LSRP CONSULTING LLC

11 Lake Michigan Drive, Little Egg Harbor Township, NJ 08087 ♦ 908-419-7918 ♦ www.lsrpconsulting.com

August 31, 2016

US Environmental Protection Agency, Region 2
2890 Woodbridge Avenue
Edison, New Jersey 08837-3679

Attn: Dr. James Haklar

Re: *Remediation Progress Report*
Former Alcoa Building 12, 660 River Road, Block 74, Lot 1.02B
Edgewater, Bergen County, New Jersey 07020

Dear Dr. Haklar,

On behalf of North River Mews Associates, LLC (North River Mews), LSRP Consulting LLC has prepared the attached *Remediation Progress Report* regarding the former Alcoa Building 12 in Edgewater, New Jersey.

If you have any questions or need additional information, please contact me at 908-419-7918 or kgagnon@lsrpconsulting.com.

Sincerely,

Keith Gagnon
LSRP Consulting LLC

REMEDIATION PROGRESS REPORT

Former Alcoa Building 12
660 River Road
Edgewater, New Jersey 07020

Prepared for:

US Environmental Protection Agency, Region 2
2890 Woodbridge Avenue
Edison, New Jersey 08837-3679

On behalf of:

North River Mews Associates, LLC
1000 Portside Drive
Edgewater, New Jersey 07020

Prepared by:

LSRP Consulting LLC
11 Lake Michigan Drive
Little Egg Harbor Township, NJ 08087

August 31, 2016

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REMEDIATION PROGRESS REPORT

FORMER ALCOA BUILDING 12
660 RIVER ROAD, EDGEWATER, NEW JERSEY

1.0 INTRODUCTION

On behalf of North River Mews Associates, LLC (North River Mews), LSRP Consulting LLC has prepared the following *Remediation Progress Report* regarding the former Alcoa Building 12 in Edgewater, New Jersey.

The EPA ID number for the property is NJD981559149; the New Jersey Department of Environmental Protection (NJDEP) Program Interest # is 023713.

The remediation activities discussed in this report are based on Pennjersey Environmental Consulting's March 2015 *Remedial Investigation Report/Remedial Action Report/Remedial Action Workplan* (which details the site history, prior remediation activities and risk-based cleanup proposal and evaluation), the US Environmental Protection Agency's (USEPA's) July 27, 2015 response to the March 2015 report, North River Mews' September 30, 2015 response to the USEPA's letter, the USEPA's October 15, 2015 approval, and subsequent discussions and emails. The USEPA's July 2015 letter and North River Mews' September 2015 response are included as Appendices A and B, respectively.

The following remediation activities are discussed in this report:

- On-site soil sampling for PCB analysis for additional characterization and resampling of prior locations;
- Off-site concrete chip samples from stormwater manholes for PCB analysis and replacement of one stormwater manhole;
- Soil stockpile waste classification sampling and disposal approval;
- Workplan to remove and properly dispose of the remaining piping runs from the two former underground storage tanks (USTs);
- Proposed soil sampling from the Edgewater Cemetery for PCB analysis.

Regarding the on-site soil sampling, none of the PCB concentrations exceeded 500 milligrams per kilogram (mg/kg). PCB concentrations at two previous post-excavation soil sample locations (PE-061 and PE-063) were reportedly above 500 mg/kg; however, based on an evaluation of the previous remediation activities in the vicinity of these two samples, the soil resampling results, the average PCB concentrations in the area of the two previous samples, and the depth of the samples, no further investigation is warranted and the institutional and engineering controls remedy for PCBs in on-site soils remains appropriate.

Based on the on-site soil sampling results, North River Mews requests USEPA approval of 500 mg/kg as the risk-based cleanup level for PCBs in on-site soils, as referenced in the USEPA's July 27, 2015 letter. The risk-based cleanup proposal and evaluation was included in Pennjersey's March 2015 report.

A map showing the locations and concentrations of the remaining PCB concentrations in on-site soils is provided as Figure 2.

Regarding the stormwater manhole concrete chip samples, PCBs were detected above 1 mg/kg in one chip sample from one of the two off-site manholes. As a remedial measure, the entire manhole was removed and replaced with a new manhole. The former manhole was added to the soil stockpile for proper disposal as PCB waste.

The soil stockpile was approved for disposal at the Waste Management landfill in Emelle, Alabama, a Toxic Substance Control Act (TSCA)-approved facility. The stockpile is scheduled to be transported to the landfill during September 2016.

The remaining piping runs from the former USTs will be removed as proposed in North River Mews' September 2015 letter and the USEPA's October 2015 approval. This work is anticipated to be completed during September 2016. The piping will be disposed of at a TSCA-approved landfill following disposal approval.

A proposal to collect soil samples for PCB analysis from the neighboring Edgewater Cemetery is included with this report.

An anticipated schedule is also included.

2.0 SITE INFORMATION

The subject property is located at 660 River Road, Block 74, Lot 1.02B, Edgewater, Bergen County, New Jersey 07020. The property is approximately 0.99 acres and currently undergoing redevelopment as a hotel and spa. The property is serviced by municipal water and sewer. A Site Location Map is included as Figure 1.

The NJ State Plane coordinates for the subject property are Easting 639118 and Northing 723679.

3.0 TECHNICAL OVERVIEW

3.1 Compounds of Concern

The compounds of concern for the subject property are PCBs and polycyclic aromatic hydrocarbons (PAHs) in soil. The samples discussed in this report were analyzed for PCBs.

3.2 Usability of the Laboratory Data

Based on the laboratory's Case Narrative/Conformance Summaries for the samples, no issues were identified with the analysis that would cause a rejection of the data. The laboratory data deliverables are included as Appendices C, E and G.

In addition, the laboratory data deliverables for the soil samples and concrete chip samples were reviewed and validated by Trillium, Inc. of Downingtown, Pennsylvania. The Data Validation reports are included as Appendices D and F.

3.3 Remedy for the On-Site Soils

Based on the on-site soil sampling results, North River Mews requests USEPA approval of 500 mg/kg as the risk-based cleanup level for PCBs in on-site soils, as referenced in the USEPA's July 27, 2015 letter. The risk-based cleanup proposal and evaluation was included in Pennjersey's March 2015 report.

As discussed in Pennjersey's March 2015 report, the selected remedy for the remaining PAH and PCB concentrations in soil at the subject property is institutional and engineering controls. The institutional control will be a Deed Notice, prepared in accordance with NJDEP regulations and guidance. The engineering control will be a 12-inch cap, consisting of at least 6 inches of surface concrete over 6 inches of gravel. The engineering control will encompass the entire property.

4.0 ON-SITE SOIL SAMPLING

To address additional on-site characterization and potential off-site issues, seven on-site soil samples were collected and analyzed for PCBs. The seven samples were designated as SB-029 through SB-035, and are shown on Figure 2. Each of seven borings extended to a depth of 2 feet and the soils were visually screened for evidence of staining and PCB contamination. No evidence of contamination was observed; therefore, as proposed, one soil sample was collected from each boring from the initial 6-inch interval of soil below the previously installed gravel layer. This plan was consistent with the sampling performed during the site-wide soil characterization activities.

In addition, four previous soil sample locations were resampled. Samples PS-001R and PS-002R were collected at previous sample locations PS-001 and PS-002, respectively; samples PE-061R and PE-063R were collected at previous sample locations PE-061 and PE-063, respectively. The resampling was performed to determine whether PCB concentrations above 500 ppm are present at the PS-001, PS-002, PE-061 and PE-063 locations.

Prior to sample location, the ground surface elevation at each boring was determined so the sample depth could be converted to an elevation relative to mean sea level, similar to the prior site-wide characterization samples. The surface elevation data was also used to ensure samples PE-061R, PE-063R, PS-001R and PS-002R matched the elevations of the previous soil samples.

The soil samples were collected on December 11, 2015 by Appalachia Hydrogeologic & Environmental Consulting, Inc. of Bridgewater, New Jersey. The drilling company was Hawk Drilling of Clinton, New Jersey.

The soil samples were analyzed for PCBs by SGS Accutest of Dayton, New Jersey, a NJDEP-certified laboratory. The laboratory data package for the soil samples is included as Appendix C. The data validation report prepared by Trillium is included as Appendix D. The sample locations are shown on Figure 2 and the results are summarized on Table I.

For the seven additional characterization samples (SB-029 through SB-035), no PCBs were detected above 500 mg/kg; the PCB concentrations ranged from 7.2 to 173 mg/kg. For samples PS-001R and PS-002R, the PCB concentrations were 2.4 and 51 mg/kg, respectively. The PCB concentrations for samples PE-061R and PE-063R were 13 and 365 mg/kg, respectively. PCBs were not detected above 500 mg/kg in any of the eleven soil samples.

With regard to the two resample locations PS-001R and PS-002R, the PCB results are consistent with the prior remediation activities in this area. According to Pennjersey, the soils with PCB concentrations above 500 mg/kg in the vicinity of these sample locations were previously excavated during March 2014.

With regard to the two resample locations PE-061R and PE-063R, the PCB results are consistent with our understanding that the original post-excavation samples PE-061 and PE-063 were collected from a small amount of soil remaining on top of the bedrock surface after the accessible soils were removed to bedrock, and the original PCB concentrations represent a de minimus volume of soil, which is currently approximately 10 feet below surface and covered with clean backfill.

According to Pennjersey, the original samples PE-061 and PE-063 were post-excavation samples collected after the removal of impacted soils from this area. The excavation extended down to the top of bedrock and further vertical excavation was not feasible. No visual staining was observed following the soil excavation. Following soil removal and sample collection, the excavation was backfilled with clean fill.

The average PCB concentration of the soil samples in the vicinity of, and including the original and resample locations, is 292 mg/kg. The PCB concentration in nine samples, including PE-061, PE-061R, PE-063, PE-063R, SB-018, PE-062, PE-064, PE-065 and PE-072, were averaged and the arithmetic mean is below the proposed PCB risk-based cleanup level of 500 mg/kg.

Based on Pennjersey's account of the prior remediation activities, the observations and sampling results for the resampling investigation, and the average PCB concentration in this area, it is reasonable to conclude the original post-excavation sample results represent a de minimus volume of soil remaining at the top of the bedrock surface following soil excavation, and are not representative of the overall remaining PCB concentrations in the sampling area. The original post-excavation sample concentrations were not replicated by the resampling, which demonstrates PCB concentrations above 500 mg/kg are not pervasive in this area.

Based on the original soil excavation activities, the soil resampling results, the average PCB concentrations for this area, and the depth of the samples, no further investigation is warranted and the institutional and engineering controls remedy for PCBs remains appropriate.

A map showing the locations and concentrations of the remaining PCB concentrations in on-site soil is provided as Figure 2.

5.0 OFF-SITE MANHOLE CONCRETE CHIP SAMPLING

As discussed in Pennjersey's March 2015 report, stormwater accumulated in an on-site excavation following the removal of the two former USTs. For a few hours, the stormwater was pumped into the stormwater sewer beneath Vreeland Terrace, the adjacent street to the south of the subject property. It is unknown whether the storm water contained PCBs.

A map showing the location of the storm water system beneath Vreeland Terrace is included as Figure 3.

To address the potential that the stormwater contained PCBs, the sediment in the two closest stormwater manholes was removed and added to the soil stockpile as PCB waste. Following sediment removal, two concrete chip samples were collected from each of the two manholes for PCB analysis, for a total of four samples. The chip samples were collected from the floor and from a sidewall near the bottom of each manhole.

The manholes were designated as Manhole #1 and Manhole #2 (Figure 3). The concrete chip samples were collected on May 31, 2016 by Appalachia. The concrete chip samples from the base and sidewall of Manhole #1 were designated as Manhole 1-1 and Manhole 1-2, respectively. The corresponding base and sidewall samples from Manhole #2 were designated as Manhole 2-1 and Manhole 2-2.

The four concrete chip samples from the stormwater manholes were analyzed for PCBs by TestAmerica of Edison, New Jersey, a NJDEP-certified laboratory. The laboratory data package for the concrete chip samples is included as Appendix E. The data validation report prepared by Trillium is included as Appendix F.

PCBs were not detected above 1 mg/kg in the two concrete chip samples from Manhole #1. At Manhole #2, PCBs were detected in sample Manhole 2-1 from the base of the manhole at 3.3 mg/kg. The PCB concentration in the sidewall sample from Manhole #2 was below 1 mg/kg. The results are summarized on Table II.

The remedy performed to address the PCB concentration above 1 mg/kg in Manhole #2 was the replacement of the manhole. On August 13 and 15, 2016, Manhole #2 was removed and replaced with a new manhole. Upon removal, Manhole #2 was placed on the soil stockpile for disposal as PCB waste.

Based on the concrete chip sampling results and the replacement of Manhole #2, North River Mews proposes no further action with regard to the adjacent stormwater sewer system.

6.0 SOIL STOCKPILE

A soil stockpile was initially generated at the subject property during October 2015. The soil in the stockpile originated from excavations for utility lines/piping and for the installation of wall footings from various locations at the property, and includes sediment from the two stormwater manholes and the former Manhole #2. The majority of the soils were added to the stockpile between October 2015 and February 2016.

The stockpile is approximately 450 cubic yards and has been covered with plastic. Waste classification samples were collected and analyzed by SGS Accutest, a New Jersey-certified laboratory, during February 2016. The waste classification sampling results, including a table and the laboratory data deliverables, are included as Appendix G.

The soil stockpile was approved for disposal at the Waste Management landfill in Emelle, Alabama, a TSCA-approved facility on August 30, 2016. The stockpile is scheduled to be transported to the landfill during September 2016.

7.0 REMAINING PIPING RUNS

The remaining piping runs from the two former USTs will be removed as proposed in North River Mews' September 2015 letter and the USEPA's October 2015 approval.

As discussed in Pennjersey's March 2015 report, laboratory analysis of twelve soil samples collected from six borings adjacent to the piping runs did not detect any PCBs. Therefore, additional soil sampling following the removal of the piping runs is not necessary, provided visual staining is not observed and/or any incidental liquids from the piping impacts the soil during removal.

This work is anticipated to be completed during September 2016. The piping will be disposed of at a TSCA-approved landfill following disposal approval.

8.0 PROPOSED SOIL SAMPLING AT EDGEWATER CEMETERY

North River Mews and the Borough of Edgewater have executed a Site Access Agreement to allow the collection of soil samples from the Edgewater Cemetery, which is the adjacent property to the north. The investigation of the cemetery will be addressed as a separate Area of Concern from the on-site soils.

In accordance with the USEPA's July 27, 2015 letter, surficial soil samples from the initial 6-inches of soil, including the root zone, will be collected along the property boundary on a 20-foot by 20-foot grid with the samples collected at the grid nodes.

A map showing the grid and the proposed soil sample locations is included as Figure 4. Two rows of samples will be collected; one row along the property boundary next to the building and one row 20 feet from the building. A total of 24 soil samples will be collected.

The soil samples will be collected following USEPA approval of this sampling plan for the cemetery. Sampling will be performed using dedicated sampling equipment and in accordance with NJDEP sampling procedures. The soil samples will be analyzed for PCBs by a New Jersey-certified laboratory.

Following receipt and evaluation of the analytical results, a report with the Edgewater Cemetery soil sampling results and recommendations will be provided to the USEPA.

9.0 ANTICIPATED SCHEDULE

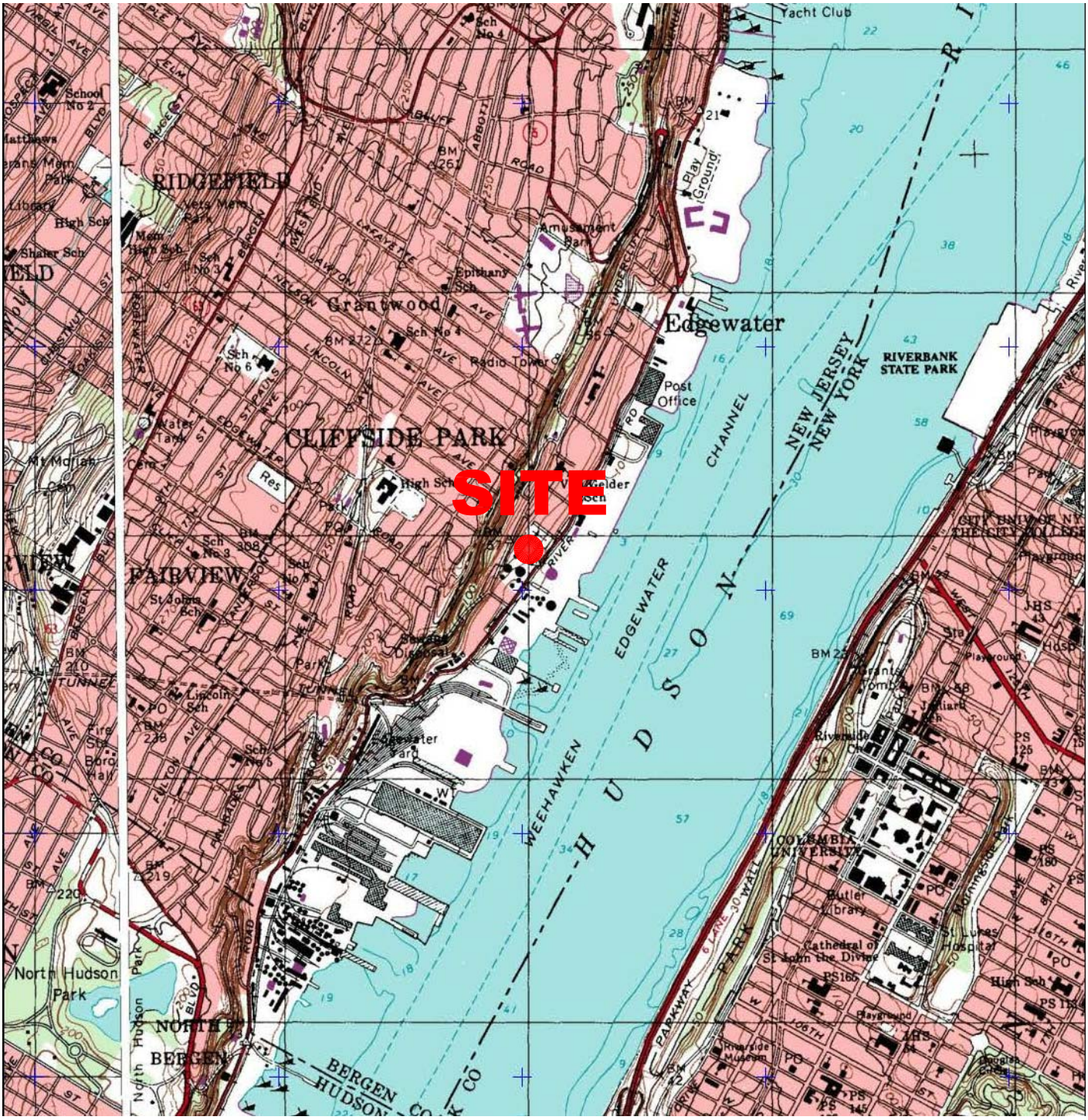
For the on-site soils, a Deed Notice will be prepared and submitted to Bergen County following USEPA approval of the proposed 500 mg/kg risk-based cleanup level for PCBs, and the installation of the cap. A Remedial Action Report and Soil Remedial Action Permit Application will be submitted to the NJDEP after the county files the Deed Notice. A Restricted Use AOC-Specific Response Action Outcome (RAO) will be issued following receipt of the Soil Remedial Action Permit from the NJDEP.

For the soil stockpile, disposal at a TSCA landfill is expected to be completed during September 2016. Manifests will be provided to the USEPA following disposal.

For the remaining piping runs, the removal of the piping is anticipated to be completed during September 2016. The piping will be disposed of at a TSCA landfill following disposal approval, which is anticipated to be prior to December 31, 2016.

For the Edgewater Cemetery, the soil samples will be collected following USEPA approval of the sampling plan. Following receipt and evaluation of the analytical results, a report with the soil sampling results and recommendations will be provided to the USEPA.

FIGURES



SCALE: 1:24000

CENTRAL PARK NJ QUADRANGLE 7.5 MINUTE SERIES

NORTH

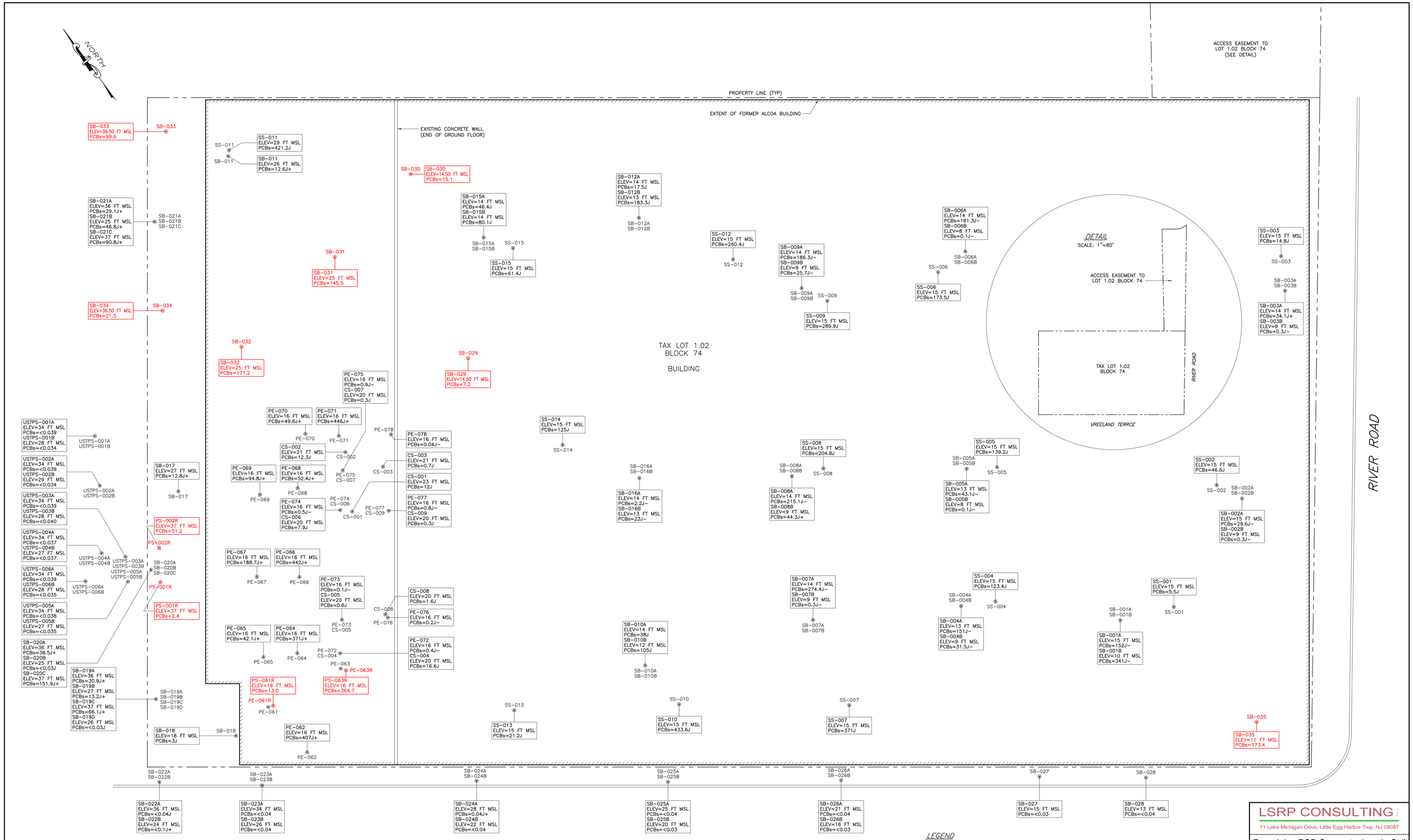
LSRP CONSULTING LLC

11 Lake Michigan Drive, Little Egg Harbor Twp, NJ 08087

Site Location Map

Former Alcoa Building 12
660 River Road, Edgewater Borough, NJ

Project 150176	April 2016	Figure 1

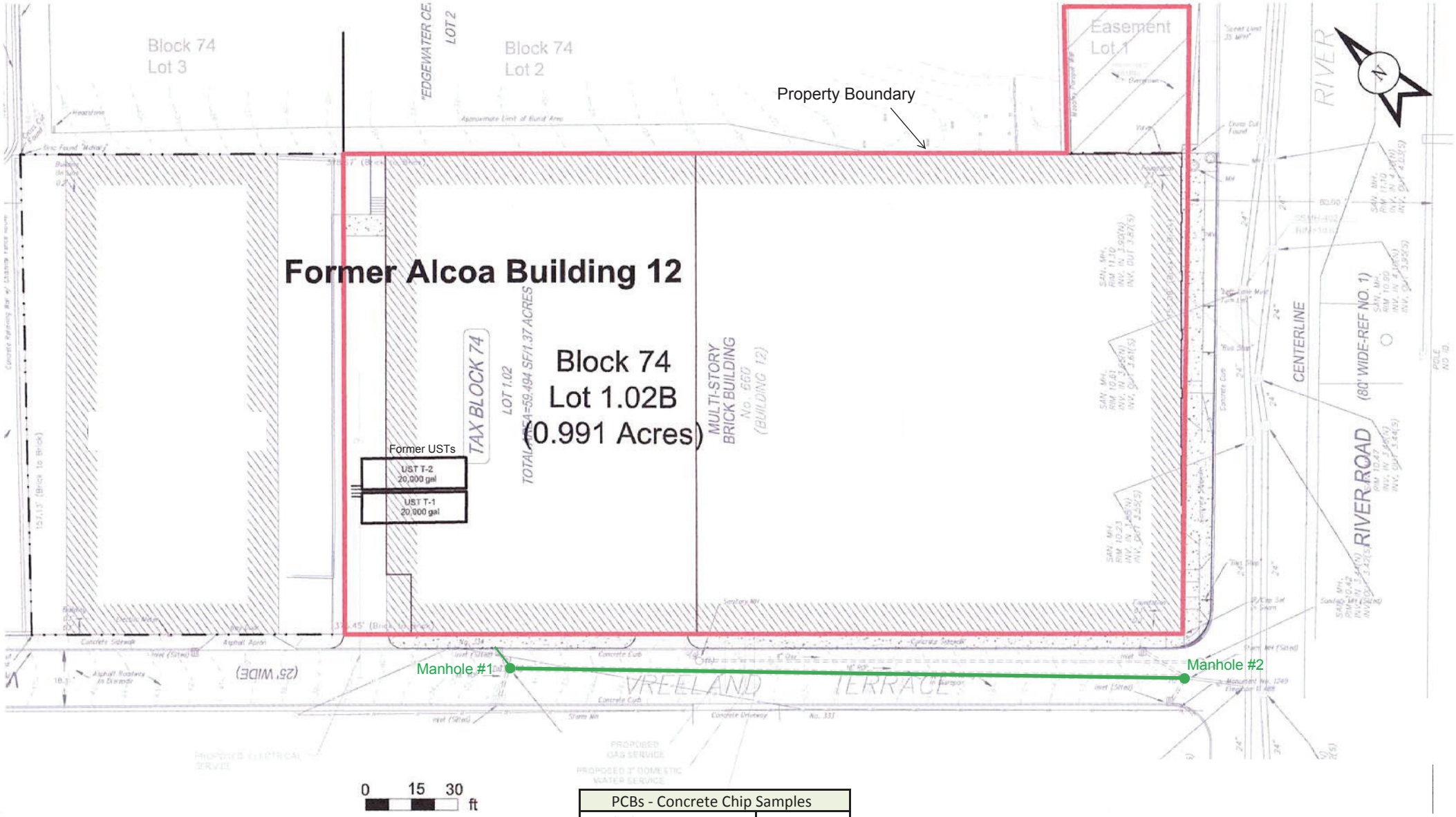


LSRP CONSULTING LLC
11 Lake Michigan Drive, Little Egg Harbor Twp, NJ 08087

Remaining PCB Concentrations in Soil

Former Alcoa Building 12
660 River Road, Edgewater, NJ 07020

Project 150176	August 2016	Figure 2



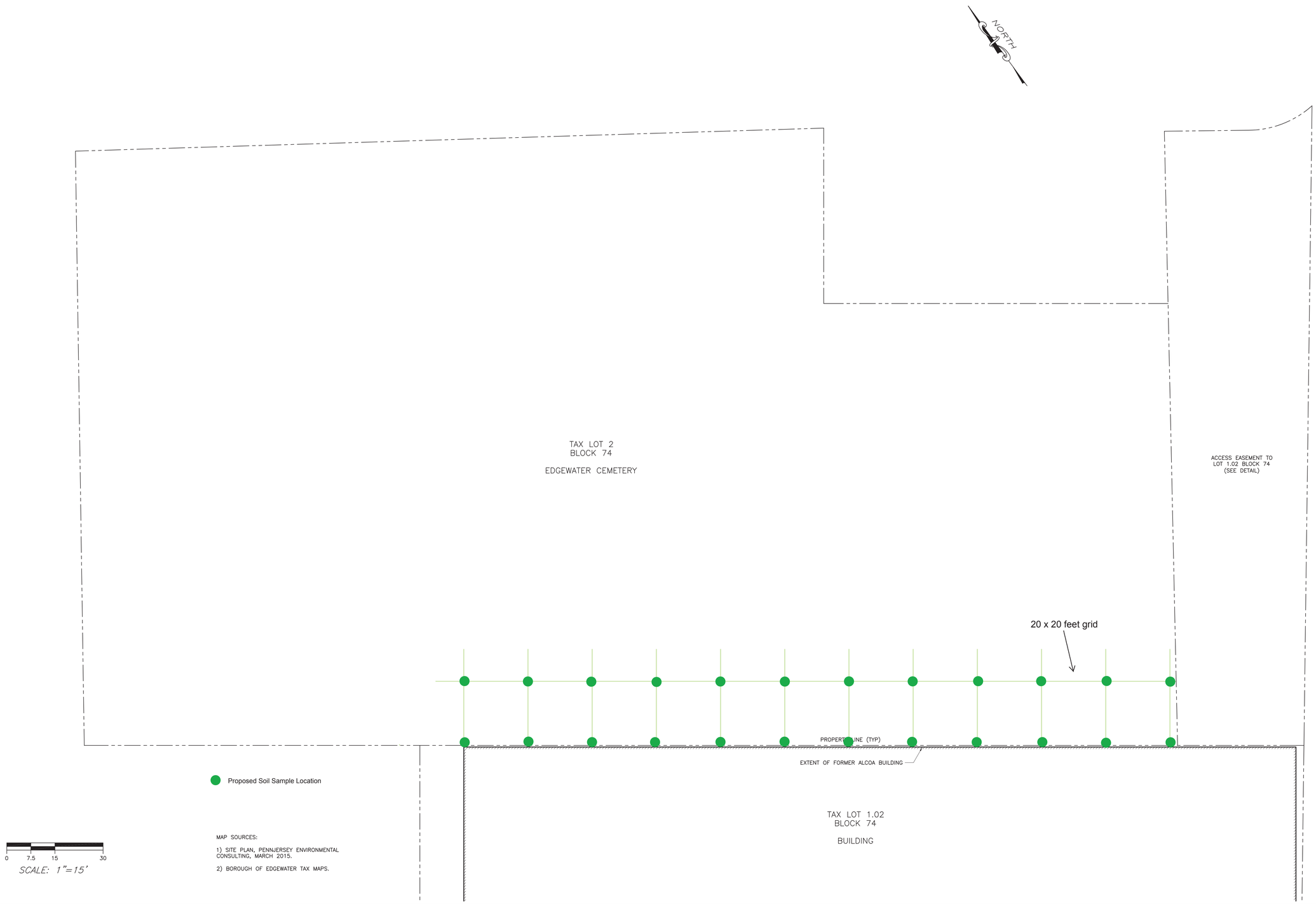
PCBs - Concrete Chip Samples	
Manhole #1 Base	0.319
Manhole #1 Sidewall	0.076
Manhole #2 Base	3.3
Manhole #2 Sidewall	0.62

Results in ppm

Concrete Chip Sample Results - PCBs
Stormwater Manholes
Former Alcoa Building 12
Edgewater, NJ

Figure 3

Map source: Site Plan, Pennjersey Environmental Consulting, March 2015



MAP SOURCES:

1) SITE PLAN, PENNJERSEY ENVIRONMENTAL CONSULTING, MARCH 2015.

2) BOROUGH OF EDGEWATER TAX MAPS.

LSRP CONSULTING LLC

11 Lake Michigan Drive, Little Egg Harbor Twp, NJ 08087

Proposed Soil Sample Locations
Edgewater Cemetery

Former Alcoa Building 12
660 River Road, Edgewater, NJ 07020

Project 150176	August 2016	Figure 4

TABLES

Table I
PCBs in Soil Samples
Former Alcoa Building 12, Edgewater, NJ

Sample Designation:		SB-029	SB-030	SB-031	SB-032	SB-033	SB-034	SB-035	PE-061R	PE-063R	PS-001R	PS-002R
Sample Elevation (ft.msl):		14.5-15	14.5-15	25-25.5	25-25.5	36.5-37	36.5-37	11-11.5	16-16.5	16-16.5	36.5-37	36.5-37
Lab Sample ID:		JC10583-1	JC10583-2	JC10583-8	JC10583-10	JC10583-12	JC10583-7	JC10583-7	JC10583-3	JC10583-4	JC10583-5	JC10583-6
Date Sampled:		12/11/15	12/11/15	12/11/15	12/11/15	12/11/15	12/11/15	12/11/15	12/11/15	12/11/15	12/11/15	12/11/15
PCBs												
Aroclor-1016	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	mg/kg	6.72	14.4	138	162	99.6	10.3	165	12.4	332	1.16	48.3
Aroclor-1254	mg/kg	ND	ND	ND	ND	ND	9.22	ND	ND	ND	0.983	ND
Aroclor-1260	mg/kg	0.493	0.721	7.49	9.19	ND	2.01	8.43	0.62	32.7	0.266	2.93
Aroclor-1262	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1268	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PCBs	mg/kg	7.213	15.121	145.49	171.19	99.6	21.53	173.43	13.02	364.7	2.409	51.23

ND = not detected

Shading and bold = concentration detected above 500 mg/kg

Table II
PCBs in Manhole Concrete Chip Samples
Former Alcoa Building 12, Edgewater, NJ

Sample Designation:		Manhole 1-1	Manhole 1-2	Manhole 2-1	Manhole 2-2
Location:		Base	Sidewall	Base	Sidewall
Lab Sample ID:		460-114699-1	460-114699-2	460-114699-3	460-114699-4
Date Sampled:		05/31/16	05/31/16	05/31/16	05/31/16
PCBs					
Aroclor-1016	mg/kg	ND	ND	ND	ND
Aroclor-1221	mg/kg	ND	ND	ND	ND
Aroclor-1232	mg/kg	ND	ND	ND	ND
Aroclor-1242	mg/kg	ND	ND	ND	ND
Aroclor-1248	mg/kg	0.22	0.076 J	2.3	0.5
Aroclor-1254	mg/kg	ND	ND	ND	ND
Aroclor-1260	mg/kg	0.099	ND	1.0	0.12
Aroclor-1262	mg/kg	ND	ND	ND	ND
Aroclor-1268	mg/kg	ND	ND	ND	ND
Total PCBs	mg/kg	0.319	0.076	**3.3**	0.62

ND = not detected; J = estimated concentration

Shading and bold = total PCB concentration detected above 1 mg/kg

APPENDIX A

USEPA LETTER
JULY 27, 2015

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
2890 WOODBRIDGE AVENUE
EDISON, NEW JERSEY 08837-3679

JUL 27 2015

CERTIFIED MAIL – RETURN RECEIPT REQUESTED
Article Number: 7001 0320 0004 7788 8315

Mr. Roger A. Ferguson, Jr., LSRP
President
Pennjersey Environmental Consulting
744 Milford Warren Glen Road
Milford, New Jersey 08848-1647

Re: Former Alcoa Building 12
Borough of Edgewater, New Jersey

Dear Mr. Ferguson:

The United States Environmental Protection Agency (EPA) has reviewed the March 5, 2015 document entitled "Remedial Investigation/Remedial Action Report/Remedial Action Workplan" (Workplan), prepared and submitted by Pennjersey Environmental Consulting on behalf of North River Mews Associates, LLC (North River Mews). The Workplan presents an application for a risk-based cleanup, under 40 CFR 761.61(c), of polychlorinated biphenyls (PCBs) present at the former Alcoa Building 12 property (former Alcoa property) located at 660 River Road in Edgewater, New Jersey. EPA's comments on the Workplan are provided below.

The Remedial Approach: With the exception of limited excavation for the installation of utilities, the Workplan proposes in-place disposal of PCBs under the building slab with the building's slab functioning as the cap. The Workplan proposes that levels of PCBs as high as 1,122.2 parts per million (ppm) (as shown on Workplan Figure 16) will remain on the property. The highest concentration of PCBs that EPA Region 2 targets for on-site disposal in a risk-based cleanup is 500 ppm. This is based on several factors including the potential for future impacts to groundwater and surface water as well as an intent to limit the volume of high concentration PCBs remaining on a contaminated property (where the PCBs could be considered a principal threat to human health or the environment). Given that the former Alcoa property is being redeveloped for commercial (high occupancy) use and is situated in a densely populated area along a major surface water body, we do not believe that concentrations greater than 500 ppm should remain on the Site.

The Extent of Characterization: The extent of characterization is insufficient to support the proposed remedial approach. There is an area of the property, encircled by sample locations SS/SB-011, SB-015A/B, SS-015, SS-014, PE-078, PE-071, PE-070, and SB-021A/B/C that has not been characterized. Furthermore, while we understand that the proposed cap will extend over the entire property, the existing characterization data does not show that the extent of the cap is sufficient to isolate all PCBs above the Agency's high occupancy unrestricted cleanup level of 1 ppm or the low occupancy (uncapped) cleanup level of 25 ppm.

The Piping Runs: The Workplan describes that the piping runs were crimped closed and, apparently, abandoned in place. Since there was liquid in the piping and soil near the piping is contaminated with PCBs, we do not understand the reason that the piping was not removed. The piping must be addressed in accordance with the federal PCB regulations.

Additional Characterization Activities: The Workplan presents additional characterization activities for the storm water system, the former building wall concrete, and the cemetery soil. With regard to the investigation of the storm water system and former building wall concrete, the information provided is insufficient for EPA to use to determine whether the work is appropriate. The details of these activities must be submitted to EPA for review and approval.

The proposed cemetery investigation consists of collecting six soil samples along the boundary with the former Alcoa property and we do not believe this is sufficient for adequate characterization. We recommend that samples be collected along the property boundary on a 20-foot by 20-foot grid with samples collected at the grid nodes. Please be advised that the Borough of Edgewater has informed EPA that it is anxious to reopen the cemetery which is closed until the PCBs have been characterized. We believe that the cemetery sampling can be separated from the other Workplan issues and we therefore ask North River Mews to perform this work, in accordance with our aforementioned recommendation, as soon as possible.

Decontamination: Please be advised that all sampling and other remediation equipment that contacts soil potentially contaminated by regulated PCBs must be decontaminated in accordance with 40 CFR 761.79.

Based on the aforementioned comments, EPA cannot, at this time, approve North River Mews' plan for risk-based disposal of PCBs at the former Alcoa property. The Agency will reevaluate its determination once the Agency's comments are addressed.

If you have any questions please contact Dr. James Haklar at (732) 906-6817 or at haklar.james@epa.gov.

Sincerely yours,

John Gorman, Chief
Pesticides and Toxic Substances Branch

cc: Kevin Schick, New Jersey Department of Environmental Protection

APPENDIX B

NORTH RIVER MEWS RESPONSE TO USEPA
SEPTEMBER 30, 2015

LSRP CONSULTING LLC

11 Lake Michigan Drive, Little Egg Harbor Township, NJ 08087 ♦ 908-419-7918 ♦ www.lsrpconsulting.com

September 30, 2015

US Environmental Protection Agency, Region 2
2890 Woodbridge Avenue
Edison, New Jersey 08837-3679

Attn: Dr. James Haklar

Re: *Response to USEPA Letter dated July 27, 2015*
Former Alcoa Building 12 Property, 660 River Road, Block 74, Lot 1.02B
Edgewater, Bergen County, New Jersey 07020
NJDEP PI No. 023713, Case Nos. 13-10-10-1558-57 and 14-04-04-1604-09

Dear Dr. Haklar,

On behalf of North River Mews Associates, LLC (North River Mews), LSRP Consulting LLC[1] has prepared the following response to the US Environmental Protection Agency's (USEPA's) letter dated July 27, 2015 (Attachment 1) regarding the former Alcoa Building 12 property.

The USEPA's letter provided comments to Pennjersey Environmental Consulting's March 2015 *Remedial Investigation Report/Remedial Action Report/Remedial Action Workplan*. The responses below are in the same order as the USEPA's letter.

The Remedial Approach

The USEPA has established 500 parts per million (ppm) as the maximum PCB concentration that can remain under the approved site-wide cap at the subject property. The USEPA's letter notes that Figure 16 of Pennjersey's March 2015 report shows PCB concentrations above 500 ppm remaining at the site.

The figure shows four soil samples with PCB concentrations above 500 ppm. Samples PS-001 and PS-002, at 1,122 and 836 ppm, respectively, were in the western portion of the property and associated with two former underground storage tanks (USTs). However, inclusion of these two samples on Figure 16 appears to be an error, as the March 2015 report (Section 3.2.5.1) states samples PS-001 and PS-002 were excavated during March 2014.

Samples PE-061 and PE-063, at 687 and 735 ppm, respectively, were in the southwestern portion of the property and associated with the soil excavation for the former USTs. The inclusion of these two samples on Figure 16 may also be an error, as the March 2015 report states the area in the vicinity of the samples were excavated during May 2014 (Section 3.2.6).

[1] Keith Gagnon of LSRP Consulting LLC was recently retained as the Licensed Site Remediation Professional (LSRP) for the former Alcoa Building 12 by North River Mews Associates, LLC

To confirm PCB concentrations above 500 ppm are not present at the PS-001, PS-002, PE-061 and PE-063 locations, one soil sample will be collected adjacent to each of the four former sample locations and analyzed for PCBs (see map, Attachment 2). If PCBs are detected above 500 ppm, the impacted soils will be excavated.

The Extent of Characterization
The USEPA letter included two comments regarding the extent of characterization:

On-Site
The USEPA requested additional PCB characterization in the northwestern portion of the subject property, in the area encircled by samples SS/SB-011, SB-015A/B, SS-015, SS-014, PE-078, PE-071, PE-070 and SB-021A/B/C. North River Mews proposes to complete four soil borings (SB-029 through SB-032) at the locations shown on the map in Attachment 2.

To address potential off-site issues, three additional on-site characterization soil samples are proposed: SB-033 and SB-034 in the northwest portion of the property and boring SB-035 in the southeast corner (see map in Attachment 2).

Each of seven borings will extend to a depth of 2 feet and the soils will be visually screened for evidence of staining and PCB contamination. At least one soil sample will be collected from each boring from the interval suspected of being contaminated; if no evidence of contamination is observed, the sample will be collected from the initial 6-inch interval of soil below the previously installed gravel layer. This plan is consistent with the sampling performed during the site-wide soil characterization activities, where the initial characterization samples were collected within the upper 1 foot of soil.

North River Mews will provide the USEPA with a map showing the locations and concentrations of the remaining PCB concentrations in soil at the property.

Off-Site
The USEPA commented that while the entire subject property will be covered by the cap, the characterization sampling data does not show the extent of the cap is sufficient to isolate all PCBs (i.e., adjacent off-site soils) above the USEPA's applicable PCB cleanup levels.

To the south of the subject property, a review of Pennjersey's March 2015 report, including Figure 16, shows previously analyzed nearby off-site samples sufficiently characterize the soils. Along Vreeland Terrace, 12 off-site soil samples were collected from 7 borings; no PCBs were detected with the exception of an estimated concentration of 0.04 ppm in one sample.

To the west, 12 off-site soil samples collected from 6 borings adjacent to the UST piping run and near the UST remediation area; no PCBs were detected. As discussed above, two proposed soil

samples (SB-033 and SB-034) will address potential off-site issues in the northwest portion of the property.

To the east, River Road is adjacent to the subject property. As discussed in a February 1999 *Remedial Action Report* prepared by Enviro-Sciences, Inc. (ESI), in accordance with a Remedial Action Workplan approved by the New Jersey Department of Environmental Protection (NJDEP), crushed concrete containing less than 50 ppm of PCBs was used as grading material beneath River Road by Bergen County (pertinent pages from the ESI report are included as Attachment 3). As discussed above, the proposed soil sample at boring SB-035 will address potential off-site issues in the southeastern portion of the property.

To the north, a cemetery is adjacent to the subject property. The Borough of Edgewater has informed North River Mews that it will perform soil sampling in the cemetery, and any PCB remediation in the cemetery will be managed and addressed separately from the remediation of the former Alcoa Building 12 property. If the Borough of Edgewater does not complete the cemetery investigation, North River Mews will propose a sampling plan to the USEPA.

The Piping Runs

North River Mews will remove and properly dispose of the remaining piping runs. As discussed in Pennjersey's March 2015 report, laboratory analysis of 12 soil samples collected from 6 borings adjacent to the piping runs did not detect any PCBs. Therefore, additional soil sampling following the removal of the piping runs is not necessary, provided visual staining is not observed and/or any incidental liquids from the piping impacts the soil during removal.

Additional Characterization Activities

The USEPA letter discussed additional characterization activities for three areas at or adjacent to the subject property:

Storm Water System

As discussed in Pennjersey's March 2015 report, storm water accumulated in an excavation for the two former USTs. For a few hours, the storm water was pumped into the storm water sewer beneath Vreeland Terrace, the adjacent street to the south of the subject property. It is unknown whether the storm water contained PCBs.

A map showing the location of the storm water system beneath Vreeland Terrace is included as Attachment 4. The storm water system adjacent to the former Alcoa Building 12 consists of one catch basin, two manholes and approximately 225 feet of 18-inch concrete pipe.

To address the potential that the storm water contained PCBs, the sediment in the catch basin and the two manholes will be removed and disposed of as PCB waste. Based on the short-term storm water discharge (a few hours during one day), it is unlikely the concrete pipe was impacted by PCBs. However, following sediment removal, two concrete chip samples will be

collected from each of the two manholes for PCB analysis, for a total of four samples. The chip samples will be collected from the floor and from a sidewall near the floor of each manhole.

Former Building Wall Concrete

The locations of the remaining former concrete building walls are shown on the map included as Attachment 5. As discussed in ESI's August 2002 *Remedial Action Report* (included in Appendix E of Pennjersey's March 2015 report), the remaining concrete building walls (approximately 4,570 square feet) have already been sampled, washed and sealed with two layers of an epoxy coating.

Prior to sealing, 21 samples from the concrete walls were collected and analyzed for PCBs via concrete cores from 10 locations biased to areas of visible staining or discoloration. The PCB concentrations ranged from 0.037 to 1.0 ppm, with an average concentration of 0.56 ppm.

The results were provided to the USEPA, which responded with a letter dated October 7, 1999 stating that based on the age of the PCBs and since the PCB concentrations were less than 50 ppm, "any renovation, disposal or use of the walls is not subject to the federal regulations for PCBs". The USEPA's October 7, 1999 letter and the pertinent pages of ESI's report describing the concrete wall sampling and epoxy coating activities are included as Attachment 6.

In accordance with a Remedial Action Workplan approved by the NJDEP on November 11, 2000, the remaining concrete walls were washed and sealed with two layers of an epoxy coating. The NJDEP approved the epoxy coating activities in a letter dated November 20, 2002, and issued a No Further Action (NFA) letter on February 12, 2003.

Based on the previous PCB sampling results for the concrete walls, the USEPA's October 1999 letter, the subsequent sealing of the walls with two layers of an epoxy coating, and the NJDEP approval and NFA letters, the March 2015 proposal to sample and apply two layers epoxy coating on the concrete walls is respectfully withdrawn.

Cemetery Soil

The Borough of Edgewater has informed North River Mews that it will perform soil sampling in the cemetery, and any PCB remediation in the cemetery will be managed and addressed separately from the former Alcoa Building 12 property. Therefore, the March 2015 proposal to sample the cemetery soil is respectfully withdrawn. As discussed above, if the Borough of Edgewater does not complete the cemetery investigation, North River Mews will propose a sampling plan to the USEPA.

Decontamination

No comment necessary.

Following the completion of the activities discussed in this letter, North River Mews will provide the USEPA and NJDEP with a report that will include details of the completed activities, tabulated sample results, figures showing the sample locations, a figure showing the locations and concentrations of the remaining PCB concentrations in soil, and the disposal manifests.

We anticipate this response addresses the USEPA's comments. If you have any questions, please contact me at 908-419-7918 or kgagnon@lsrpconsulting.com.

Sincerely,

Keith Gagnon
LSRP No. 582874

c: Mr. Kevin Schick, NJDEP

ATTACHMENT 1

USEPA LETTER DATED JULY 27, 2015

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
2890 WOODBRIDGE AVENUE
EDISON, NEW JERSEY 08837-3679

JUL 27 2015

CERTIFIED MAIL – RETURN RECEIPT REQUESTED
Article Number: 7001 0320 0004 7788 8315

Mr. Roger A. Ferguson, Jr., LSRP
President
Pennjersey Environmental Consulting
744 Milford Warren Glen Road
Milford, New Jersey 08848-1647

Re: Former Alcoa Building 12
Borough of Edgewater, New Jersey

Dear Mr. Ferguson:

The United States Environmental Protection Agency (EPA) has reviewed the March 5, 2015 document entitled "Remedial Investigation/Remedial Action Report/Remedial Action Workplan" (Workplan), prepared and submitted by Pennjersey Environmental Consulting on behalf of North River Mews Associates, LLC (North River Mews). The Workplan presents an application for a risk-based cleanup, under 40 CFR 761.61(c), of polychlorinated biphenyls (PCBs) present at the former Alcoa Building 12 property (former Alcoa property) located at 660 River Road in Edgewater, New Jersey. EPA's comments on the Workplan are provided below.

The Remedial Approach: With the exception of limited excavation for the installation of utilities, the Workplan proposes in-place disposal of PCBs under the building slab with the building's slab functioning as the cap. The Workplan proposes that levels of PCBs as high as 1,122.2 parts per million (ppm) (as shown on Workplan Figure 16) will remain on the property. The highest concentration of PCBs that EPA Region 2 targets for on-site disposal in a risk-based cleanup is 500 ppm. This is based on several factors including the potential for future impacts to groundwater and surface water as well as an intent to limit the volume of high concentration PCBs remaining on a contaminated property (where the PCBs could be considered a principal threat to human health or the environment). Given that the former Alcoa property is being redeveloped for commercial (high occupancy) use and is situated in a densely populated area along a major surface water body, we do not believe that concentrations greater than 500 ppm should remain on the Site.

The Extent of Characterization: The extent of characterization is insufficient to support the proposed remedial approach. There is an area of the property, encircled by sample locations SS/SB-011, SB-015A/B, SS-015, SS-014, PE-078, PE-071, PE-070, and SB-021A/B/C that has not been characterized. Furthermore, while we understand that the proposed cap will extend over the entire property, the existing characterization data does not show that the extent of the cap is sufficient to isolate all PCBs above the Agency's high occupancy unrestricted cleanup level of 1 ppm or the low occupancy (uncapped) cleanup level of 25 ppm.

The Piping Runs: The Workplan describes that the piping runs were crimped closed and, apparently, abandoned in place. Since there was liquid in the piping and soil near the piping is contaminated with PCBs, we do not understand the reason that the piping was not removed. The piping must be addressed in accordance with the federal PCB regulations.

Additional Characterization Activities: The Workplan presents additional characterization activities for the storm water system, the former building wall concrete, and the cemetery soil. With regard to the investigation of the storm water system and former building wall concrete, the information provided is insufficient for EPA to use to determine whether the work is appropriate. The details of these activities must be submitted to EPA for review and approval.

The proposed cemetery investigation consists of collecting six soil samples along the boundary with the former Alcoa property and we do not believe this is sufficient for adequate characterization. We recommend that samples be collected along the property boundary on a 20-foot by 20-foot grid with samples collected at the grid nodes. Please be advised that the Borough of Edgewater has informed EPA that it is anxious to reopen the cemetery which is closed until the PCBs have been characterized. We believe that the cemetery sampling can be separated from the other Workplan issues and we therefore ask North River Mews to perform this work, in accordance with our aforementioned recommendation, as soon as possible.

Decontamination: Please be advised that all sampling and other remediation equipment that contacts soil potentially contaminated by regulated PCBs must be decontaminated in accordance with 40 CFR 761.79.

Based on the aforementioned comments, EPA cannot, at this time, approve North River Mews' plan for risk-based disposal of PCBs at the former Alcoa property. The Agency will reevaluate its determination once the Agency's comments are addressed.

If you have any questions please contact Dr. James Haklar at (732) 906-6817 or at haklar.james@epa.gov.

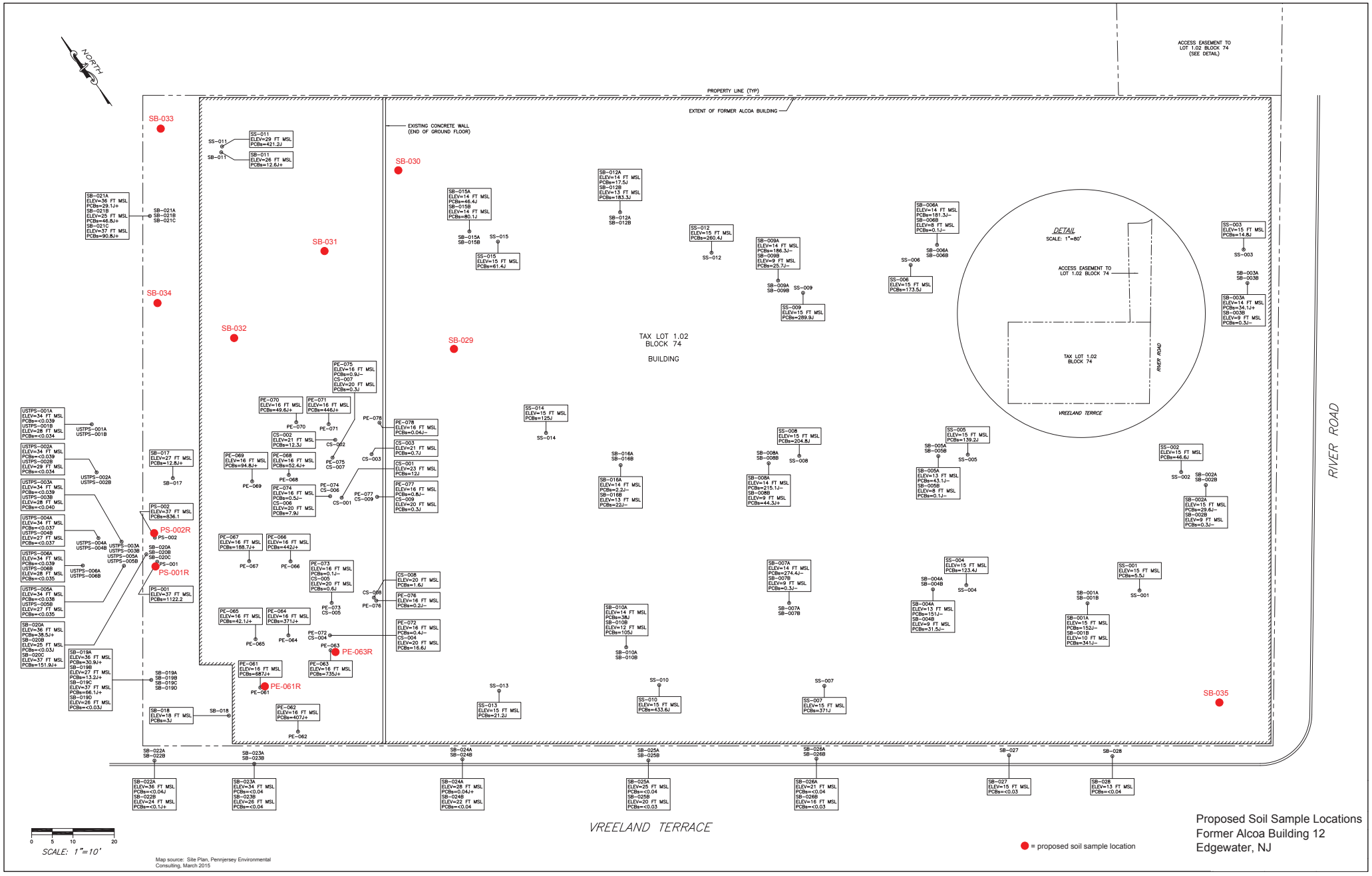
Sincerely yours,

John Gorman, Chief
Pesticides and Toxic Substances Branch

cc: Kevin Schick, New Jersey Department of Environmental Protection

ATTACHMENT 2

PROPOSED SOIL SAMPLE LOCATIONS


NORTH
PROPERTY LINE (TYP)
EXTENT OF FORMER ALCOA BUILDING
EXISTING CONCRETE WALL (END OF GROUND FLOOR)
ACCESS EASEMENT TO LOT 1.02 BLOCK 74 (SEE DETAIL)
TAX LOT 1.02
BLOCK 74
BUILDING
DETAIL
SCALE: 1"=80'
ACCESS EASEMENT TO LOT 1.02 BLOCK 74
TAX LOT 1.02 BLOCK 74
RIVER ROAD
VREELAND TERRCE
RIVER ROAD
VREELAND TERRACE
SB-033
SB-030
SB-031
SB-034
SB-032
SB-029
SB-035
PS-002R
PS-001R
PE-063R
PE-061R
SS-011 ELEV=29 FT MSL PCBs=421.2J
SB-011 ELEV=26 FT MSL PCBs=12.6J+
SB-021A ELEV=36 FT MSL PCBs=29.1J+ SB-021B ELEV=25 FT MSL PCBs=46.8J+ SB-021C ELEV=37 FT MSL PCBs=90.8J+
SB-015A ELEV=14 FT MSL PCBs=45.4J SB-015B ELEV=14 FT MSL PCBs=80.1J
SS-015 ELEV=15 FT MSL PCBs=61.4J
SB-012A ELEV=14 FT MSL PCBs=17.5J SB-012B ELEV=13 FT MSL PCBs=183.3J
SS-012 ELEV=15 FT MSL PCBs=260.4J
SB-009A ELEV=14 FT MSL PCBs=186.3J- SB-009B ELEV=9 FT MSL PCBs=25.7J-
SS-009 ELEV=15 FT MSL PCBs=289.9J
SB-006A ELEV=14 FT MSL PCBs=181.3J- SB-006B ELEV=8 FT MSL PCBs=0.1J-
SS-006 ELEV=15 FT MSL PCBs=173.5J
SS-003 ELEV=15 FT MSL PCBs=14.6J
SB-003A ELEV=14 FT MSL PCBs=34.1J+ SB-003B ELEV=9 FT MSL PCBs=0.3J-
SS-014 ELEV=15 FT MSL PCBs=125J
SB-016A ELEV=14 FT MSL PCBs=2.2J- SB-016B ELEV=13 FT MSL PCBs=22J-
SS-008 ELEV=15 FT MSL PCBs=204.8J
SB-008A ELEV=14 FT MSL PCBs=215.1J- SB-008B ELEV=9 FT MSL PCBs=44.3J+
SS-005 ELEV=15 FT MSL PCBs=139.2J
SB-005A ELEV=13 FT MSL PCBs=43.1J- SB-005B ELEV=8 FT MSL PCBs=0.1J-
SS-002 ELEV=15 FT MSL PCBs=46.6J
SB-002A ELEV=15 FT MSL PCBs=29.6J- SB-002B ELEV=9 FT MSL PCBs=0.3J-
SS-007A ELEV=14 FT MSL PCBs=274.4J- SB-007B ELEV=9 FT MSL PCBs=0.3J-
SS-004 ELEV=15 FT MSL PCBs=123.4J
SB-004A ELEV=13 FT MSL PCBs=151J- SB-004B ELEV=9 FT MSL PCBs=31.5J-
SS-001 ELEV=15 FT MSL PCBs=5.5J
SB-001A ELEV=15 FT MSL PCBs=152J- SB-001B ELEV=10 FT MSL PCBs=341J-
SB-010A ELEV=14 FT MSL PCBs=38J SB-010B ELEV=12 FT MSL PCBs=105J
SS-010 ELEV=15 FT MSL PCBs=433.6J
SS-013 ELEV=15 FT MSL PCBs=21.2J
SS-007 ELEV=15 FT MSL PCBs=371J
USTPS-001A ELEV=34 FT MSL PCBs=<0.039 USTPS-001B ELEV=28 FT MSL PCBs=<0.034
USTPS-002A ELEV=34 FT MSL PCBs=<0.039 USTPS-002B ELEV=29 FT MSL PCBs=<0.034
USTPS-003A ELEV=34 FT MSL PCBs=<0.039 USTPS-003B ELEV=28 FT MSL PCBs=<0.040
USTPS-004A ELEV=34 FT MSL PCBs=<0.037 USTPS-004B ELEV=27 FT MSL PCBs=<0.037
USTPS-006A ELEV=34 FT MSL PCBs=<0.039 USTPS-006B ELEV=28 FT MSL PCBs=<0.035
USTPS-005A ELEV=34 FT MSL PCBs=<0.038 USTPS-005B ELEV=27 FT MSL PCBs=<0.035
SB-020A ELEV=36 FT MSL PCBs=38.5J+ SB-020B ELEV=25 FT MSL PCBs=<0.03J SB-020C ELEV=37 FT MSL PCBs=151.9J+
SB-019A ELEV=36 FT MSL PCBs=30.9J+ SB-019B ELEV=27 FT MSL PCBs=113.2J+ SB-019C ELEV=37 FT MSL PCBs=66.1J+ SB-019D ELEV=26 FT MSL PCBs=<0.03J
SB-018 ELEV=18 FT MSL PCBs=3J
SB-017 ELEV=27 FT MSL PCBs=12.8J+
PS-002 ELEV=37 FT MSL PCBs=836.1
PS-001 ELEV=37 FT MSL PCBs=1122.2
PE-075 ELEV=16 FT MSL PCBs=0.9J- CS-007 ELEV=20 FT MSL PCBs=0.3J
PE-070 ELEV=16 FT MSL PCBs=49.6J+
PE-071 ELEV=16 FT MSL PCBs=446J+
CS-002 ELEV=21 FT MSL PCBs=12.3J
PE-069 ELEV=16 FT MSL PCBs=94.8J+
PE-068 ELEV=16 FT MSL PCBs=52.4J+
PE-074 ELEV=16 FT MSL PCBs=0.5J- CS-006 ELEV=20 FT MSL PCBs=7.9J
PE-078 ELEV=16 FT MSL PCBs=0.04J-
CS-003 ELEV=21 FT MSL PCBs=0.7J
CS-001 ELEV=23 FT MSL PCBs=12J
PE-077 ELEV=16 FT MSL PCBs=0.8J- CS-009 ELEV=20 FT MSL PCBs=0.3J
PE-067 ELEV=16 FT MSL PCBs=188.7J+
PE-066 ELEV=16 FT MSL PCBs=442J+
PE-073 ELEV=16 FT MSL PCBs=0.1J- CS-005 ELEV=20 FT MSL PCBs=0.6J
CS-008 ELEV=20 FT MSL PCBs=1.6J
PE-076 ELEV=16 FT MSL PCBs=0.2J-
PE-065 ELEV=16 FT MSL PCBs=42.1J+
PE-064 ELEV=16 FT MSL PCBs=371J+
PE-072 ELEV=16 FT MSL PCBs=0.4J- CS-004 ELEV=20 FT MSL PCBs=16.6J
PE-061 ELEV=16 FT MSL PCBs=687J+
PE-063 ELEV=16 FT MSL PCBs=735J+
PE-062 ELEV=16 FT MSL PCBs=407J+
SB-022A ELEV=36 FT MSL PCBs=<0.04J SB-022B ELEV=24 FT MSL PCBs=<0.1J+
SB-023A ELEV=34 FT MSL PCBs=<0.04 SB-023B ELEV=26 FT MSL PCBs=<0.04
SB-024A ELEV=28 FT MSL PCBs=0.04J+ SB-024B ELEV=22 FT MSL PCBs=<0.04
SB-025A ELEV=25 FT MSL PCBs=<0.04 SB-025B ELEV=20 FT MSL PCBs=<0.03
SB-026A ELEV=21 FT MSL PCBs=<0.04 SB-026B ELEV=16 FT MSL PCBs=<0.03
SB-027 ELEV=15 FT MSL PCBs=<0.03
SB-028 ELEV=13 FT MSL PCBs=<0.04
0 5 10 20
SCALE: 1"=10'
Map source: Site Plan, Pennjersey Environmental Consulting, March 2015
● = proposed soil sample location
Proposed Soil Sample Locations
Former Alcoa Building 12
Edgewater, NJ

ATTACHMENT 3

PERTINENT PAGES
ESI REMEDIAL ACTION REPORT, FEBRUARY 1999

III. REMEDIAL INVESTIGATION – SCOPE OF WORK

There were two Remedial Action Workplans[2] approved for the subject property. The first, dated August 1997, proposed specific actions for Buildings 5, 7, and 9 (Appendix 2). A second RAW, dated September 1997, proposed specific cleanup activities associated with the Russell Avenue Wing, River Road Wing, and Building 11 and 12 (Appendix 3).

It is anticipated that a third and final RAW will be prepared and approved for Building 12, as Building 12 has been bifurcated from the current review process. The results will be reported in a separate RAR.

A. Objectives

Both RAW-1 and RAW-2 included the following objectives:

- Remove all construction materials contaminated with PCBs in excess of the 50 parts per million (ppm) Toxic Substances Control Act (TSCA) cleanup criteria. Materials in this category had to be removed from the site and sent to an approved disposal facility. The removal, temporary on-site storage, and disposal operations had to be cost effective, environmentally sensitive, and executed accordance with NJDEP regulations.

- Additional areas containing construction materials with PCB concentrations between 0.49 and 50 ppm had to be removed from the subject property. Removal would allow the property to meet the NJDEP PCB residential soil cleanup criteria. As these materials contained PCBs that were less than the TSCA criteria, they were removed from the buildings, crushed, processed in an on-site recycling center, and reused for the reconstruction of River Road.

- Dust monitoring and control were significant issues during both the operation of the recycling center and during demolition activities. Concerned parties included the applicant, surrounding property owners, and the adjacent public school.

[2] For clarity and when necessary, the RAW for Buildings 5, 7, and 9 will be referred to as RAW-1, and the RAW for the Russell Avenue and River Road Wings, and Building 11 will be referred to as RAW-2. In general, both documents will be collectively referred to as the RAW.

IV. TECHNICAL OVERVIEW

A. Remedial Action Objectives

As stated in Section 4 of this report, the objectives of the remedial action were to:

- Remove PCB contamination in excess of 50 parts per million (ppm) from specific areas of concern (AOC) of the property. This material was disposed off-site at an NJDEP approved site.
- Additionally, remove areas containing PCB concentrations between 0.49 and 50 ppm. This material was then crushed, recycled, and then used as road bedding material off-site.

B. Analytical Findings Summary

1. Buildings 5, 7, and 9

The construction materials historically determined to be contaminated with PCBs, in excess of the 50 ppm standard were removed, temporarily stockpiled on-site, and hauled off site in a controlled manner. The material was shipped under a series of manifests to Model City, New York.

All construction material, including those determined to have PCB concentrations between 0.49 and 50 ppm were removed from the buildings, temporarily stockpiled on-site, and subsequently recycled for off-site usage as roadway construction material. A summary of the analytical data can be found in Appendix 7.

2. Russell Avenue and River Road Wings, and Building 11

As described above and in Table 1, a series of samples were required to be collected by RAW-2. These samples were collected in the prescribed manner and sent to ChemTech (Englewood, New Jersey) for PCB analysis.

The results of the analytical testing are summarized in Table 2. The estimated volumes of contaminated concrete are summarized in Table 3. In addition, the QA/QC packages associated with the results are provided in Appendix 4 and the Electronic Data Deliverables (EDX) area provided in Appendix 5.

V. FINDINGS AND REMEDIAL ACTION REPORT

There were two general areas of concern regarding this project:

- Construction materials contaminated with PCBs in excess of 50 ppm located in Buildings 5, 7, 9, and 11, as well as the Russell Avenue and River Road Wings. This material was selectively removed, staged, and transported to a secure landfill in Model City, New York.
- Concrete contaminated with PCBs concentrations between 0.49 and 50 ppm. The material was also selectively removed, staged, crushed, and subsequently used by Bergen County as grading material for the reconstruction of River Road adjacent to the subject property.

As discussed in Section 4, there is currently no existing or proposed concrete remediation or cleanup standards promulgated in the State of New Jersey. However, for the purposes of this project, PCB-contaminated debris was evaluated with respect to the Unrestricted Use Soil Cleanup Criteria under N.J.A.C. 7:26D.

All areas of concern within the subject property have been remediated as of the date of this report (except for Building 12). The buildings found to have PCB contaminated concrete above 0.49 ppm have had that material removed. Subsequently, it has either been transported to an approved hazardous waste storage facility or recycled and used as sub-base off-site road construction material.

In addition, all of the buildings on the subject property have been demolished and the site graded (except for Building 12). There are no site restoration activities anticipated. The site will be redeveloped with high-density residential dwelling units. The applicant knows of no known on-site areas containing PCB contamination in excess of the 0.49-ppm residential soil cleanup criteria.

A. Disposal Sites Employed

Chemical Waste Management transported all concrete contaminated with PCBs in excess of 50 ppm to their Model City, New York disposal facility. This disposal facility was approved by NJDEP.

B. Manifests Discussion

Copies of the manifest used during the transport of the PCB contaminated concrete to the Model City facility can be found in Appendix 6.

VI. OPERATION AND MAINTENANCE PLAN

All existing building structures, except Building 12, were processed through the recycling center. The processed concrete as noted above was utilized by the Bergen County Department of Planning and Economic Development as road base material in the River Road expansion. None of the material was used by NRMA for on-site construction.

The site is currently being redeveloped into a residential complex by NRMA. There is no on going operational or maintenance plans associated with the removed contaminated material.

IX. CONCLUSIONS

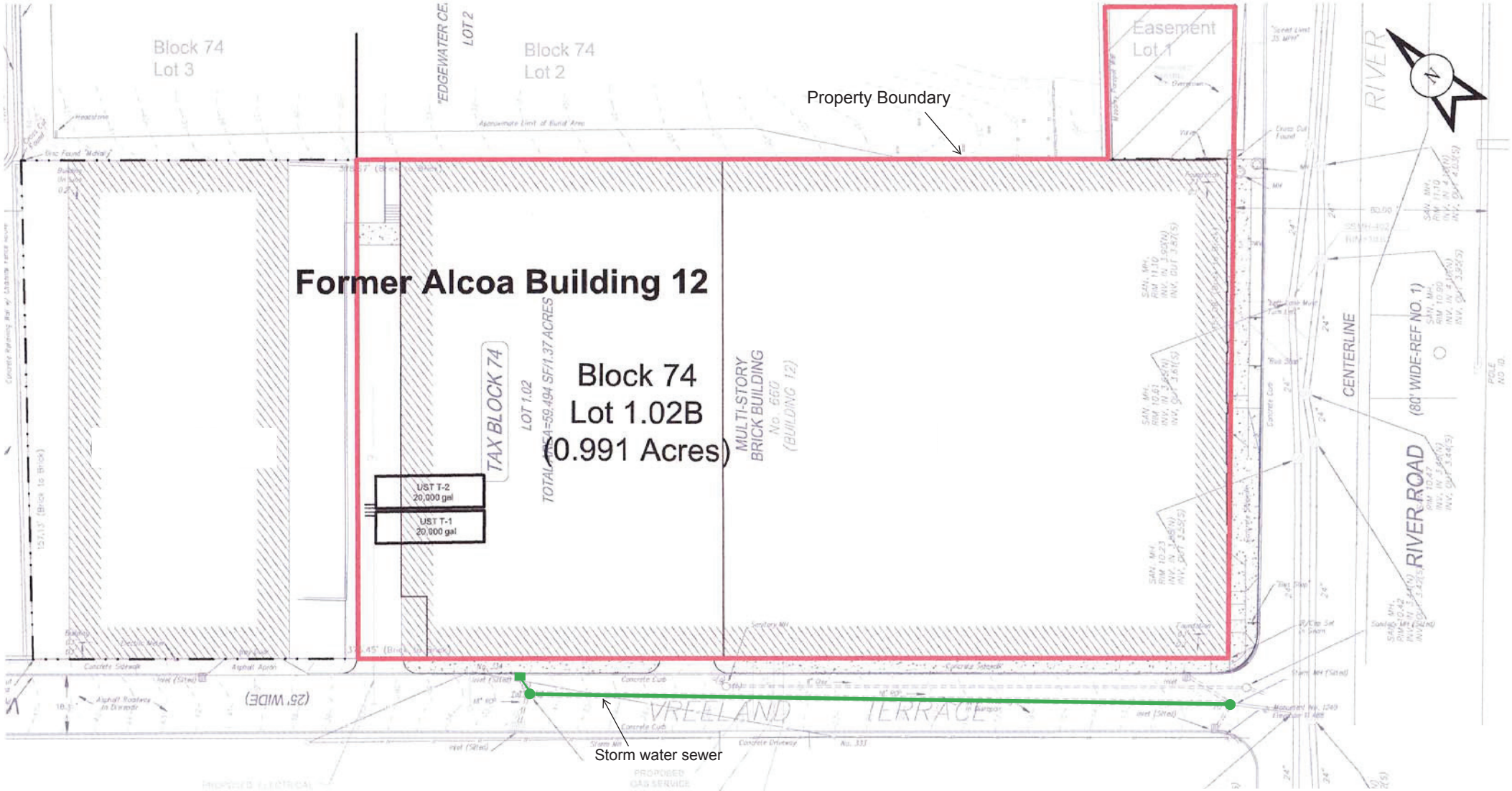
Based on the remedial action assessment, the removal of all PCB contaminated concrete is the appropriate solution for the former Alcoa site. Removing all the contaminated material to NJDEP soil cleanup criteria will protect future tenants, neighboring residential uses, and businesses from potentially hazardous materials on–site.

It is important to note that all the crushed concrete from the subject was used by the County for the reconstruction of River Road. No crushed concrete originating from the demolition material was reused on the subject property.

The measures taken to minimize the exposure of workers and nearby residents to any construction dust during the demolition and removal process was successful.

ATTACHMENT 4

STORM WATER SYSTEM BENEATH VREELAND TERRACE



0 15 30 ft

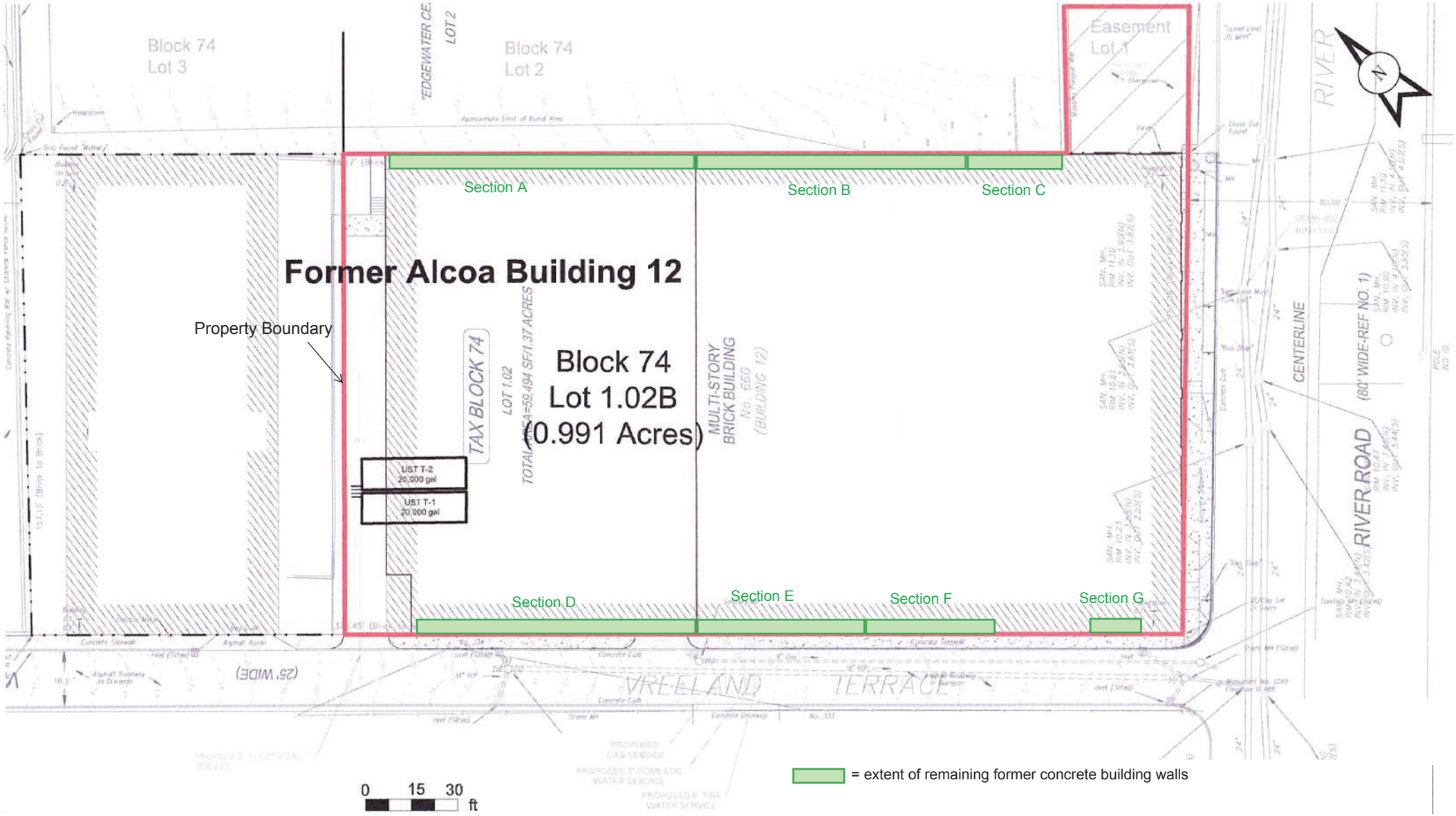
- Catch basin (inlet)
- Manhole
- 18" RCP storm water sewer pipe (~225 ft)

Storm Water Sewer - Vreeland Terrace
Former Alcoa Building 12
Edgewater, NJ

Map source: Site Plan, Pennjersey Environmental Consulting, March 2015

ATTACHMENT 5

LOCATION OF REMAINING FORMER CONCRETE BUILDING WALLS



Map source: Site Plan, Pennjersey Environmental Consulting, March 2015

Remaining Former Concrete Building Walls
Former Alcoa Building 12
Edgewater, NJ

ATTACHMENT 6

USEPA LETTER DATED OCTOBER 7, 1999
AND
PERTINENT PAGES
ESI REMEDIAL ACTION REPORT, AUGUST 2002

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
2890 WOODBRIDGE AVENUE
EDISON, NEW JERSEY 08837-3679

October 7, 1999

Irving D. Cohen, CEP, CES, CEI, Chief Executive Officer
Enviro-Sciences Inc.
111 Howard Boulevard, Suite 108
Mount Arlington, New Jersey 07856

Dear Mr. Cohen:

This is a response to the reported levels of polychlorinated biphenyl (PCB) contamination found in the interior walls of Building 12 at the former ALCOA facility at 700 River Road, Edgewater, New Jersey. Core samples of the concrete walls were obtained based on the sampling plan this office reviewed on July 30, 1999.

The sampling results show PCB contamination in core samples taken at 0"-2" and 2"-4" intervals into the wall to be less than one part per million(ppm). Since the history of this site indicates that contamination occurred prior to the regulation of PCBs by EPA and the levels are less than 50 ppm, the PCBs are not regulated under the federal PCB regulations. Additionally, less than one ppm is the standard or goal for cleanup of bulk PCB contamination in situations where cleanup is required..

It is anticipated that the existing wall areas will be covered as part of the renovations of the building.

Therefore any renovation, disposal or use of the walls is not subject to the federal regulations for PCBs.

This determination is based on the information provided.

If you have any questions on this response, please contact me at (732) 906-6817 or greenlaw.david@epa.gov.

Sincerely,

David Eric Greenlaw, PCB Program Coordinator
Pesticides and Toxic Substances Branch

REMEDIAL ACTION REPORT

River Mews Associates
(Building 12 - Former Alcoa Facility)
700 River Road
Edgewater, New Jersey 07020
(NJDEP #97-6-10-0037-28)

August 2002

ENVIRO-SCIENCES, INC.
111 HOWARD BOULEVARD, SUITE 108
MT. ARLINGTON, NEW JERSEY 07856
(973)398-8183 • (973)398-8037 - Fax

4.0 DESCRIPTION OF REMEDIAL INVESTIGATION

Building 12 is currently standing vacant and partially rehabilitated. All the interior walls have been removed. The exterior walls enclose a space containing two stories. A floor divides this space into two stories. The first story includes a partial basement that underlies the eastern portion of the building. The second story runs the entire length of the building.

On September 17, 1999, the interior surfaces of the exterior walls of Building 12 were tested to determinate if they were contaminated with PCBs. The program consisted of collecting a series of ten core samples.

The cores were collected from approximately one foot above the intersection of the wall and floor. Test locations were biased towards areas of visible staining or discoloration. The differentiation of walls either suspected or not suspected of having PCB contamination was based on their locations. Walls adjacent to floor panels that were removed and were suspected of having been contaminated with low levels of PCBs. Walls adjacent to existing floor panels were determined to be less contaminated. Five cores were collected from exterior wall panels suspected of having elevated concentrations of PCBs. In addition, five additional cores were taken from exterior walls suspected of having minimal PCB contamination.

After collection of each core, sub-samples were taken: the first 2-inch and the second 2-inch segments were harvested. Each was subsequently crushed prior to being sent to the laboratory. The sampling results indicated that all of the cores collected from suspected areas without contamination had PCB concentrations below the 0.49-ppm criteria, both in the surfacial and 2-inch depth samples. As for the areas that were suspected as being contaminated, three of the five surfacial samples had PCB concentrations slightly in excess of the 0.49-ppm criteria. Only one of these samples exhibited contamination in the 2-inch depth section. This last sample was the most visibly stained.

5.0 IMPLEMENTATION OF THE REMEDIAL ACTION WORKPLAN

The proposed Remedial Action to mitigate the PCB contamination in the exterior walls of Building 12 was as follows:

- Wall panels and supporting columns were washed to a height of 8-feet with a water-based soap solution per the paint manufacturer's specification. The wash water was collected and a composite sample was collected by ESI and laboratory tested for PCBs prior to disposal.

- The walls were allowed to adequately dry following wash operations.

- All the wall panels were painted twice with a two-part epoxy-based paint to seal the concrete and brick walls.

- The painted walls will be periodically monitored for cracking, leaks, and structural defects. (Deed Notice)

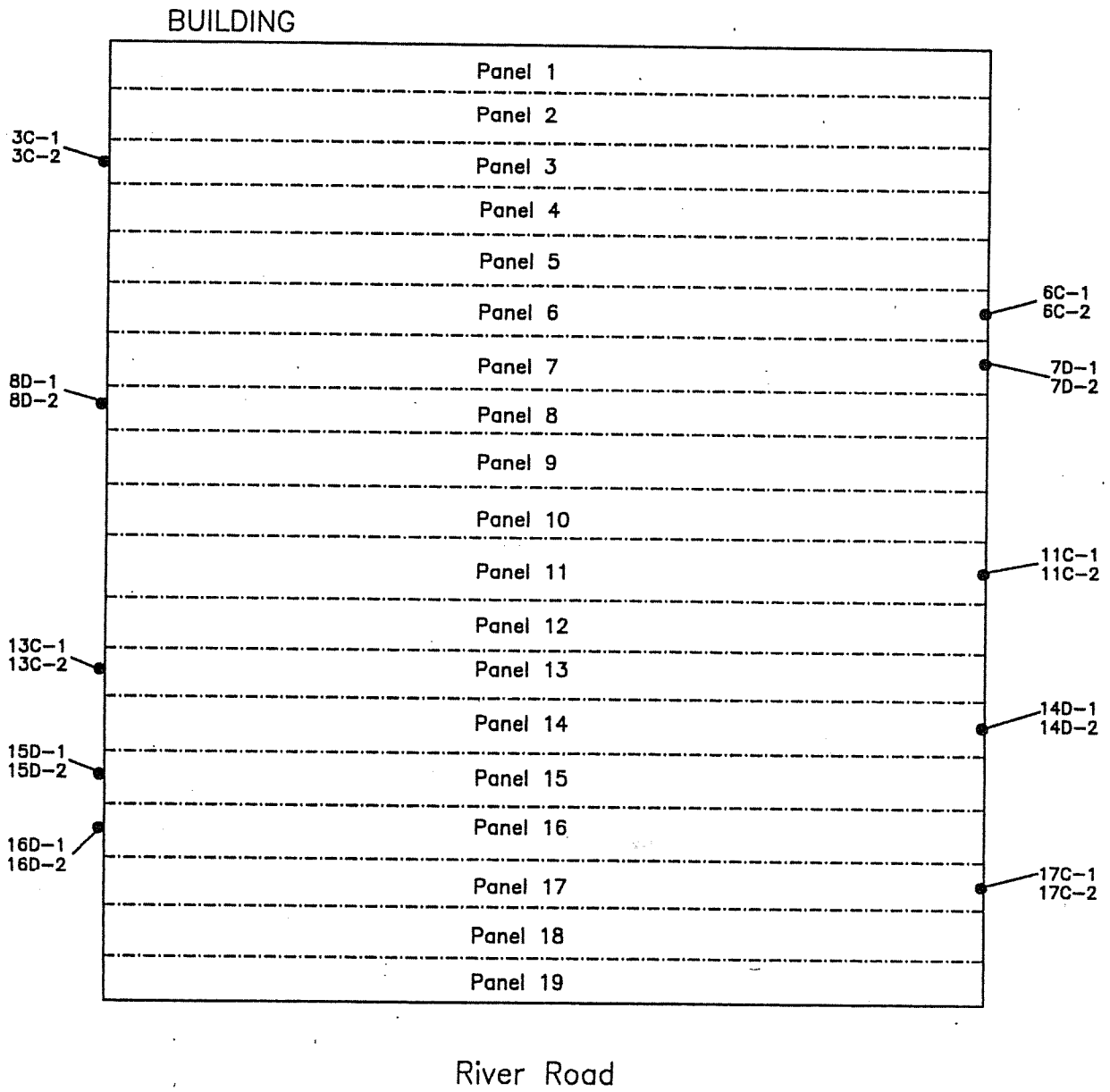
- The general public will be excluded from Building 12 until such a time as the building is rehabilitated or demolished (Deed Notice)

7.0 FINDINGS

The washing of the interior surfaces of the exterior walls of Building 12 have been documented (Attachment 7), as well as the application of the paint specified by the NJDEP. The laboratory analysis of the composite wash water sample indicated that PCB levels (i.e., very low levels) were within an acceptable concentration to allow disposal.

A Deed Notice was prepared for this project that would limit the general public's access to Building 12, until such time as the Notice was removed by agreement between NRMA and the NJDEP. The draft of the Deed Notice is provided as Attachment 4.

With the completion of the remedial activities specified in the RAW and implementation of the Deed Notice, the remediation of Building 12 is now complete.



LEGEND

17C-1
● Sampling Location

NOTES

C = No PCB Contamination
D = PCB Contamination
#1 = 1st two-inches
#2 = 2nd two-inches
Panel width = 18.0'
Drawing not to Scale

FIGURE 3

PCB SAMPLING LOCATIONS

ALCOA
Bergen County New Jersey

PROJECT MANAGER | PROJECT NO.

ENVIRO-SCIENCES, INC.
111 Howard Boulevard, Suite 108
Mount Arlington, NJ 07856
973-398-8182 * Fax 973-398-8087

DRAWN BY/DATE	APPROVED/DATE	DRAWING NUMBER
LMH/8-25-99		ALC-001

Table 2
Former Alcoa Facility-Building 12
PCB Sampling Results

SAMPLE LOCATION	RESULT
3C-1	0.210 ppm
3C-2	0.250 ppm
6C-1	0.200 ppm
6C-2	0.110 ppm
11C-1	0.120 ppm
11C-2	0.037 ppm
13C-1	0.072 ppm
13C-2	0.250 ppm
17C-1	0.070 ppm
17C-2	0.063 ppm

SAMPLE LOCATION	RESULT
7D-1	0.530 ppm
7D-2	0.370 ppm
8D-1	0.071 ppm
8D-2	0.051 ppm
14D-1	0.057 ppm
14D-2	0.058 ppm
15D-1	0.610 ppm
15D-2	0.460 ppm
16D-1	0.640 ppm
16D-2	0.970 ppm
16D-2L	1.000 ppm

All results are for parameter 1254 Aroclor

C = Sample locations where the floor did not contain staining
D = Sample locations where the floor was removed due to PCB contamination

-1 = Sample obtained at first 2 inches
-2 = Sample obtained at second 2 inches

APPENDIX C

SOIL LABORATORY DATA DELIVERABLES
JC10583

New Jersey
ACCUTEST LABORATORIES

12/29/15

Technical Report for

Appalachia Hydrogeologic & Environ. Con.

Alcoa, Edgewater, NJ

Accutest Job Number: JC10583

Sampling Date: 12/11/15

Report to:

Appalachia Hydrogeologic & Environ. Con.
477 Garretson Road
Bridgewater, NJ 08807
JLlewellyn@appalachiaconsulting.com; KCritchlow@appalachiaconsulting.com

ATTN: Jim Llewelyn

Total number of pages in report: **148**

NELAP ACCREDITED TNI LABORATORY

Nancy T. Cole
Nancy Cole
Laboratory Director

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, TX, VA, WV, DoD ELAP (L-A-B L2248)

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Accutest Laboratories

Sample Summary

Appalachia Hydrogeologic & Environ. Con.

Alcoa, Edgewater, NJ

Job No: JC10583

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC10583-1	12/11/15	09:15	KC/PC	12/14/15	SO	Soil	SB-029(14.5-15.0)
JC10583-2	12/11/15	10:05	KC/PC	12/14/15	SO	Soil	SB-030(14.5-15.0)
JC10583-3	12/11/15	11:30	KC/PC	12/14/15	SO	Soil	PE-061R (16.0-16.5)
JC10583-4	12/11/15	12:30	KC/PC	12/14/15	SO	Soil	PE-063R(16.0-16.5)
JC10583-5	12/11/15	13:10	KC/PC	12/14/15	SO	Soil	PS-001R(36.5-37.0)
JC10583-6	12/11/15	13:15	KC/PC	12/14/15	SO	Soil	PS-002R(36.5-37.0)
JC10583-7	12/11/15	13:20	KC/PC	12/14/15	SO	Soil	SB-034(36.5-37.0)
JC10583-8	12/11/15	13:55	KC/PC	12/14/15	SO	Soil	SB-031(25.0-25.5)
JC10583-10	12/11/15	14:00	KC/PC	12/14/15	SO	Soil	SB-032(25.0-25.5)
JC10583-11	12/11/15	14:45	KC/PC	12/14/15	SO	Soil	SB-035(11.0-11.5)
JC10583-12	12/11/15	13:30	KC/PC	12/14/15	SO	Soil	SB-033(36.5-37.0)

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Appalachia Hydrogeologic & Environ. Con.	**Job No**	JC10583
Site:	Alcoa, Edgewater, NJ	**Report Date**	12/29/2015 10:08:45 A

On 12/14/2015, 11 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a maximum corrected temperature of 5.5 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JC10583 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

Extractables by GC By Method SW846 8082A

Matrix: SO **Batch ID:** OP89820

- All samples were extracted within the recommended method holding time.
- Sample(s) JC10588-1MS, JC10588-1MSD were used as the QC samples indicated.
- Sample(s) JC10583-1, JC10583-10, JC10583-11, JC10583-12, JC10583-2, JC10583-3, JC10583-4, JC10583-5, JC10583-6, JC10583-7, JC10583-8 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank.
- JC10583-8 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JC10583-5 for Aroclor 1260: Reported from 1st signal. %D of check on 2nd signal excess method criteria (20 %) so using for confirmation only.
- JC10583-7 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JC10583-11 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JC10583-11 for Aroclor 1260: Reported from 1st signal. %D of check on 2nd signal excess method criteria (20 %) so using for confirmation only.
- JC10583-12 for Decachlorobiphenyl: Outside control limits due to dilution.
- JC10583-12 for Tetrachloro-m-xylene: Outside control limits due to dilution.
- JC10583-4 for Tetrachloro-m-xylene: Outside control limits due to matrix interference.
- JC10583-7 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JC10583-11 for Tetrachloro-m-xylene: Outside control limits due to dilution.
- JC10583-10 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JC10583-11 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JC10583-12 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JC10583-4 for Decachlorobiphenyl: Outside control limits due to dilution.
- JC10583-4 for Tetrachloro-m-xylene: Outside control limits due to dilution.
- JC10583-6 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JC10583-8 for Decachlorobiphenyl: Outside control limits due to dilution.
- JC10583-8 for Tetrachloro-m-xylene: Outside control limits due to dilution.
- JC10583-10 for Decachlorobiphenyl: Outside control limits due to dilution.
- JC10583-10 for Tetrachloro-m-xylene: Outside control limits due to dilution.

Extractables by GC By Method SW846 8082A

Matrix: SO	Batch ID: OP89820

- JC10583-11 for Decachlorobiphenyl: Outside control limits due to dilution.
- JC10583-6 for Decachlorobiphenyl: Outside control limits due to matrix interference.

Wet Chemistry By Method SM2540 G-97

Matrix: SO	Batch ID: GN37977

- The data for SM2540 G-97 meets quality control requirements.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Summary of Hits

Job Number: JC10583
Account: Appalachia Hydrogeologic & Environ. Con.
Project: Alcoa, Edgewater, NJ
Collected: 12/11/15

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC10583-1	**SB-029(14.5-15.0)**					
Aroclor 1248		6720 B	210	64	ug/kg	SW846 8082A
Aroclor 1260		493	42	18	ug/kg	SW846 8082A
JC10583-2	**SB-030(14.5-15.0)**					
Aroclor 1248		14400 B	680	210	ug/kg	SW846 8082A
Aroclor 1260		721	34	14	ug/kg	SW846 8082A
JC10583-3	**PE-061R (16.0-16.5)**					
Aroclor 1248		12400 B	370	110	ug/kg	SW846 8082A
Aroclor 1260		620	37	15	ug/kg	SW846 8082A
JC10583-4	**PE-063R(16.0-16.5)**					
Aroclor 1248		332000 B	9300	2800	ug/kg	SW846 8082A
Aroclor 1260		32700	9300	3900	ug/kg	SW846 8082A
JC10583-5	**PS-001R(36.5-37.0)**					
Aroclor 1248		1160 B	38	11	ug/kg	SW846 8082A
Aroclor 1254		983	38	17	ug/kg	SW846 8082A
Aroclor 1260 [a]		266	38	16	ug/kg	SW846 8082A
JC10583-6	**PS-002R(36.5-37.0)**					
Aroclor 1248		48300 B	1400	420	ug/kg	SW846 8082A
Aroclor 1260		2930	1400	580	ug/kg	SW846 8082A
JC10583-7	**SB-034(36.5-37.0)**					
Aroclor 1248		10300 B	350	110	ug/kg	SW846 8082A
Aroclor 1254		9220	350	150	ug/kg	SW846 8082A
Aroclor 1260		2010	350	150	ug/kg	SW846 8082A
JC10583-8	**SB-031(25.0-25.5)**					
Aroclor 1248		138000 B	7000	2100	ug/kg	SW846 8082A
Aroclor 1260		7490	7000	3000	ug/kg	SW846 8082A
JC10583-10	**SB-032(25.0-25.5)**					
Aroclor 1248		162000 B	6600	2000	ug/kg	SW846 8082A

Summary of Hits

Job Number: JC10583
Account: Appalachia Hydrogeologic & Environ. Con.
Project: Alcoa, Edgewater, NJ
Collected: 12/11/15

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Aroclor 1260		9190	6600	2800	ug/kg	SW846 8082A
JC10583-11	**SB-035(11.0-11.5)**					
Aroclor 1248		165000 B	7300	2200	ug/kg	SW846 8082A
Aroclor 1260 [a]		8430	1500	620	ug/kg	SW846 8082A
JC10583-12	**SB-033(36.5-37.0)**					
Aroclor 1248		99600 B	8000	2400	ug/kg	SW846 8082A

(a) Reported from 1st signal. %D of check on 2nd signal excess method criteria (20 %) so using for confirmation only.

New Jersey

ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID: SB-029(14.5-15.0)
Lab Sample ID: JC10583-1
Matrix: SO - Soil
Method: SW846 8082A SW846 3546
Project: Alcoa, Edgewater, NJ

Date Sampled: 12/11/15
Date Received: 12/14/15
Percent Solids: 77.3

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124607.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124580.D	5	12/23/15	KM	12/17/15	OP89820	G2G3562

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2	15.4 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	42	13	ug/kg	
11104-28-2	Aroclor 1221	ND	42	25	ug/kg	
11141-16-5	Aroclor 1232	ND	42	14	ug/kg	
53469-21-9	Aroclor 1242	ND	42	19	ug/kg	
12672-29-6	Aroclor 1248	6720 [a]	210	64	ug/kg	B
11097-69-1	Aroclor 1254	ND	42	19	ug/kg	
11096-82-5	Aroclor 1260	493	42	18	ug/kg	
11100-14-4	Aroclor 1268	ND	42	13	ug/kg	
37324-23-5	Aroclor 1262	ND	42	12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	63%	73%	20-152%
877-09-8	Tetrachloro-m-xylene	65%	77%	20-152%
2051-24-3	Decachlorobiphenyl	90%	73%	12-157%
2051-24-3	Decachlorobiphenyl	97%	79%	12-157%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-030(14.5-15.0)		
Lab Sample ID:	JC10583-2	**Date Sampled:**	12/11/15
Matrix:	SO - Soil	**Date Received:**	12/14/15
Method:	SW846 8082A SW846 3546	**Percent Solids:**	90.3
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124608.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124585.D	20	12/23/15	KM	12/17/15	OP89820	G2G3562

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2	16.2 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	34	11	ug/kg	
11104-28-2	Aroclor 1221	ND	34	20	ug/kg	
11141-16-5	Aroclor 1232	ND	34	11	ug/kg	
53469-21-9	Aroclor 1242	ND	34	15	ug/kg	
12672-29-6	Aroclor 1248	14400 [a]	680	210	ug/kg	B
11097-69-1	Aroclor 1254	ND	34	15	ug/kg	
11096-82-5	Aroclor 1260	721	34	14	ug/kg	
11100-14-4	Aroclor 1268	ND	34	11	ug/kg	
37324-23-5	Aroclor 1262	ND	34	9.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	85%	112%	20-152%
877-09-8	Tetrachloro-m-xylene	79%	105%	20-152%
2051-24-3	Decachlorobiphenyl	88%	105%	12-157%
2051-24-3	Decachlorobiphenyl	139%	124%	12-157%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	PE-061R (16.0-16.5)		
Lab Sample ID:	JC10583-3	**Date Sampled:**	12/11/15
Matrix:	SO - Soil	**Date Received:**	12/14/15
Method:	SW846 8082A SW846 3546	**Percent Solids:**	89.7
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124609.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124586.D	10	12/23/15	KM	12/17/15	OP89820	G2G3562

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2	15.2 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	12	ug/kg	
11104-28-2	Aroclor 1221	ND	37	22	ug/kg	
11141-16-5	Aroclor 1232	ND	37	12	ug/kg	
53469-21-9	Aroclor 1242	ND	37	17	ug/kg	
12672-29-6	Aroclor 1248	12400 [a]	370	110	ug/kg	B
11097-69-1	Aroclor 1254	ND	37	16	ug/kg	
11096-82-5	Aroclor 1260	620	37	15	ug/kg	
11100-14-4	Aroclor 1268	ND	37	11	ug/kg	
37324-23-5	Aroclor 1262	ND	37	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	45%	41%	20-152%
877-09-8	Tetrachloro-m-xylene	53%	50%	20-152%
2051-24-3	Decachlorobiphenyl	81%	86%	12-157%
2051-24-3	Decachlorobiphenyl	65%	70%	12-157%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	PE-063R(16.0-16.5)		
Lab Sample ID:	JC10583-4	**Date Sampled:**	12/11/15
Matrix:	SO - Soil	**Date Received:**	12/14/15
Method:	SW846 8082A SW846 3546	**Percent Solids:**	71.9
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124610.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124619.D	200	12/23/15	DG	12/17/15	OP89820	G2G3563

	Initial Weight	Final Volume
Run #1	15.0 g	10.0 ml
Run #2	15.0 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	46	15	ug/kg	
11104-28-2	Aroclor 1221	ND	46	27	ug/kg	
11141-16-5	Aroclor 1232	ND	46	15	ug/kg	
53469-21-9	Aroclor 1242	ND	46	21	ug/kg	
12672-29-6	Aroclor 1248	332000 [a]	9300	2800	ug/kg	B
11097-69-1	Aroclor 1254	ND	46	21	ug/kg	
11096-82-5	Aroclor 1260	32700 [a]	9300	3900	ug/kg	
11100-14-4	Aroclor 1268	ND	46	14	ug/kg	
37324-23-5	Aroclor 1262	ND	46	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	543% [b]	0% [c]	20-152%
877-09-8	Tetrachloro-m-xylene	57%	0% [c]	20-152%
2051-24-3	Decachlorobiphenyl	69%	0% [c]	12-157%
2051-24-3	Decachlorobiphenyl	79%	0% [c]	12-157%

(a) Result is from Run# 2
(b) Outside control limits due to matrix interference.
(c) Outside control limits due to dilution.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	PS-001R(36.5-37.0)		
Lab Sample ID:	JC10583-5	**Date Sampled:**	12/11/15
Matrix:	SO - Soil	**Date Received:**	12/14/15
Method:	SW846 8082A SW846 3546	**Percent Solids:**	82.3
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124578.D	1	12/23/15	KM	12/17/15	OP89820	G2G3562
Run #2							

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	12	ug/kg	
11104-28-2	Aroclor 1221	ND	38	22	ug/kg	
11141-16-5	Aroclor 1232	ND	38	12	ug/kg	
53469-21-9	Aroclor 1242	ND	38	17	ug/kg	
12672-29-6	Aroclor 1248	1160	38	11	ug/kg	B
11097-69-1	Aroclor 1254	983	38	17	ug/kg	
11096-82-5	Aroclor 1260 [a]	266	38	16	ug/kg	
11100-14-4	Aroclor 1268	ND	38	12	ug/kg	
37324-23-5	Aroclor 1262	ND	38	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		20-152%
877-09-8	Tetrachloro-m-xylene	87%		20-152%
2051-24-3	Decachlorobiphenyl	78%		12-157%
2051-24-3	Decachlorobiphenyl	101%		12-157%

(a) Reported from 1st signal. %D of check on 2nd signal excess method criteria (20 %) so using for confirmation only.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	PS-002R(36.5-37.0)		
Lab Sample ID:	JC10583-6	**Date Sampled:**	12/11/15
Matrix:	SO - Soil	**Date Received:**	12/14/15
Method:	SW846 8082A SW846 3546	**Percent Solids:**	92.8
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124611.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124620.D	40	12/23/15	DG	12/17/15	OP89820	G2G3563

	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2	15.8 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	34	11	ug/kg	
11104-28-2	Aroclor 1221	ND	34	20	ug/kg	
11141-16-5	Aroclor 1232	ND	34	11	ug/kg	
53469-21-9	Aroclor 1242	ND	34	15	ug/kg	
12672-29-6	Aroclor 1248	48300 [a]	1400	420	ug/kg	B
11097-69-1	Aroclor 1254	ND	34	15	ug/kg	
11096-82-5	Aroclor 1260	2930 [a]	1400	580	ug/kg	
11100-14-4	Aroclor 1268	ND	34	11	ug/kg	
37324-23-5	Aroclor 1262	ND	34	9.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%	86%	20-152%
877-09-8	Tetrachloro-m-xylene	66%	106%	20-152%
2051-24-3	Decachlorobiphenyl	60%	84%	12-157%
2051-24-3	Decachlorobiphenyl	230% [b]	238% [b]	12-157%

(a) Result is from Run# 2
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-034(36.5-37.0)		
Lab Sample ID:	JC10583-7	**Date Sampled:**	12/11/15
Matrix:	SO - Soil	**Date Received:**	12/14/15
Method:	SW846 8082A SW846 3546	**Percent Solids:**	92.2
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124612.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124589.D	10	12/23/15	KM	12/17/15	OP89820	G2G3562

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2	15.6 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	11	ug/kg	
11104-28-2	Aroclor 1221	ND	35	20	ug/kg	
11141-16-5	Aroclor 1232	ND	35	11	ug/kg	
53469-21-9	Aroclor 1242	ND	35	16	ug/kg	
12672-29-6	Aroclor 1248	10300 [a]	350	110	ug/kg	B
11097-69-1	Aroclor 1254	9220 [a]	350	150	ug/kg	
11096-82-5	Aroclor 1260	2010 [a]	350	150	ug/kg	
11100-14-4	Aroclor 1268	ND	35	11	ug/kg	
37324-23-5	Aroclor 1262	ND	35	9.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	52%	46%	20-152%
877-09-8	Tetrachloro-m-xylene	58%	42%	20-152%
2051-24-3	Decachlorobiphenyl	135%	200% [b]	12-157%
2051-24-3	Decachlorobiphenyl	2681% [b]	1554% [b]	12-157%

(a) Result is from Run# 2
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-031(25.0-25.5)		
Lab Sample ID:	JC10583-8	**Date Sampled:**	12/11/15
Matrix:	SO - Soil	**Date Received:**	12/14/15
Method:	SW846 8082A SW846 3546	**Percent Solids:**	88.3
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124613.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124621.D	200	12/23/15	DG	12/17/15	OP89820	G2G3563

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2	16.2 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	11	ug/kg	
11104-28-2	Aroclor 1221	ND	35	21	ug/kg	
11141-16-5	Aroclor 1232	ND	35	12	ug/kg	
53469-21-9	Aroclor 1242	ND	35	16	ug/kg	
12672-29-6	Aroclor 1248	138000 [a]	7000	2100	ug/kg	B
11097-69-1	Aroclor 1254	ND	35	16	ug/kg	
11096-82-5	Aroclor 1260	7490 [a]	7000	3000	ug/kg	
11100-14-4	Aroclor 1268	ND	35	11	ug/kg	
37324-23-5	Aroclor 1262	ND	35	9.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%	0% [b]	20-152%
877-09-8	Tetrachloro-m-xylene	68%	0% [b]	20-152%
2051-24-3	Decachlorobiphenyl	992% [c]	0% [b]	12-157%
2051-24-3	Decachlorobiphenyl	179% [c]	0% [b]	12-157%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.
(c) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-032(25.0-25.5)		
Lab Sample ID:	JC10583-10	**Date Sampled:**	12/11/15
Matrix:	SO - Soil	**Date Received:**	12/14/15
Method:	SW846 8082A SW846 3546	**Percent Solids:**	88.7
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124614.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124622.D	200	12/23/15	DG	12/17/15	OP89820	G2G3563

	Initial Weight	Final Volume
Run #1	17.0 g	10.0 ml
Run #2	17.0 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	11	ug/kg	
11104-28-2	Aroclor 1221	ND	33	19	ug/kg	
11141-16-5	Aroclor 1232	ND	33	11	ug/kg	
53469-21-9	Aroclor 1242	ND	33	15	ug/kg	
12672-29-6	Aroclor 1248	162000 [a]	6600	2000	ug/kg	B
11097-69-1	Aroclor 1254	ND	33	15	ug/kg	
11096-82-5	Aroclor 1260	9190 [a]	6600	2800	ug/kg	
11100-14-4	Aroclor 1268	ND	33	10	ug/kg	
37324-23-5	Aroclor 1262	ND	33	9.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%	0% [b]	20-152%
877-09-8	Tetrachloro-m-xylene	67%	0% [b]	20-152%
2051-24-3	Decachlorobiphenyl	102%	0% [b]	12-157%
2051-24-3	Decachlorobiphenyl	242% [c]	0% [b]	12-157%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.
(c) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: SB-035(11.0-11.5)
Lab Sample ID: JC10583-11
Matrix: SO - Soil
Method: SW846 8082A SW846 3546
Project: Alcoa, Edgewater, NJ

Date Sampled: 12/11/15
Date Received: 12/14/15
Percent Solids: 91.4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124617.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124592.D	40	12/23/15	KM	12/17/15	OP89820	G2G3562
Run #3	2G124623.D	200	12/23/15	DG	12/17/15	OP89820	G2G3563

	Initial Weight	Final Volume
Run #1	15.0 g	10.0 ml
Run #2	15.0 g	10.0 ml
Run #3	15.0 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	12	ug/kg	
11104-28-2	Aroclor 1221	ND	36	21	ug/kg	
11141-16-5	Aroclor 1232	ND	36	12	ug/kg	
53469-21-9	Aroclor 1242	ND	36	16	ug/kg	
12672-29-6	Aroclor 1248	165000 [a]	7300	2200	ug/kg	B
11097-69-1	Aroclor 1254	ND	36	16	ug/kg	
11096-82-5	Aroclor 1260 [b]	8430 [c]	1500	620	ug/kg	
11100-14-4	Aroclor 1268	ND	36	11	ug/kg	
37324-23-5	Aroclor 1262	ND	36	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
877-09-8	Tetrachloro-m-xylene	80%	116%	0% [d]	20-152%
877-09-8	Tetrachloro-m-xylene	61%	103%	0% [d]	20-152%
2051-24-3	Decachlorobiphenyl	85%	115%	0% [d]	12-157%
2051-24-3	Decachlorobiphenyl	250% [e]	201% [e]	0% [d]	12-157%

(a) Result is from Run# 3
(b) Reported from 1st signal. %D of check on 2nd signal excess method criteria (20 %) so using for confirmation only.
(c) Result is from Run# 2
(d) Outside control limits due to dilution.
(e) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-033(36.5-37.0)		
Lab Sample ID:	JC10583-12	**Date Sampled:**	12/11/15
Matrix:	SO - Soil	**Date Received:**	12/14/15
Method:	SW846 8082A SW846 3546	**Percent Solids:**	76.0
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124618.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124593.D	200	12/23/15	KM	12/17/15	OP89820	G2G3562

	Initial Weight	Final Volume
Run #1	16.5 g	10.0 ml
Run #2	16.5 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	40	13	ug/kg	
11104-28-2	Aroclor 1221	ND	40	23	ug/kg	
11141-16-5	Aroclor 1232	ND	40	13	ug/kg	
53469-21-9	Aroclor 1242	ND	40	18	ug/kg	
12672-29-6	Aroclor 1248	99600 [a]	8000	2400	ug/kg	B
11097-69-1	Aroclor 1254	ND	40	18	ug/kg	
11096-82-5	Aroclor 1260	ND	40	17	ug/kg	
11100-14-4	Aroclor 1268	ND	40	12	ug/kg	
37324-23-5	Aroclor 1262	ND	40	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%	0% [b]	20-152%
877-09-8	Tetrachloro-m-xylene	68%	0% [b]	20-152%
2051-24-3	Decachlorobiphenyl	113%	0% [b]	12-157%
2051-24-3	Decachlorobiphenyl	173% [c]	0% [b]	12-157%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.
(c) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

New Jersey

ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

ACCUTEST LABORATORIES

So

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
TEL 732-329-0200 FAX 732-329-3499/3480
www.accutest.com

PAGE 1 OF 1 PP

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # JC10583

Client / Reporting Information

Company Name: Appalachia Hydrogeo & Enviro Consulting
Street Address: 678 Rt. 202/206 Blg. 5 Suite 4
City: Bridgewater State: NJ Zip: 08807
Project Contact: W. James Llewellyn E-mail: jllewellyn@App Consulting
Phone #: 888-240-1984 Fax #: 908-450-7454
Sampler(s) Name(s): Ken Critchlow / Patricia Cormachia Phone #:

Project Information

Project Name: Alcoa
Street:
City: Edgewater State: NJ
Project #:
Client Purchase Order #:
Project Manager: Matt Cordova

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	ICC	PCB	LAB USE ONLY
1	SB-029 (14.5-15.0)		12/11/15	0915	KC/PC	Soil	1									1	X	D43
2	SB-030 (14.5-15.0)		12/11/15	1005	KC/PC	Soil	1									1	X	
3	SB-061R (16.0-16.5)		12/11/15	1130	KC/PC	Soil	1									1	X	
4	PE-063R (16.0-16.5)		12/11/15	1230	KC/PC	Soil	1									1	X	
5	PS-001R (36.5-37.0)		12/11/15	1310	KC/PC	Soil	1									1	X	
6	PS-002R (36.5-37.0)		12/11/15	1315	KC/PC	Soil	1									1	X	
7	SB-034 (36.5-37.0)		12/11/15	1320	KC/PC	Soil	1									1	X	
8	SB-031 (25.0-25.5)		12/11/15	1355	KC/PC	Soil	1									1	X	
9	SB-034 (36.0-35.5)		12/11/15	1325	KC/PC	Soil	1									1	Hold	
10	SB-032 (25.0-25.5)		12/11/15	1400	KC/PC	Soil	1									1	X	
11	SB-035 (11.0-11.5)		12/11/15	1445	KC/PC	Soil	1									1	X	
12	SB-033 (36.5-37.0)		12/11/15	1330	KC/PC	Soil	1									1	X	

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

Turnaround Time (Business days)

- [x] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] 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

SB-034 (36.0-35.5) on HOLD
TIAL ASESSMENT NEW 2A
LABEL VERIFICATION NIN

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 Ken Critchlow	12/14/15 1015	1 A Kreger	2 A Kreger	12/14/15 1215	2
3		3	4		4
5		5	Custody Seal # 180 Accutest	Preserved where applicable	On Ice Cooler Temp.

JC10583: Chain of Custody
Page 1 of 3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JC10583 **Client:** AH&EC **Project:** ALCOA

Date / Time Received: 12/14/2015 12:15:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (5.1);

Cooler Temps (Corrected) °C: Cooler 1: (5.5);

Cooler Security	Y	N		Y	N
1. Custody Seals Present:	☑	☐	3. COC Present:	☑	☐
2. Custody Seals Intact:	☑	☐	4. Smpl Dates/Time OK	☑	☐

Cooler Temperature	Y	N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:	IR Gun	
3. Cooler media:	Ice (Bag)	
4. No, Coolers	1	

Quality Control Preservation	Y	N	N/A
1. Trip Blank present / cooler:	☐	☐	☑
2. Trip Blank listed on COC:	☐	☐	☑
3. Samples preserved properly:	☑	☐	
4. VOCs headspace free:	☐	☐	☑

Sample Integrity - Documentation	Y	N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☐	☑

Sample Integrity - Condition	Y	N
1. Sample recvd within HT:	☑	☐
2. All containers accounted for:	☑	☐
3. Condition of sample:	Intact	

Sample Integrity - Instructions	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume recvd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments -3 SAMPLE ID ON LABEL DOES NOT MATCH ID ON COC. SB-061R (16.0-16.5) LABELED PE-061R (16.0-16.5) PROJECT DATE AND TIME OK.

Accutest Laboratories
V:732.329.0200
2235 US Highway 130
F: 732.329.3499
Dayton, New Jersey
www/accutest.com

JC10583: Chain of Custody
Page 2 of 3

Sample Receipt Summary - Problem Resolution

Accutest Job Number: JC10583

Initiator: BOBL

CSR: M Cordova

Response Date 12/16/2015

Response: The correct sample ID is PE-061R (16.0-16.5). Please use that sample ID.

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JC10583: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

Appalachia Hydrogeologic & Environ. Con.

Alcoa, Edgewater, NJ

Job No: JC10583

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC10583-1 Collected: 11-DEC-15 09:15 By: KC/PC Received: 14-DEC-15 By: RL SB-029(14.5-15.0)						
JC10583-1	SM2540 G-97	16-DEC-15 16:30	KP			%SOL
JC10583-1	SW846 8082A	23-DEC-15 04:55	KM	17-DEC-15	MA	P8082PCB11
JC10583-1	SW846 8082A	23-DEC-15 12:53	DG	17-DEC-15	MA	P8082PCB11
JC10583-2 Collected: 11-DEC-15 10:05 By: KC/PC Received: 14-DEC-15 By: RL SB-030(14.5-15.0)						
JC10583-2	SM2540 G-97	16-DEC-15 16:30	KP			%SOL
JC10583-2	SW846 8082A	23-DEC-15 06:20	KM	17-DEC-15	MA	P8082PCB11
JC10583-2	SW846 8082A	23-DEC-15 13:10	DG	17-DEC-15	MA	P8082PCB11
JC10583-3 Collected: 11-DEC-15 11:30 By: KC/PC Received: 14-DEC-15 By: RL PE-061R (16.0-16.5)						
JC10583-3	SM2540 G-97	16-DEC-15 16:30	KP			%SOL
JC10583-3	SW846 8082A	23-DEC-15 06:37	KM	17-DEC-15	MA	P8082PCB11
JC10583-3	SW846 8082A	23-DEC-15 13:27	DG	17-DEC-15	MA	P8082PCB11
JC10583-4 Collected: 11-DEC-15 12:30 By: KC/PC Received: 14-DEC-15 By: RL PE-063R(16.0-16.5)						
JC10583-4	SM2540 G-97	16-DEC-15 16:30	KP			%SOL
JC10583-4	SW846 8082A	23-DEC-15 13:44	DG	17-DEC-15	MA	P8082PCB11
JC10583-4	SW846 8082A	23-DEC-15 17:10	DG	17-DEC-15	MA	P8082PCB11
JC10583-5 Collected: 11-DEC-15 13:10 By: KC/PC Received: 14-DEC-15 By: RL PS-001R(36.5-37.0)						
JC10583-5	SM2540 G-97	16-DEC-15 16:30	KP			%SOL
JC10583-5	SW846 8082A	23-DEC-15 04:21	KM	17-DEC-15	MA	P8082PCB11
JC10583-6 Collected: 11-DEC-15 13:15 By: KC/PC Received: 14-DEC-15 By: RL PS-002R(36.5-37.0)						
JC10583-6	SM2540 G-97	16-DEC-15 16:30	KP			%SOL
JC10583-6	SW846 8082A	23-DEC-15 14:01	DG	17-DEC-15	MA	P8082PCB11
JC10583-6	SW846 8082A	23-DEC-15 17:27	DG	17-DEC-15	MA	P8082PCB11

Internal Sample Tracking Chronicle

Appalachia Hydrogeologic & Environ. Con.

Alcoa, Edgewater, NJ

Job No: JC10583

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC10583-7 Collected: 11-DEC-15 13:20 By: KC/PC Received: 14-DEC-15 By: RL SB-034(36.5-37.0)						
JC10583-7	SM2540 G-97	16-DEC-15 16:30	KP			%SOL
JC10583-7	SW846 8082A	23-DEC-15 07:27	KM	17-DEC-15	MA	P8082PCB11
JC10583-7	SW846 8082A	23-DEC-15 14:18	DG	17-DEC-15	MA	P8082PCB11
JC10583-8 Collected: 11-DEC-15 13:55 By: KC/PC Received: 14-DEC-15 By: RL SB-031(25.0-25.5)						
JC10583-8	SM2540 G-97	16-DEC-15 16:30	KP			%SOL
JC10583-8	SW846 8082A	23-DEC-15 14:35	DG	17-DEC-15	MA	P8082PCB11
JC10583-8	SW846 8082A	23-DEC-15 17:44	DG	17-DEC-15	MA	P8082PCB11
JC10583-10 Collected: 11-DEC-15 14:00 By: KC/PC Received: 14-DEC-15 By: RL SB-032(25.0-25.5)						
JC10583-10	SM2540 G-97	16-DEC-15 16:30	KP			%SOL
JC10583-10	SW846 8082A	23-DEC-15 14:52	DG	17-DEC-15	MA	P8082PCB11
JC10583-10	SW846 8082A	23-DEC-15 18:01	DG	17-DEC-15	MA	P8082PCB11
JC10583-11 Collected: 11-DEC-15 14:45 By: KC/PC Received: 14-DEC-15 By: RL SB-035(11.0-11.5)						
JC10583-11	SM2540 G-97	16-DEC-15 16:30	KP			%SOL
JC10583-11	SW846 8082A	23-DEC-15 08:18	KM	17-DEC-15	MA	P8082PCB11
JC10583-11	SW846 8082A	23-DEC-15 16:36	DG	17-DEC-15	MA	P8082PCB11
JC10583-11	SW846 8082A	23-DEC-15 18:18	DG	17-DEC-15	MA	P8082PCB11
JC10583-12 Collected: 11-DEC-15 13:30 By: KC/PC Received: 14-DEC-15 By: RL SB-033(36.5-37.0)						
JC10583-12	SM2540 G-97	16-DEC-15 16:30	KP			%SOL
JC10583-12	SW846 8082A	23-DEC-15 08:35	KM	17-DEC-15	MA	P8082PCB11
JC10583-12	SW846 8082A	23-DEC-15 16:53	DG	17-DEC-15	MA	P8082PCB11

Accutest Internal Chain of Custody

Job Number: JC10583
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con.
Project: Alcoa, Edgewater, NJ
Received: 12/14/15

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC10583-1.1	Secured Storage	Alfredo Crespo	12/16/15 11:19	Retrieve from Storage
JC10583-1.1	Alfredo Crespo	Secured Staging Area	12/16/15 11:19	Return to Storage
JC10583-1.1	Secured Staging Area	Kruti Patel	12/16/15 11:30	Retrieve from Storage
JC10583-1.1	Kruti Patel	Secured Storage	12/16/15 14:24	Return to Storage
JC10583-1.1	Secured Storage	Arielle Cocozza	12/17/15 03:30	Retrieve from Storage
JC10583-1.1	Arielle Cocozza	Humarah Bano	12/17/15 07:02	Custody Transfer
JC10583-1.1	Humarah Bano	Secured Storage	12/17/15 11:19	Return to Storage
JC10583-1.1.1	Arielle Cocozza	Organics Prep	12/17/15 03:30	Extract from JC10583-1.1
JC10583-1.1.1	Organics Prep	Meilly Arbelo	12/17/15 09:55	Extract from JC10583-1.1
JC10583-1.1.1	Meilly Arbelo	Extract Storage	12/17/15 09:55	Return to Storage
JC10583-1.1.1	Extract Storage	Kevin Moyle	12/21/15 16:34	Retrieve from Storage
JC10583-1.1.1	Kevin Moyle	GC2G	12/21/15 16:34	Load on Instrument
JC10583-2.1	Secured Storage	Alfredo Crespo	12/16/15 11:19	Retrieve from Storage
JC10583-2.1	Alfredo Crespo	Secured Staging Area	12/16/15 11:19	Return to Storage
JC10583-2.1	Secured Staging Area	Kruti Patel	12/16/15 11:30	Retrieve from Storage
JC10583-2.1	Kruti Patel	Secured Storage	12/16/15 14:24	Return to Storage
JC10583-2.1	Secured Storage	Arielle Cocozza	12/17/15 03:30	Retrieve from Storage
JC10583-2.1	Arielle Cocozza	Humarah Bano	12/17/15 07:02	Custody Transfer
JC10583-2.1	Humarah Bano	Secured Storage	12/17/15 11:19	Return to Storage
JC10583-2.1.1	Arielle Cocozza	Organics Prep	12/17/15 03:30	Extract from JC10583-2.1
JC10583-2.1.1	Organics Prep	Meilly Arbelo	12/17/15 09:55	Extract from JC10583-2.1
JC10583-2.1.1	Meilly Arbelo	Extract Storage	12/17/15 09:55	Return to Storage
JC10583-2.1.1	Extract Storage	Kevin Moyle	12/21/15 16:34	Retrieve from Storage
JC10583-2.1.1	Kevin Moyle	GC2G	12/21/15 16:34	Load on Instrument
JC10583-3.1	Secured Storage	Alfredo Crespo	12/16/15 11:19	Retrieve from Storage
JC10583-3.1	Alfredo Crespo	Secured Staging Area	12/16/15 11:19	Return to Storage
JC10583-3.1	Secured Staging Area	Kruti Patel	12/16/15 11:30	Retrieve from Storage
JC10583-3.1	Kruti Patel	Secured Storage	12/16/15 14:24	Return to Storage
JC10583-3.1	Secured Storage	Arielle Cocozza	12/17/15 03:30	Retrieve from Storage
JC10583-3.1	Arielle Cocozza	Humarah Bano	12/17/15 07:02	Custody Transfer
JC10583-3.1	Humarah Bano	Secured Storage	12/17/15 11:19	Return to Storage
JC10583-3.1.1	Arielle Cocozza	Organics Prep	12/17/15 03:30	Extract from JC10583-3.1
JC10583-3.1.1	Organics Prep	Meilly Arbelo	12/17/15 09:55	Extract from JC10583-3.1
JC10583-3.1.1	Meilly Arbelo	Extract Storage	12/17/15 09:55	Return to Storage
JC10583-3.1.1	Extract Storage	Kevin Moyle	12/21/15 16:34	Retrieve from Storage
JC10583-3.1.1	Kevin Moyle	GC2G	12/21/15 16:34	Load on Instrument
JC10583-4.1	Secured Storage	Alfredo Crespo	12/16/15 11:19	Retrieve from Storage
JC10583-4.1	Alfredo Crespo	Secured Staging Area	12/16/15 11:19	Return to Storage

Accutest Internal Chain of Custody

Job Number: JC10583
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con.
Project: Alcoa, Edgewater, NJ
Received: 12/14/15

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC10583-4.1	Secured Staging Area	Kruti Patel	12/16/15 11:30	Retrieve from Storage
JC10583-4.1	Kruti Patel	Secured Storage	12/16/15 14:24	Return to Storage
JC10583-4.1	Secured Storage	Arielle Cocozza	12/17/15 03:30	Retrieve from Storage
JC10583-4.1	Arielle Cocozza	Humarah Bano	12/17/15 07:02	Custody Transfer
JC10583-4.1	Humarah Bano	Secured Storage	12/17/15 11:19	Return to Storage
JC10583-4.1.1	Arielle Cocozza	Organics Prep	12/17/15 03:30	Extract from JC10583-4.1
JC10583-4.1.1	Organics Prep	Meilly Arbelo	12/17/15 09:55	Extract from JC10583-4.1
JC10583-4.1.1	Meilly Arbelo	Extract Storage	12/17/15 09:55	Return to Storage
JC10583-4.1.1	Extract Storage	Kevin Moyle	12/21/15 16:34	Retrieve from Storage
JC10583-4.1.1	Kevin Moyle	GC2G	12/21/15 16:34	Load on Instrument
JC10583-5.1	Secured Storage	Alfredo Crespo	12/16/15 11:19	Retrieve from Storage
JC10583-5.1	Alfredo Crespo	Secured Staging Area	12/16/15 11:19	Return to Storage
JC10583-5.1	Secured Staging Area	Kruti Patel	12/16/15 11:30	Retrieve from Storage
JC10583-5.1	Kruti Patel	Secured Storage	12/16/15 14:24	Return to Storage
JC10583-5.1	Secured Storage	Arielle Cocozza	12/17/15 03:30	Retrieve from Storage
JC10583-5.1	Arielle Cocozza	Humarah Bano	12/17/15 07:02	Custody Transfer
JC10583-5.1	Humarah Bano	Secured Storage	12/17/15 11:19	Return to Storage
JC10583-5.1.1	Arielle Cocozza	Organics Prep	12/17/15 03:30	Extract from JC10583-5.1
JC10583-5.1.1	Organics Prep	Meilly Arbelo	12/17/15 09:55	Extract from JC10583-5.1
JC10583-5.1.1	Meilly Arbelo	Extract Storage	12/17/15 09:55	Return to Storage
JC10583-5.1.1	Extract Storage	Kevin Moyle	12/21/15 16:34	Retrieve from Storage
JC10583-5.1.1	Kevin Moyle	GC2G	12/21/15 16:34	Load on Instrument
JC10583-6.1	Secured Storage	Alfredo Crespo	12/16/15 11:19	Retrieve from Storage
JC10583-6.1	Alfredo Crespo	Secured Staging Area	12/16/15 11:19	Return to Storage
JC10583-6.1	Secured Staging Area	Kruti Patel	12/16/15 11:30	Retrieve from Storage
JC10583-6.1	Kruti Patel	Secured Storage	12/16/15 14:24	Return to Storage
JC10583-6.1	Secured Storage	Arielle Cocozza	12/17/15 03:30	Retrieve from Storage
JC10583-6.1	Arielle Cocozza	Humarah Bano	12/17/15 07:02	Custody Transfer
JC10583-6.1	Humarah Bano	Secured Storage	12/17/15 11:19	Return to Storage
JC10583-6.1.1	Arielle Cocozza	Organics Prep	12/17/15 03:30	Extract from JC10583-6.1
JC10583-6.1.1	Organics Prep	Meilly Arbelo	12/17/15 09:55	Extract from JC10583-6.1
JC10583-6.1.1	Meilly Arbelo	Extract Storage	12/17/15 09:55	Return to Storage
JC10583-6.1.1	Extract Storage	Kevin Moyle	12/21/15 16:34	Retrieve from Storage
JC10583-6.1.1	Kevin Moyle	GC2G	12/21/15 16:34	Load on Instrument
JC10583-7.1	Secured Storage	Alfredo Crespo	12/16/15 11:19	Retrieve from Storage
JC10583-7.1	Alfredo Crespo	Secured Staging Area	12/16/15 11:19	Return to Storage
JC10583-7.1	Secured Staging Area	Kruti Patel	12/16/15 11:30	Retrieve from Storage
JC10583-7.1	Kruti Patel	Secured Storage	12/16/15 14:24	Return to Storage

Accutest Internal Chain of Custody

Job Number: JC10583
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con.
Project: Alcoa, Edgewater, NJ
Received: 12/14/15

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC10583-7.1	Secured Storage	Arielle Cocozza	12/17/15 03:30	Retrieve from Storage
JC10583-7.1	Arielle Cocozza	Humarah Bano	12/17/15 07:02	Custody Transfer
JC10583-7.1	Humarah Bano	Secured Storage	12/17/15 11:19	Return to Storage
JC10583-7.1.1	Arielle Cocozza	Organics Prep	12/17/15 03:30	Extract from JC10583-7.1
JC10583-7.1.1	Organics Prep	Meilly Arbelo	12/17/15 09:55	Extract from JC10583-7.1
JC10583-7.1.1	Meilly Arbelo	Extract Storage	12/17/15 09:55	Return to Storage
JC10583-7.1.1	Extract Storage	Kevin Moyle	12/21/15 16:34	Retrieve from Storage
JC10583-7.1.1	Kevin Moyle	GC2G	12/21/15 16:34	Load on Instrument
JC10583-8.1	Secured Storage	Alfredo Crespo	12/16/15 11:19	Retrieve from Storage
JC10583-8.1	Alfredo Crespo	Secured Staging Area	12/16/15 11:19	Return to Storage
JC10583-8.1	Secured Staging Area	Kruti Patel	12/16/15 11:30	Retrieve from Storage
JC10583-8.1	Kruti Patel	Secured Storage	12/16/15 14:24	Return to Storage
JC10583-8.1	Secured Storage	Arielle Cocozza	12/17/15 03:30	Retrieve from Storage
JC10583-8.1	Arielle Cocozza	Humarah Bano	12/17/15 07:02	Custody Transfer
JC10583-8.1	Humarah Bano	Secured Storage	12/17/15 11:19	Return to Storage
JC10583-8.1.1	Arielle Cocozza	Organics Prep	12/17/15 03:30	Extract from JC10583-8.1
JC10583-8.1.1	Organics Prep	Meilly Arbelo	12/17/15 09:55	Extract from JC10583-8.1
JC10583-8.1.1	Meilly Arbelo	Extract Storage	12/17/15 09:55	Return to Storage
JC10583-8.1.1	Extract Storage	Kevin Moyle	12/21/15 16:34	Retrieve from Storage
JC10583-8.1.1	Kevin Moyle	GC2G	12/21/15 16:34	Load on Instrument
JC10583-9.1	Secured Storage	Humarah Bano	12/17/15 07:10	Retrieve from Storage
JC10583-9.1	Humarah Bano	Secured Storage	12/17/15 11:19	Return to Storage
JC10583-10.1	Secured Storage	Alfredo Crespo	12/16/15 11:19	Retrieve from Storage
JC10583-10.1	Alfredo Crespo	Secured Staging Area	12/16/15 11:19	Return to Storage
JC10583-10.1	Secured Staging Area	Kruti Patel	12/16/15 11:30	Retrieve from Storage
JC10583-10.1	Kruti Patel	Secured Storage	12/16/15 14:24	Return to Storage
JC10583-10.1	Secured Storage	Arielle Cocozza	12/17/15 03:30	Retrieve from Storage
JC10583-10.1	Arielle Cocozza	Humarah Bano	12/17/15 07:02	Custody Transfer
JC10583-10.1	Humarah Bano	Secured Storage	12/17/15 11:19	Return to Storage
JC10583-10.1.1	Arielle Cocozza	Organics Prep	12/17/15 03:30	Extract from JC10583-10.1
JC10583-10.1.1	Organics Prep	Meilly Arbelo	12/17/15 09:55	Extract from JC10583-10.1
JC10583-10.1.1	Meilly Arbelo	Extract Storage	12/17/15 09:55	Return to Storage
JC10583-10.1.1	Extract Storage	Kevin Moyle	12/21/15 16:34	Retrieve from Storage
JC10583-10.1.1	Kevin Moyle	GC2G	12/21/15 16:34	Load on Instrument
JC10583-11.1	Secured Storage	Alfredo Crespo	12/16/15 11:19	Retrieve from Storage
JC10583-11.1	Alfredo Crespo	Secured Staging Area	12/16/15 11:19	Return to Storage
JC10583-11.1	Secured Staging Area	Kruti Patel	12/16/15 11:30	Retrieve from Storage

Accutest Internal Chain of Custody

Job Number: JC10583
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con.
Project: Alcoa, Edgewater, NJ
Received: 12/14/15

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC10583-11.1	Kruti Patel	Secured Storage	12/16/15 14:24	Return to Storage
JC10583-11.1	Secured Storage	Arielle Cocozza	12/17/15 03:30	Retrieve from Storage
JC10583-11.1	Arielle Cocozza	Humarah Bano	12/17/15 07:02	Custody Transfer
JC10583-11.1	Humarah Bano	Secured Storage	12/17/15 11:19	Return to Storage
JC10583-11.1.1	Arielle Cocozza	Organics Prep	12/17/15 03:30	Extract from JC10583-11.1
JC10583-11.1.1	Organics Prep	Meilly Arbelo	12/17/15 09:55	Extract from JC10583-11.1
JC10583-11.1.1	Meilly Arbelo	Extract Storage	12/17/15 09:55	Return to Storage
JC10583-11.1.1	Extract Storage	Kevin Moyle	12/21/15 16:34	Retrieve from Storage
JC10583-11.1.1	Kevin Moyle	GC2G	12/21/15 16:34	Load on Instrument
JC10583-12.1	Secured Storage	Alfredo Crespo	12/16/15 11:19	Retrieve from Storage
JC10583-12.1	Alfredo Crespo	Secured Staging Area	12/16/15 11:19	Return to Storage
JC10583-12.1	Secured Staging Area	Kruti Patel	12/16/15 11:30	Retrieve from Storage
JC10583-12.1	Kruti Patel	Secured Storage	12/16/15 14:24	Return to Storage
JC10583-12.1	Secured Storage	Arielle Cocozza	12/17/15 03:30	Retrieve from Storage
JC10583-12.1	Arielle Cocozza	Humarah Bano	12/17/15 07:02	Custody Transfer
JC10583-12.1	Humarah Bano	Secured Storage	12/17/15 11:19	Return to Storage
JC10583-12.1.1	Arielle Cocozza	Organics Prep	12/17/15 03:30	Extract from JC10583-12.1
JC10583-12.1.1	Organics Prep	Meilly Arbelo	12/17/15 09:55	Extract from JC10583-12.1
JC10583-12.1.1	Meilly Arbelo	Extract Storage	12/17/15 09:55	Return to Storage
JC10583-12.1.1	Extract Storage	Kevin Moyle	12/21/15 16:34	Retrieve from Storage
JC10583-12.1.1	Kevin Moyle	GC2G	12/21/15 16:34	Load on Instrument

New Jersey
ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC10583
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con.
Project: Alcoa, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP89820-MB1	XX182474.D	1	12/17/15	JR	12/17/15	OP89820	GXX5548

The QC reported here applies to the following samples: **Method:** SW846 8082A

JC10583-1, JC10583-2, JC10583-3, JC10583-4, JC10583-5, JC10583-6, JC10583-7, JC10583-8, JC10583-10, JC10583-11, JC10583-12

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	11	ug/kg	
11104-28-2	Aroclor 1221	ND	33	20	ug/kg	
11141-16-5	Aroclor 1232	ND	33	11	ug/kg	
53469-21-9	Aroclor 1242	ND	33	15	ug/kg	
12672-29-6	Aroclor 1248	10.9	33	10	ug/kg	J
11097-69-1	Aroclor 1254	ND	33	15	ug/kg	
11096-82-5	Aroclor 1260	ND	33	14	ug/kg	
11100-14-4	Aroclor 1268	ND	33	10	ug/kg	
37324-23-5	Aroclor 1262	ND	33	9.4	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	96%	20-152%
877-09-8	Tetrachloro-m-xylene	99%	20-152%
2051-24-3	Decachlorobiphenyl	88%	12-157%
2051-24-3	Decachlorobiphenyl	87%	12-157%

Blank Spike Summary

Job Number: JC10583
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con.
Project: Alcoa, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP89820-BS1	XX182475.D	1	12/17/15	JR	12/17/15	OP89820	GXX5548

The QC reported here applies to the following samples: **Method:** SW846 8082A

JC10583-1, JC10583-2, JC10583-3, JC10583-4, JC10583-5, JC10583-6, JC10583-7, JC10583-8, JC10583-10, JC10583-11, JC10583-12

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	133	158	118	48-167
11104-28-2	Aroclor 1221		ND		70-130
11141-16-5	Aroclor 1232		ND		70-130
53469-21-9	Aroclor 1242		ND		70-130
12672-29-6	Aroclor 1248		ND		70-130
11097-69-1	Aroclor 1254		ND		70-130
11096-82-5	Aroclor 1260	133	142	106	44-162
11100-14-4	Aroclor 1268		ND		50-150 [a]
37324-23-5	Aroclor 1262		ND		50-150 [a]

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	103%	20-152%
877-09-8	Tetrachloro-m-xylene	107%	20-152%
2051-24-3	Decachlorobiphenyl	95%	12-157%
2051-24-3	Decachlorobiphenyl	94%	12-157%

(a) Advisory control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC10583
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con.
Project: Alcoa, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP89820-MS	2G124460.D	1	12/21/15	KM	12/17/15	OP89820	G2G3561
OP89820-MSD	2G124461.D	1	12/21/15	KM	12/17/15	OP89820	G2G3561
JC10588-1	2G124462.D	1	12/21/15	KM	12/17/15	OP89820	G2G3561

The QC reported here applies to the following samples: **Method:** SW846 8082A

JC10583-1, JC10583-2, JC10583-3, JC10583-4, JC10583-5, JC10583-6, JC10583-7, JC10583-8, JC10583-10, JC10583-11, JC10583-12

CAS No.	Compound	JC10588-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		151	201	133	152	152	100	28	32-176/47
11104-28-2	Aroclor 1221	ND			ND			ND		nc	70-130/30
11141-16-5	Aroclor 1232	ND			ND			ND		nc	70-130/30
53469-21-9	Aroclor 1242	ND			ND			ND		nc	70-130/30
12672-29-6	Aroclor 1248	ND			ND			ND		nc	70-130/30
11097-69-1	Aroclor 1254	ND			ND			ND		nc	70-130/30
11096-82-5	Aroclor 1260	ND		151	173	115	152	134	88	25	19-180/49
11100-14-4	Aroclor 1268	ND			ND			ND		nc	-/30
37324-23-5	Aroclor 1262	ND			ND			ND		nc	-/30

CAS No.	Surrogate Recoveries	MS	MSD	JC10588-1	Limits
877-09-8	Tetrachloro-m-xylene	112%	80%	97%	20-152%
877-09-8	Tetrachloro-m-xylene	115%	78%	98%	20-152%
2051-24-3	Decachlorobiphenyl	89%	58%	67%	12-157%
2051-24-3	Decachlorobiphenyl	93%	67%	69%	12-157%

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: JC10583
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con.
Project: Alcoa, Edgewater, NJ

Method: SW846 8082A **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
JC10583-1	2G124607.D	63	65	90	97
JC10583-1	2G124580.D	73	77	73	79
JC10583-2	2G124608.D	85	79	88	139
JC10583-2	2G124585.D	112	105	105	124
JC10583-3	2G124609.D	45	53	81	65
JC10583-3	2G124586.D	41	50	86	70
JC10583-4	2G124610.D	543* [c]	57	69	79
JC10583-4	2G124619.D	0* [d]	0* [d]	0* [d]	0* [d]
JC10583-5	2G124578.D	88	87	78	101
JC10583-6	2G124611.D	88	66	60	230* [c]
JC10583-6	2G124620.D	86	106	84	238* [c]
JC10583-7	2G124612.D	52	58	135	2681* [c]
JC10583-7	2G124589.D	46	42	200* [c]	1554* [c]
JC10583-8	2G124613.D	98	68	992* [c]	179* [c]
JC10583-8	2G124621.D	0* [d]	0* [d]	0* [d]	0* [d]
JC10583-10	2G124614.D	95	67	102	242* [c]
JC10583-10	2G124622.D	0* [d]	0* [d]	0* [d]	0* [d]
JC10583-11	2G124617.D	80	61	85	250* [c]
JC10583-11	2G124623.D	0* [d]	0* [d]	0* [d]	0* [d]
JC10583-11	2G124592.D	116	103	115	201* [c]
JC10583-12	2G124618.D	78	68	113	173* [c]
JC10583-12	2G124593.D	0* [d]	0* [d]	0* [d]	0* [d]
OP89820-BS1	XX182475.D	103	107	95	94
OP89820-MB1	XX182474.D	96	99	88	87
OP89820-MS	2G124460.D	112	115	89	93
OP89820-MSD	2G124461.D	80	78	58	67

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	20-152%
S2 = Decachlorobiphenyl	12-157%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2
(c) Outside control limits due to matrix interference.
(d) Outside control limits due to dilution.

GC Surrogate Retention Time Summary

Job Number: JC10583
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con.
Project: Alcoa, Edgewater, NJ

Check Std:	G2G3562-CC3559	**Injection Date:**	12/23/15
Lab File ID:	2G124583.D	**Injection Time:**	05:46
Instrument ID:	GC2G	**Method:**	SW846 8082A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std				

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
JC10583-2	2G124585.D	12/23/15	06:20	3.08	3.66	10.52	12.16
JC10583-3	2G124586.D	12/23/15	06:37	3.09	3.66	10.52	12.16
JC10583-7	2G124589.D	12/23/15	07:27	3.09	3.66	10.52	12.16
JC10583-11	2G124592.D	12/23/15	08:18	3.07	3.65	10.52	12.16
JC10583-12	2G124593.D	12/23/15	08:35	0.00	0.00	0.00	0.00

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC10583
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con.
Project: Alcoa, Edgewater, NJ

Check Std:	G2G3561-CC3559	**Injection Date:**	12/21/15
Lab File ID:	2G124455.D	**Injection Time:**	09:26
Instrument ID:	GC2G	**Method:**	SW846 8082A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	3.09	3.66	10.53	12.16

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	2G124458.D	12/21/15	10:45	3.09	3.66	10.52	12.16
ZZZZZZ	2G124459.D	12/21/15	11:09	3.10	3.66	10.53	12.16
OP89820-MS	2G124460.D	12/21/15	11:26	3.09	3.66	10.52	12.16
OP89820-MSD	2G124461.D	12/21/15	11:42	3.09	3.66	10.52	12.16
JC10588-1	2G124462.D	12/21/15	11:59	3.08	3.65	10.52	12.16
ZZZZZZ	2G124463.D	12/21/15	12:16	3.08	3.65	10.52	12.16
ZZZZZZ	2G124464.D	12/21/15	12:33	3.08	3.66	10.52	12.16

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC10583
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con.
Project: Alcoa, Edgewater, NJ

Check Std:	G2G3562-CC3559	**Injection Date:**	12/23/15
Lab File ID:	2G124572.D	**Injection Time:**	02:37
Instrument ID:	GC2G	**Method:**	SW846 8082A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	3.09	3.66	10.52	12.16

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	2G124574.D	12/23/15	03:13	3.08	3.66	10.52	12.16
ZZZZZZ	2G124575.D	12/23/15	03:30	3.09	3.66	10.52	12.16
ZZZZZZ	2G124576.D	12/23/15	03:47	3.09	3.66	10.52	12.16
ZZZZZZ	2G124577.D	12/23/15	04:04	3.08	3.66	10.52	12.16
JC10583-5	2G124578.D	12/23/15	04:21	3.09	3.66	10.52	12.16
ZZZZZZ	2G124579.D	12/23/15	04:38	3.08	3.66	10.52	12.16
JC10583-1	2G124580.D	12/23/15	04:55	3.09	3.66	10.52	12.16

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC10583
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con.
Project: Alcoa, Edgewater, NJ

Check Std:	G2G3563-CC3559	**Injection Date:**	12/23/15
Lab File ID:	2G124605.D	**Injection Time:**	12:20
Instrument ID:	GC2G	**Method:**	SW846 8082A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	3.08	3.65	10.51	12.15

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
JC10583-1	2G124607.D	12/23/15	12:53	3.08	3.65	10.52	12.16
JC10583-2	2G124608.D	12/23/15	13:10	3.08	3.65	10.52	12.16
JC10583-3	2G124609.D	12/23/15	13:27	3.09	3.67	10.53	12.16
JC10583-4	2G124610.D	12/23/15	13:44	3.05	3.66	10.53	12.17
JC10583-6	2G124611.D	12/23/15	14:01	3.08	3.66	10.52	12.17
JC10583-7	2G124612.D	12/23/15	14:18	3.08	3.66	10.54	12.20
JC10583-8	2G124613.D	12/23/15	14:35	3.06	3.65	10.53	12.17
JC10583-10	2G124614.D	12/23/15	14:52	3.06	3.65	10.52	12.16

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC10583
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con.
Project: Alcoa, Edgewater, NJ

Check Std:	G2G3563-CC3559	**Injection Date:**	12/23/15
Lab File ID:	2G124615.D	**Injection Time:**	16:02
Instrument ID:	GC2G	**Method:**	SW846 8082A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	3.08	3.65	10.51	12.15

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
JC10583-11	2G124617.D	12/23/15	16:36	3.07	3.65	10.52	12.16
JC10583-12	2G124618.D	12/23/15	16:53	3.08	3.65	10.52	12.16
JC10583-4	2G124619.D	12/23/15	17:10	0.00	0.00	0.00	0.00
JC10583-6	2G124620.D	12/23/15	17:27	3.08	3.65	10.52	12.17
JC10583-8	2G124621.D	12/23/15	17:44	0.00	0.00	0.00	0.00
JC10583-10	2G124622.D	12/23/15	18:01	0.00	0.00	0.00	0.00
JC10583-11	2G124623.D	12/23/15	18:18	0.00	0.00	0.00	0.00

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC10583
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con.
Project: Alcoa, Edgewater, NJ

Check Std:	GXX5548-CC5543	**Injection Date:**	12/17/15
Lab File ID:	XX182468.D	**Injection Time:**	12:46
Instrument ID:	GCXX	**Method:**	SW846 8082A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	3.01	3.27	10.62	11.60

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	XX182470.D	12/17/15	13:20	3.01	3.27	10.62	11.60
ZZZZZZ	XX182471.D	12/17/15	13:37	3.01	3.27	10.62	11.60
ZZZZZZ	XX182472.D	12/17/15	13:54	3.02	3.29	10.61	11.60
ZZZZZZ	XX182473.D	12/17/15	14:11	3.01	3.29	10.61	11.60
OP89820-MB1	XX182474.D	12/17/15	14:36	3.01	3.27	10.63	11.60
OP89820-BS1	XX182475.D	12/17/15	14:53	3.01	3.27	10.63	11.60
ZZZZZZ	XX182476.D	12/17/15	15:10	3.01	3.27	10.61	11.60

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: JC10583 **Sample:** G2G3559-ICC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124400.D
Project: Alcoa, Edgewater, NJ

Response Factor Report HP G1530A

Method Path : C:\MSDCHEM\1\METHODS\
Method File : 2PCB3559.M
Title :
Last Update : Mon Dec 21 08:45:44 2015
Response Via : Initial Calibration

Calibration Files
50 =2g124397.D 250 =2g124398.D 500 =2g124399.D
1000 =2g124400.D 2000 =2g124401.D 3000 =2g124402.D

	Compound	50	250	500	1000	2000	3000	Avg	%RSD
1) S	Tetrachloro-m...	6.221	6.408	6.837	6.703	6.237	6.609	6.503 E7	3.90
2)	AR1221-A				3.209			3.209 E5	0.00
3)	AR1221-B				6.507			6.507 E5	0.00
4)	AR1221-C				1.899			1.899 E6	0.00
5)	AR1221-D				1.745			1.745 E5	0.00
6)	AR1221-E				1.636			1.636 E5	0.00
7)	AR1232-A				1.553			1.553 E6	0.00
8)	AR1232-B				1.051			1.051 E6	0.00
9)	AR1232-C				2.255			2.255 E6	0.00
10)	AR1232-D				8.348			8.348 E5	0.00
11)	AR1232-E				8.144			8.144 E5	0.00
12)	AR1242-A				1.720			1.720 E6	0.00
13)	AR1242-B				3.938			3.938 E6	0.00
14)	AR1242-C				1.452			1.452 E6	0.00
15)	AR1242-D				1.570			1.570 E6	0.00
16)	AR1242-E				1.358			1.358 E6	0.00
17)	AR1248-A				9.012			9.012 E5	0.00
18)	AR1248-B				2.657			2.657 E6	0.00
19)	AR1248-C				2.404			2.404 E6	0.00
20)	AR1248-D				2.418			2.418 E6	0.00
21)	AR1248-E				1.320			1.320 E6	0.00
22)	AR1248-F				2.313			2.313 E6	0.00
23)	AR1248-G				1.725			1.725 E6	0.00
24)	AR1254-A				1.972			1.972 E6	0.00
25)	AR1254-B				3.913			3.913 E6	0.00
26)	AR1254-C				2.192			2.192 E6	0.00
27)	AR1254-D				3.768			3.768 E6	0.00
28)	AR1254-E				2.994			2.994 E6	0.00
29)	AR1254-F				2.786			2.786 E6	0.00
30)	AR1254-G				3.912			3.912 E6	0.00
31)	AR1016-A	1.276	1.233	1.190	1.146	1.141	1.189	1.196 E6	4.33
32)	AR1016-B	2.683	2.176	2.072	1.978	1.985	2.061	2.159 E6	12.34
33)	AR1016-C	6.022	4.919	4.701	4.613	4.821	5.136	5.035 E6	10.26
34)	AR1016-D	2.238	1.815	1.730	1.691	1.745	1.848	1.845 E6	10.89
35)	AR1016-E	2.330	1.907	1.834	1.789	1.886	2.000	1.958 E6	10.00
36)	AR1260-A	5.250	4.373	4.160	4.201	4.510	4.911	4.567 E6	9.42
37)	AR1260-B	2.637	2.164	2.077	2.065	2.160	2.331	2.239 E6	9.68
38)	AR1260-C	2.703	2.423	2.276	2.301	2.452	2.671	2.471 E6	7.32
39)	AR1260-D	7.281	5.957	5.735	5.938	6.324	6.913	6.358 E6	9.66
40)	AR1260-E	4.534	3.835	3.541	3.641	3.919	4.328	3.966 E6	9.83
41)	AR1262-A				2.847			2.847 E6	0.00
42)	AR1262-B				3.754			3.754 E6	0.00
43)	AR1262-C				3.493			3.493 E6	0.00
44)	AR1262-D				8.158			8.158 E6	0.00
45)	AR1262-E				4.974			4.974 E6	0.00
46)	AR1268-A				7.930			7.930 E6	0.00

Initial Calibration Summary

Job Number: JC10583 **Sample:** G2G3559-ICC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124400.D
Project: Alcoa, Edgewater, NJ

47)	AR1268-B				8.250			8.250	E6	0.00
48)	AR1268-C				6.529			6.529	E6	0.00
49)	AR1268-D				2.732			2.732	E6	0.00
50)	AR1268-E				2.111			2.111	E7	0.00
51) S	Decachlorobip...	5.826	5.247	5.473	5.308	5.008	5.385	5.375	E7	5.05

Signal #2 Calibration Files

50	=2g124397.D	250	=2g124398.D	500	=2g124399.D
1000	=2g124400.D	2000	=2g124401.D	3000	=2g124402.D

	Compound	50	250	500	1000	2000	3000	Avg		%RSD
1) S	Tetrachloro-m...	5.087	5.249	5.640	5.605	5.204	5.498	5.381	E7	4.29
2)	AR1221-A				2.973			2.973	E5	0.00
3)	AR1221-B				4.958			4.958	E5	0.00
4)	AR1221-C				1.219			1.219	E6	0.00
5)	AR1221-D				2.227			2.227	E5	0.00
6)	AR1221-E				1.399			1.399	E5	0.00
7)	AR1232-A				1.030			1.030	E6	0.00
8)	AR1232-B				8.445			8.445	E5	0.00
9)	AR1232-C				1.759			1.759	E6	0.00
10)	AR1232-D				7.242			7.242	E5	0.00
11)	AR1232-E				5.136			5.136	E5	0.00
12)	AR1242-A				1.446			1.446	E6	0.00
13)	AR1242-B				3.027			3.027	E6	0.00
14)	AR1242-C				1.230			1.230	E6	0.00
15)	AR1242-D				7.186			7.186	E5	0.00
16)	AR1242-E				1.144			1.144	E6	0.00
17)	AR1248-A				7.333			7.333	E5	0.00
18)	AR1248-B				1.913			1.913	E6	0.00
19)	AR1248-C				1.112			1.112	E6	0.00
20)	AR1248-D				1.471			1.471	E6	0.00
21)	AR1248-E				1.628			1.628	E6	0.00
22)	AR1248-F				1.921			1.921	E6	0.00
23)	AR1248-G				1.698			1.698	E6	0.00
24)	AR1254-A				1.909			1.909	E6	0.00
25)	AR1254-B				2.019			2.019	E6	0.00
26)	AR1254-C				1.671			1.671	E6	0.00
27)	AR1254-D				3.180			3.180	E6	0.00
28)	AR1254-E				2.127			2.127	E6	0.00
29)	AR1254-F				2.421			2.421	E6	0.00
30)	AR1254-G				3.081			3.081	E6	0.00
31)	AR1016-A	9.773	9.001	8.592	8.240	8.141	8.347	8.682	E5	7.10
32)	AR1016-B	2.409	1.933	1.825	1.756	1.732	1.767	1.904	E6	13.56
33)	AR1016-C	4.791	3.958	3.771	3.722	3.768	3.904	3.986	E6	10.15
34)	AR1016-D	1.958	1.591	1.527	1.496	1.508	1.549	1.605	E6	10.99
35)	AR1016-E	1.475	1.204	1.164	1.163	1.177	1.222	1.234	E6	9.74
36)	AR1260-A	3.425	2.899	2.810	2.754	2.827	2.921	2.939	E6	8.35
37)	AR1260-B	2.267	1.794	1.744	1.701	1.736	1.828	1.845	E6	11.46
38)	AR1260-C	2.621	2.139	2.072	2.048	2.118	2.241	2.206	E6	9.69
39)	AR1260-D	5.473	4.317	4.116	4.085	4.287	4.542	4.470	E6	11.59
40)	AR1260-E	4.945	4.115	3.987	3.954	4.122	4.390	4.252	E6	8.76
41)	AR1262-A				2.121			2.121	E6	0.00
42)	AR1262-B				2.907			2.907	E6	0.00
43)	AR1262-C				2.747			2.747	E6	0.00
44)	AR1262-D				5.425			5.425	E6	0.00
45)	AR1262-E				6.251			6.251	E6	0.00
46)	AR1268-A				5.866			5.866	E6	0.00
47)	AR1268-B				5.875			5.875	E6	0.00
48)	AR1268-C				4.708			4.708	E6	0.00

Initial Calibration Summary

Job Number: JC10583 **Sample:** G2G3559-ICC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124400.D
Project: Alcoa, Edgewater, NJ

```
 49)     AR1268-D                          1.970             1.970 E6  0.00
 50)     AR1268-E                          1.459             1.459 E7  0.00
 51) S   Decachlorobip... 4.041 3.839 3.940 3.957 3.720 3.933 3.905 E7  2.85
 ---------------------------------------------------------------------------
 (#) = Out of Range

2PCB3559.M Mon Dec 21 08:50:58 2015 RPT1
```

Initial Calibration Verification

Job Number: JC10583 **Sample:** G2G3559-ICV3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124407.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\2G3559\2g124407.D\ECD1A.CH Vial: 20
Signal #2 : C:\msdchem\1\DATA\2G3559\2g124407.D\ECD2B.CH
Acq On    : 18 Dec 2015   6:42 pm                    Operator: kevinm2
Sample    : icv3559-1000                             Inst    : HP G1530A
Misc      : op89801,G2G3559,16.1,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\2PCB3559.M (Chemstation Integrator)
Title        :
Last Update  : Mon Dec 21 08:45:44 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	65.025	59.989 E6	7.7	90	0.00	3.07- 3.13
31		AR1016-A	1.196	1.220 E6	-2.0	106	0.00	3.47- 3.53
32		AR1016-B	2.159	2.232 E6	-3.4	113	0.00	3.90- 3.96
33		AR1016-C	5.035	5.214 E6	-3.6	113	0.00	4.49- 4.55
34		AR1016-D	1.845	1.918 E6	-4.0	113	0.00	4.66- 4.72
35		AR1016-E	1.958	2.022 E6	-3.3	113	0.00	5.19- 5.25
36		AR1260-A	4.567	4.353 E6	4.7	104	0.00	7.23- 7.29
37		AR1260-B	2.239	2.291 E6	-2.3	111	0.00	7.77- 7.83
38		AR1260-C	2.471	2.545 E6	-3.0	111	0.00	8.12- 8.18
39		AR1260-D	6.358	6.515 E6	-2.5	110	0.00	8.55- 8.61
40		AR1260-E	3.966	3.935 E6	0.8	108	0.00	8.91- 9.07
51	S	Decachlorobiphenyl	53.745	46.951 E6	12.6	88	0.00	10.50-10.56

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	53.806	47.451 E6	11.8	85	0.00	3.64- 3.70
31		AR1016-A	868.218	840.926 E3	3.1	102	0.00	4.30- 4.36
32		AR1016-B	1.904	1.863 E6	2.2	106	0.00	4.87- 4.93
33		AR1016-C	3.986	3.944 E6	1.1	106	0.00	5.51- 5.57
34		AR1016-D	1.605	1.583 E6	1.4	106	0.00	5.70- 5.76
35		AR1016-E	1.234	1.203 E6	2.5	103	0.00	6.37- 6.43
36		AR1260-A	2.939	2.735 E6	6.9	99	0.00	8.47- 8.53
37		AR1260-B	1.845	1.787 E6	3.1	105	0.00	9.12- 9.18
38		AR1260-C	2.206	2.103 E6	4.7	103	0.00	9.56- 9.62
39		AR1260-D	4.470	4.504 E6	-0.8	110	0.00	9.91- 9.97
40		AR1260-E	4.252	4.109 E6	3.4	104	0.00	10.45-10.51
51	S	Decachlorobiphenyl	39.050	34.021 E6	12.9	86	0.00	12.13-12.19

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 2g124400.D 2PCB3559.M       Mon Dec 21 09:00:28 2015   RPT1
```

Initial Calibration Verification

Job Number: JC10583 **Sample:** G2G3559-ICV3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124408.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\2G3559\2g124408.D\ECD1A.CH Vial: 21
Signal #2 : C:\msdchem\1\DATA\2G3559\2g124408.D\ECD2B.CH
Acq On    : 18 Dec 2015   6:59 pm                    Operator: kevinm2
Sample    : icv3559-1000                             Inst    : HP G1530A
Misc      : op89801,G2G3559,16.1,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\2PCB3559.M (Chemstation Integrator)
Title        :
Last Update  : Mon Dec 21 08:45:44 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
24	AR1254-A	1.972	1.867 E6	5.3	95	0.00	5.22- 6.22
25	AR1254-B	3.913	3.870 E6	1.1	99	0.00	5.98- 6.18
26	AR1254-C	2.192	2.152 E6	1.8	98	0.00	6.35- 6.55
27	AR1254-D	3.768	3.770 E6	-0.1	100	0.00	6.52- 6.72
28	AR1254-E	2.994	3.257 E6	-8.8	109	0.00	6.91- 7.11
29	AR1254-F	2.786	2.838 E6	-1.9	102	0.00	7.16- 7.36
30	AR1254-G	3.912	4.128 E6	-5.5	106	0.00	7.55- 7.75
*****	Signal #2 *****						
24	AR1254-A	1.909	1.876 E6	1.7	98	0.00	6.50- 7.50
25	AR1254-B	2.019	1.993 E6	1.3	99	0.00	7.16- 7.36
26	AR1254-C	1.671	1.659 E6	0.7	99	0.00	7.67- 7.87
27	AR1254-D	3.180	3.141 E6	1.2	99	0.00	7.84- 8.04
28	AR1254-E	2.127	2.351 E6	-10.5	111	0.00	8.15- 8.35
29	AR1254-F	2.421	2.598 E6	-7.3	107	0.00	8.63- 8.83
30	AR1254-G	3.081	3.237 E6	-5.1	105	0.00	8.93- 9.13

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2g124400.D 2PCB3559.M Mon Dec 21 09:00:31 2015 RPT1

Initial Calibration Verification

Job Number: JC10583 **Sample:** G2G3559-ICV3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124409.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\2G3559\2g124409.D\ECD1A.CH Vial: 22
Signal #2 : C:\msdchem\1\DATA\2G3559\2g124409.D\ECD2B.CH
Acq On    : 18 Dec 2015   7:16 pm                    Operator: kevinm2
Sample    : icv3559-1000                             Inst    : HP G1530A
Misc      : op89801,G2G3559,16.1,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\2PCB3559.M (Chemstation Integrator)
Title        :
Last Update  : Mon Dec 21 08:45:44 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
7	AR1232-A	1.553	1.596 E6	-2.8	103	0.00	3.40- 3.60
8	AR1232-B	1.051	1.109 E6	-5.5	105	0.00	3.83- 4.03
9	AR1232-C	2.255	2.398 E6	-6.3	106	0.00	4.42- 4.62
10	AR1232-D	834.790	894.105 E3	-7.1	107	0.00	4.59- 4.79
11	AR1232-E	814.422	903.490 E3	-10.9	111	0.00	5.12- 5.32
41	AR1262-A	2.847	2.900 E6	-1.9	102	0.00	7.16- 7.36
42	AR1262-B	3.754	3.836 E6	-2.2	102	0.00	7.70- 7.90
43	AR1262-C	3.493	3.658 E6	-4.7	105	0.00	8.05- 8.25
44	AR1262-D	8.158	8.393 E6	-2.9	103	0.00	8.49- 8.69
45	AR1262-E	4.974	5.191 E6	-4.4	104	0.00	8.93- 9.13
*****	Signal #2 *****						
7	AR1232-A	1.030	1.067 E6	-3.6	104	0.00	4.24- 4.44
8	AR1232-B	844.511	882.815 E3	-4.5	105	0.00	4.80- 5.00
9	AR1232-C	1.759	1.832 E6	-4.2	104	0.00	5.44- 5.64
10	AR1232-D	724.164	747.464 E3	-3.2	103	0.00	5.63- 5.83
11	AR1232-E	513.558	530.571 E3	-3.3	103	0.00	6.30- 6.50
41	AR1262-A	2.121	2.043 E6	3.7	96	0.00	8.40- 8.60
42	AR1262-B	2.907	2.895 E6	0.4	100	0.00	9.05- 9.25
43	AR1262-C	2.747	2.785 E6	-1.4	101	0.00	9.49- 9.69
44	AR1262-D	5.425	5.351 E6	1.4	99	0.00	9.84-10.04
45	AR1262-E	6.251	6.193 E6	0.9	99	0.00	10.36-10.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2g124400.D 2PCB3559.M Mon Dec 21 09:00:33 2015 RPT1

6.6.4

6

Initial Calibration Verification

Job Number: JC10583 **Sample:** G2G3559-ICV3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124410.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\2G3559\2g124410.D\ECD1A.CH Vial: 23
Signal #2 : C:\msdchem\1\DATA\2G3559\2g124410.D\ECD2B.CH
Acq On    : 18 Dec 2015   7:33 pm                    Operator: kevinm2
Sample    : icv3559-1000                             Inst    : HP G1530A
Misc      : op89801,G2G3559,16.1,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\2PCB3559.M (Chemstation Integrator)
Title        :
Last Update  : Mon Dec 21 08:45:44 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
12	AR1242-A	1.720	1.805 E6	-4.9	105	0.00	3.83- 4.03
13	AR1242-B	3.938	4.137 E6	-5.1	105	0.00	4.41- 4.61
14	AR1242-C	1.452	1.531 E6	-5.4	105	0.00	4.59- 4.79
15	AR1242-D	1.570	1.681 E6	-7.1	107	0.00	5.12- 5.32
16	AR1242-E	1.358	1.447 E6	-6.6	107	0.00	5.72- 5.92
46	AR1268-A	7.930	8.200 E6	-3.4	103	0.00	8.93- 9.13
47	AR1268-B	8.250	9.652 E6	-17.0	117	0.00	8.98- 9.18
48	AR1268-C	6.529	6.467 E6	0.9	99	0.00	9.26- 9.46
49	AR1268-D	2.732	2.558 E6	6.4	94	0.00	9.76- 9.96
50	AR1268-E	21.108	18.177 E6	13.9	86	0.00	10.16-10.36
*****	Signal #2 *****						
12	AR1242-A	1.446	1.530 E6	-5.8	106	0.00	4.80- 5.00
13	AR1242-B	3.027	3.164 E6	-4.5	105	0.00	5.44- 5.64
14	AR1242-C	1.230	1.286 E6	-4.6	105	0.00	5.63- 5.83
15	AR1242-D	718.584	747.893 E3	-4.1	104	0.00	5.78- 5.98
16	AR1242-E	1.144	1.209 E6	-5.7	106	0.00	6.91- 7.11
46	AR1268-A	5.866	6.209 E6	-5.8	106	0.00	10.36-10.56
47	AR1268-B	5.875	6.949 E6	-18.3	118	0.00	10.43-10.63
48	AR1268-C	4.708	4.737 E6	-0.6	101	0.00	10.80-11.00
49	AR1268-D	1.970	1.875 E6	4.8	95	0.00	11.21-11.41
50	AR1268-E	14.593	13.176 E6	9.7	90	0.00	11.68-11.88

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 2g124400.D 2PCB3559.M       Mon Dec 21 09:00:35 2015   RPT1
```

Initial Calibration Verification

Job Number: JC10583 **Sample:** G2G3559-ICV3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124411.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\2G3559\2g124411.D\ECD1A.CH Vial: 24
Signal #2 : C:\msdchem\1\DATA\2G3559\2g124411.D\ECD2B.CH
Acq On    : 18 Dec 2015   7:50 pm                    Operator: kevinm2
Sample    : icv3559-1000                             Inst    : HP G1530A
Misc      : op89801,G2G3559,16.1,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\2PCB3559.M (Chemstation Integrator)
Title        :
Last Update  : Mon Dec 21 08:45:44 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
17	AR1248-A	901.225	915.712 E3	-1.6	102	0.00	3.83- 4.03
18	AR1248-B	2.657	2.693 E6	-1.4	101	0.00	4.41- 4.61
19	AR1248-C	2.404	2.450 E6	-1.9	102	0.00	4.85- 5.05
20	AR1248-D	2.418	2.457 E6	-1.6	102	0.00	5.12- 5.32
21	AR1248-E	1.320	1.351 E6	-2.3	102	0.00	5.23- 5.43
22	AR1248-F	2.313	2.336 E6	-1.0	101	0.00	5.72- 5.92
23	AR1248-G	1.725	1.702 E6	1.3	99	0.00	5.58- 6.58
***** Signal #2 *****							
17	AR1248-A	733.337	775.981 E3	-5.8	106	0.00	4.80- 5.00
18	AR1248-B	1.913	2.030 E6	-6.1	106	0.00	5.44- 5.64
19	AR1248-C	1.112	1.176 E6	-5.8	106	0.00	5.91- 6.11
20	AR1248-D	1.471	1.556 E6	-5.8	106	0.00	6.30- 6.50
21	AR1248-E	1.628	1.725 E6	-6.0	106	0.00	6.48- 6.68
22	AR1248-F	1.921	2.025 E6	-5.4	105	0.00	6.90- 7.10
23	AR1248-G	1.698	1.776 E6	-4.6	105	0.00	6.84- 7.84

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 2g124400.D 2PCB3559.M       Mon Dec 21 09:00:37 2015   RPT1
```

Initial Calibration Verification

Job Number: JC10583 **Sample:** G2G3559-ICV3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124412.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\2G3559\2g124412.D\ECD1A.CH Vial: 25
Signal #2 : C:\msdchem\1\DATA\2G3559\2g124412.D\ECD2B.CH
Acq On    : 18 Dec 2015   8:07 pm                    Operator: kevinm2
Sample    : icv3559-1000                             Inst    : HP G1530A
Misc      : op89801,G2G3559,16.1,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\2PCB3559.M (Chemstation Integrator)
Title        :
Last Update  : Mon Dec 21 08:45:44 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
2	AR1221-A	320.912	361.022 E3	-12.5	112	0.00	2.44- 2.64
3	AR1221-B	650.741	613.320 E3	5.8	94	0.00	3.19- 3.39
4	AR1221-C	1.899	1.871 E6	1.5	99	0.00	3.40- 3.60
5	AR1221-D	174.452	140.141 E3	19.7	80	0.00	3.83- 4.03
6	AR1221-E	163.647	158.374 E3	3.2	97	0.00	4.00- 4.20
***** Signal #2 *****							
2	AR1221-A	297.327	308.223 E3	-3.7	104	0.00	2.99- 3.19
3	AR1221-B	495.772	516.638 E3	-4.2	104	0.00	3.95- 4.15
4	AR1221-C	1.219	1.230 E6	-0.9	101	0.00	4.23- 4.43
5	AR1221-D	222.657	203.860 E3	8.4	92	0.00	4.79- 4.99
6	AR1221-E	139.949	144.347 E3	-3.1	103	0.00	4.88- 5.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2g124400.D 2PCB3559.M Mon Dec 21 09:02:43 2015 RPT1

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3561-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124455.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\2G3561\2g124455.D\ECD1A.CH Vial: 61
Signal #2 : C:\msdchem\1\DATA\2G3561\2g124455.D\ECD2B.CH
Acq On    : 21 Dec 2015   9:26 am                    Operator: kevinm2
Sample    : cc3559-500                               Inst    : HP G1530A
Misc      : op89594,G2G3561,500,,,5,1                Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\2PCB3559.M (Chemstation Integrator)
Title        :
Last Update  : Mon Dec 21 08:45:44 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	65.025	71.794 E6	-10.4	105	0.00	3.06- 3.12
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1016-A	1.196	1.379 E6	-15.3	116	0.00	3.47- 3.53
32	AR1016-B	2.159	2.233 E6	-3.4	108	0.00	3.90- 3.96
33	AR1016-C	5.035	4.720 E6	6.3	100	0.00	4.49- 4.55
34	AR1016-D	1.845	1.714 E6	7.1	99	0.00	4.66- 4.72
35	AR1016-E	1.958	1.697 E6	13.3	93	0.00	5.19- 5.25
36	AR1260-A	4.567	3.707 E6	18.8	89	0.00	7.23- 7.29
37	AR1260-B	2.239	1.802 E6	19.5	87	0.00	7.77- 7.83
38	AR1260-C	2.471	2.110 E6	14.6	93	0.00	8.12- 8.18
39	AR1260-D	6.358	5.133 E6	19.3	90	0.00	8.55- 8.61
40	AR1260-E	3.966	3.638 E6	8.3	103	0.00	8.90- 9.06
41	AR1262-A		----------NA----------				

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3561-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124455.D
Project: Alcoa, Edgewater, NJ

42		AR1262-B		----------NA----------					
43		AR1262-C		----------NA----------					
44		AR1262-D		----------NA----------					
45		AR1262-E		----------NA----------					
46		AR1268-A		----------NA----------					
47		AR1268-B		----------NA----------					
48		AR1268-C		----------NA----------					
49		AR1268-D		----------NA----------					
50		AR1268-E		----------NA----------					
51	S	Decachlorobiphenyl	53.745	56.446 E6	-5.0	103	0.00	10.50-10.56	

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	53.806	55.660 E6	-3.4	99	0.00	3.63- 3.69	
2		AR1221-A		----------NA----------					
3		AR1221-B		----------NA----------					
4		AR1221-C		----------NA----------					
5		AR1221-D		----------NA----------					
6		AR1221-E		----------NA----------					
7		AR1232-A		----------NA----------					
8		AR1232-B		----------NA----------					
9		AR1232-C		----------NA----------					
10		AR1232-D		----------NA----------					
11		AR1232-E		----------NA----------					
12		AR1242-A		----------NA----------					
13		AR1242-B		----------NA----------					
14		AR1242-C		----------NA----------					
15		AR1242-D		----------NA----------					
16		AR1242-E		----------NA----------					
17		AR1248-A		----------NA----------					
18		AR1248-B		----------NA----------					
19		AR1248-C		----------NA----------					
20		AR1248-D		----------NA----------					
21		AR1248-E		----------NA----------					
22		AR1248-F		----------NA----------					
23		AR1248-G		----------NA----------					
24		AR1254-A		----------NA----------					
25		AR1254-B		----------NA----------					
26		AR1254-C		----------NA----------					
27		AR1254-D		----------NA----------					
28		AR1254-E		----------NA----------					
29		AR1254-F		----------NA----------					
30		AR1254-G		----------NA----------					
31		AR1016-A	868.218	830.931 E3	4.3	97	0.00	4.30- 4.36	
32		AR1016-B	1.904	1.864 E6	2.1	102	0.00	4.86- 4.92	
33		AR1016-C	3.986	3.518 E6	11.7	93	0.00	5.51- 5.57	
34		AR1016-D	1.605	1.309 E6	18.4	86	0.00	5.70- 5.76	
35		AR1016-E	1.234	1.025 E6	16.9	88	0.00	6.37- 6.43	
36		AR1260-A	2.939	2.451 E6	16.6	87	0.00	8.47- 8.53	
37		AR1260-B	1.845	1.513 E6	18.0	87	0.00	9.12- 9.18	
38		AR1260-C	2.206	1.895 E6	14.1	91	0.00	9.55- 9.61	
39		AR1260-D	4.470	3.856 E6	13.7	94	0.00	9.90- 9.96	
40		AR1260-E	4.252	3.767 E6	11.4	94	0.00	10.45-10.51	
41		AR1262-A		----------NA----------					
42		AR1262-B		----------NA----------					
43		AR1262-C		----------NA----------					
44		AR1262-D		----------NA----------					
45		AR1262-E		----------NA----------					
46		AR1268-A		----------NA----------					
47		AR1268-B		----------NA----------					

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3561-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124455.D
Project: Alcoa, Edgewater, NJ

```
48      AR1268-C                          ----------NA----------
49      AR1268-D                          ----------NA----------
50      AR1268-E                          ----------NA----------
51 S    Decachlorobiphenyl      39.050  41.438 E6  -6.1  105   0.00   12.13-12.19
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    2g124399.D 2PCB3559.M       Tue Dec 22 10:15:13 2015   RPT1
```

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3561-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124465.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\2G3561\2g124465.D\ECD1A.CH Vial: 11
Signal #2 : C:\msdchem\1\DATA\2G3561\2g124465.D\ECD2B.CH
Acq On    : 21 Dec 2015   1:14 pm                    Operator: kevinm2
Sample    : cc3559-500                               Inst    : HP G1530A
Misc      : op89820,G2G3561,15.3,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\2PCB3559.M (Chemstation Integrator)
Title        :
Last Update  : Mon Dec 21 08:45:44 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	65.025	69.926 E6	-7.5	102	-0.02	3.05- 3.11
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1016-A	1.196	1.237 E6	-3.4	104	-0.02	3.46- 3.52
32	AR1016-B	2.159	2.086 E6	3.4	101	-0.02	3.89- 3.95
33	AR1016-C	5.035	4.658 E6	7.5	99	-0.01	4.47- 4.53
34	AR1016-D	1.845	1.778 E6	3.6	103	-0.01	4.64- 4.70
35	AR1016-E	1.958	1.879 E6	4.0	102	-0.01	5.17- 5.23
36	AR1260-A	4.567	4.148 E6	9.2	100	-0.01	7.21- 7.27
37	AR1260-B	2.239	2.059 E6	8.0	99	-0.01	7.76- 7.82
38	AR1260-C	2.471	2.169 E6	12.2	95	-0.01	8.10- 8.16
39	AR1260-D	6.358	5.627 E6	11.5	98	0.00	8.54- 8.60
40	AR1260-E	3.966	3.502 E6	11.7	99	-0.01	8.89- 9.05
41	AR1262-A		----------NA----------				

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3561-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124465.D
Project: Alcoa, Edgewater, NJ

42		AR1262-B		----------NA----------					
43		AR1262-C		----------NA----------					
44		AR1262-D		----------NA----------					
45		AR1262-E		----------NA----------					
46		AR1268-A		----------NA----------					
47		AR1268-B		----------NA----------					
48		AR1268-C		----------NA----------					
49		AR1268-D		----------NA----------					
50		AR1268-E		----------NA----------					
51	S	Decachlorobiphenyl	53.745	55.376	E6	-3.0	101	0.00	10.49-10.55
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	53.806	55.444	E6	-3.0	98	-0.01	3.62- 3.68
2		AR1221-A		----------NA----------					
3		AR1221-B		----------NA----------					
4		AR1221-C		----------NA----------					
5		AR1221-D		----------NA----------					
6		AR1221-E		----------NA----------					
7		AR1232-A		----------NA----------					
8		AR1232-B		----------NA----------					
9		AR1232-C		----------NA----------					
10		AR1232-D		----------NA----------					
11		AR1232-E		----------NA----------					
12		AR1242-A		----------NA----------					
13		AR1242-B		----------NA----------					
14		AR1242-C		----------NA----------					
15		AR1242-D		----------NA----------					
16		AR1242-E		----------NA----------					
17		AR1248-A		----------NA----------					
18		AR1248-B		----------NA----------					
19		AR1248-C		----------NA----------					
20		AR1248-D		----------NA----------					
21		AR1248-E		----------NA----------					
22		AR1248-F		----------NA----------					
23		AR1248-G		----------NA----------					
24		AR1254-A		----------NA----------					
25		AR1254-B		----------NA----------					
26		AR1254-C		----------NA----------					
27		AR1254-D		----------NA----------					
28		AR1254-E		----------NA----------					
29		AR1254-F		----------NA----------					
30		AR1254-G		----------NA----------					
31		AR1016-A	868.218	836.245	E3	3.7	97	0.00	4.29- 4.35
32		AR1016-B	1.904	1.718	E6	9.8	94	-0.01	4.85- 4.91
33		AR1016-C	3.986	3.632	E6	8.9	96	0.00	5.50- 5.56
34		AR1016-D	1.605	1.382	E6	13.9	90	0.00	5.69- 5.75
35		AR1016-E	1.234	1.155	E6	6.4	99	0.00	6.36- 6.42
36		AR1260-A	2.939	2.732	E6	7.0	97	0.00	8.46- 8.52
37		AR1260-B	1.845	1.704	E6	7.6	98	0.00	9.11- 9.17
38		AR1260-C	2.206	2.007	E6	9.0	97	0.00	9.55- 9.61
39		AR1260-D	4.470	4.188	E6	6.3	102	0.00	9.90- 9.96
40		AR1260-E	4.252	3.838	E6	9.7	96	0.00	10.45-10.51
41		AR1262-A		----------NA----------					
42		AR1262-B		----------NA----------					
43		AR1262-C		----------NA----------					
44		AR1262-D		----------NA----------					
45		AR1262-E		----------NA----------					
46		AR1268-A		----------NA----------					
47		AR1268-B		----------NA----------					

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3561-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124465.D
Project: Alcoa, Edgewater, NJ

```
48      AR1268-C                          ----------NA----------
49      AR1268-D                          ----------NA----------
50      AR1268-E                          ----------NA----------
51 S    Decachlorobiphenyl      39.050  39.527 E6  -1.2  100   0.00   12.13-12.19
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    2g124399.D 2PCB3559.M       Mon Dec 21 15:36:12 2015   RPT1
```

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3562-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124572.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\2G3562\2g124572.D\ECD1A.CH Vial: 93
Signal #2 : C:\msdchem\1\DATA\2G3562\2g124572.D\ECD2B.CH
Acq On    : 23 Dec 2015   2:37 am                    Operator: kevinm2
Sample    : cc3559-500                               Inst    : HP G1530A
Misc      : op89900,G2G3562,15.1,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\2PCB3559.M (Chemstation Integrator)
Title        :
Last Update  : Mon Dec 21 08:45:44 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	65.025	72.281 E6	-11.2	106	-0.01	3.06- 3.12
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1016-A	1.196	1.294 E6	-8.2	109	-0.01	3.46- 3.52
32	AR1016-B	2.159	2.186 E6	-1.3	106	-0.01	3.89- 3.95
33	AR1016-C	5.035	4.908 E6	2.5	104	0.00	4.47- 4.53
34	AR1016-D	1.845	1.855 E6	-0.5	107	0.00	4.65- 4.71
35	AR1016-E	1.958	1.950 E6	0.4	106	-0.01	5.18- 5.24
36	AR1260-A	4.567	4.355 E6	4.6	105	0.00	7.22- 7.28
37	AR1260-B	2.239	2.034 E6	9.2	98	0.00	7.76- 7.82
38	AR1260-C	2.471	2.304 E6	6.8	101	0.00	8.11- 8.17
39	AR1260-D	6.358	5.490 E6	13.7	96	-0.01	8.54- 8.60
40	AR1260-E	3.966	3.731 E6	5.9	105	-0.01	8.89- 9.05
41	AR1262-A		----------NA----------				

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3562-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124572.D
Project: Alcoa, Edgewater, NJ

42		AR1262-B		----------NA----------					
43		AR1262-C		----------NA----------					
44		AR1262-D		----------NA----------					
45		AR1262-E		----------NA----------					
46		AR1268-A		----------NA----------					
47		AR1268-B		----------NA----------					
48		AR1268-C		----------NA----------					
49		AR1268-D		----------NA----------					
50		AR1268-E		----------NA----------					
51	S	Decachlorobiphenyl	53.745	50.906	E6	5.3	93	-0.01	10.49-10.55
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	53.806	57.341	E6	-6.6	102	0.00	3.63- 3.69
2		AR1221-A		----------NA----------					
3		AR1221-B		----------NA----------					
4		AR1221-C		----------NA----------					
5		AR1221-D		----------NA----------					
6		AR1221-E		----------NA----------					
7		AR1232-A		----------NA----------					
8		AR1232-B		----------NA----------					
9		AR1232-C		----------NA----------					
10		AR1232-D		----------NA----------					
11		AR1232-E		----------NA----------					
12		AR1242-A		----------NA----------					
13		AR1242-B		----------NA----------					
14		AR1242-C		----------NA----------					
15		AR1242-D		----------NA----------					
16		AR1242-E		----------NA----------					
17		AR1248-A		----------NA----------					
18		AR1248-B		----------NA----------					
19		AR1248-C		----------NA----------					
20		AR1248-D		----------NA----------					
21		AR1248-E		----------NA----------					
22		AR1248-F		----------NA----------					
23		AR1248-G		----------NA----------					
24		AR1254-A		----------NA----------					
25		AR1254-B		----------NA----------					
26		AR1254-C		----------NA----------					
27		AR1254-D		----------NA----------					
28		AR1254-E		----------NA----------					
29		AR1254-F		----------NA----------					
30		AR1254-G		----------NA----------					
31		AR1016-A	868.218	869.819	E3	-0.2	101	0.00	4.30- 4.36
32		AR1016-B	1.904	1.767	E6	7.2	97	-0.01	4.86- 4.92
33		AR1016-C	3.986	3.839	E6	3.7	102	0.00	5.51- 5.57
34		AR1016-D	1.605	1.449	E6	9.7	95	0.00	5.70- 5.76
35		AR1016-E	1.234	1.158	E6	6.2	99	0.00	6.36- 6.42
36		AR1260-A	2.939	2.538	E6	13.6	90	0.00	8.46- 8.52
37		AR1260-B	1.845	1.526	E6	17.3	88	0.00	9.12- 9.18
38		AR1260-C	2.206	1.847	E6	16.3	89	0.00	9.55- 9.61
39		AR1260-D	4.470	3.548	E6	20.6#	86	0.00	9.90- 9.96
40		AR1260-E	4.252	3.409	E6	19.8	86	0.00	10.45-10.51
41		AR1262-A		----------NA----------					
42		AR1262-B		----------NA----------					
43		AR1262-C		----------NA----------					
44		AR1262-D		----------NA----------					
45		AR1262-E		----------NA----------					
46		AR1268-A		----------NA----------					
47		AR1268-B		----------NA----------					

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3562-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124572.D
Project: Alcoa, Edgewater, NJ

```
48      AR1268-C                          ----------NA----------
49      AR1268-D                          ----------NA----------
50      AR1268-E                          ----------NA----------
51 S    Decachlorobiphenyl      39.050  32.675 E6  16.3   83   0.00   12.13-12.19
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    2g124399.D 2PCB3559.M       Wed Dec 23 11:59:56 2015   RPT1
```

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3562-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124583.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\2G3562\2g124583.D\ECD1A.CH Vial: 3
Signal #2 : C:\msdchem\1\DATA\2G3562\2g124583.D\ECD2B.CH
Acq On    : 23 Dec 2015   5:46 am                    Operator: kevinm2
Sample    : cc3559-1000                              Inst    : HP G1530A
Misc      : op89920,G2G3562,15.2,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\2PCB3559.M (Chemstation Integrator)
Title        :
Last Update  : Mon Dec 21 08:45:44 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	65.025	68.542 E6	-5.4	102	-0.01	3.05- 3.11
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1016-A	1.196	1.205 E6	-0.8	105	-0.01	3.46- 3.52
32	AR1016-B	2.159	2.024 E6	6.3	102	-0.01	3.89- 3.95
33	AR1016-C	5.035	4.641 E6	7.8	101	-0.01	4.47- 4.53
34	AR1016-D	1.845	1.769 E6	4.1	105	-0.01	4.64- 4.70
35	AR1016-E	1.958	1.845 E6	5.8	103	-0.01	5.18- 5.24
36	AR1260-A	4.567	4.347 E6	4.8	103	0.00	7.21- 7.27
37	AR1260-B	2.239	2.017 E6	9.9	98	0.00	7.76- 7.82
38	AR1260-C	2.471	2.334 E6	5.5	101	-0.01	8.10- 8.16
39	AR1260-D	6.358	5.689 E6	10.5	96	-0.01	8.54- 8.60
40	AR1260-E	3.966	3.813 E6	3.9	105	-0.01	8.89- 9.05
41	AR1262-A		----------NA----------				

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3562-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124583.D
Project: Alcoa, Edgewater, NJ

42		AR1262-B		----------NA----------					
43		AR1262-C		----------NA----------					
44		AR1262-D		----------NA----------					
45		AR1262-E		----------NA----------					
46		AR1268-A		----------NA----------					
47		AR1268-B		----------NA----------					
48		AR1268-C		----------NA----------					
49		AR1268-D		----------NA----------					
50		AR1268-E		----------NA----------					
51	S	Decachlorobiphenyl	53.745	52.387 E6	2.5	99	-0.01	10.49-10.55	
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	53.806	55.838 E6	-3.8	100	0.00	3.63- 3.69	
2		AR1221-A		----------NA----------					
3		AR1221-B		----------NA----------					
4		AR1221-C		----------NA----------					
5		AR1221-D		----------NA----------					
6		AR1221-E		----------NA----------					
7		AR1232-A		----------NA----------					
8		AR1232-B		----------NA----------					
9		AR1232-C		----------NA----------					
10		AR1232-D		----------NA----------					
11		AR1232-E		----------NA----------					
12		AR1242-A		----------NA----------					
13		AR1242-B		----------NA----------					
14		AR1242-C		----------NA----------					
15		AR1242-D		----------NA----------					
16		AR1242-E		----------NA----------					
17		AR1248-A		----------NA----------					
18		AR1248-B		----------NA----------					
19		AR1248-C		----------NA----------					
20		AR1248-D		----------NA----------					
21		AR1248-E		----------NA----------					
22		AR1248-F		----------NA----------					
23		AR1248-G		----------NA----------					
24		AR1254-A		----------NA----------					
25		AR1254-B		----------NA----------					
26		AR1254-C		----------NA----------					
27		AR1254-D		----------NA----------					
28		AR1254-E		----------NA----------					
29		AR1254-F		----------NA----------					
30		AR1254-G		----------NA----------					
31		AR1016-A	868.218	812.038 E3	6.5	99	0.00	4.30- 4.36	
32		AR1016-B	1.904	1.634 E6	14.2	93	-0.01	4.86- 4.92	
33		AR1016-C	3.986	3.631 E6	8.9	98	0.00	5.50- 5.56	
34		AR1016-D	1.605	1.357 E6	15.5	91	0.00	5.70- 5.76	
35		AR1016-E	1.234	1.103 E6	10.6	95	0.00	6.36- 6.42	
36		AR1260-A	2.939	2.489 E6	15.3	90	0.00	8.46- 8.52	
37		AR1260-B	1.845	1.423 E6	22.9#	84	0.00	9.11- 9.17	
38		AR1260-C	2.206	1.729 E6	21.6#	84	0.00	9.55- 9.61	
39		AR1260-D	4.470	3.540 E6	20.8#	87	0.00	9.90- 9.96	
40		AR1260-E	4.252	3.225 E6	24.2#	82	0.00	10.44-10.50	
41		AR1262-A		----------NA----------					
42		AR1262-B		----------NA----------					
43		AR1262-C		----------NA----------					
44		AR1262-D		----------NA----------					
45		AR1262-E		----------NA----------					
46		AR1268-A		----------NA----------					
47		AR1268-B		----------NA----------					

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3562-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124583.D
Project: Alcoa, Edgewater, NJ

```
48      AR1268-C                          ----------NA----------
49      AR1268-D                          ----------NA----------
50      AR1268-E                          ----------NA----------
51 S    Decachlorobiphenyl      39.050  30.665 E6  21.5#  77   0.00   12.13-12.19
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    2g124400.D 2PCB3559.M       Wed Dec 23 11:59:34 2015   RPT1
```

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3562-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124594.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\2G3562\2g124594.D\ECD1A.CH Vial: 11
Signal #2 : C:\msdchem\1\DATA\2G3562\2g124594.D\ECD2B.CH
Acq On    : 23 Dec 2015   9:40 am                    Operator: kevinm2
Sample    : cc3559-500                               Inst    : HP G1530A
Misc      : op89920,G2G3562,15.0,,,10,40             Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\2PCB3559.M (Chemstation Integrator)
Title        :
Last Update  : Mon Dec 21 08:45:44 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	65.025	70.928 E6	-9.1	104	-0.02	3.05- 3.11
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1016-A	1.196	1.254 E6	-4.8	105	-0.02	3.46- 3.52
32	AR1016-B	2.159	2.145 E6	0.6	104	-0.02	3.88- 3.94
33	AR1016-C	5.035	4.762 E6	5.4	101	-0.02	4.47- 4.53
34	AR1016-D	1.845	1.812 E6	1.8	105	-0.02	4.64- 4.70
35	AR1016-E	1.958	1.930 E6	1.4	105	-0.02	5.17- 5.23
36	AR1260-A	4.567	4.372 E6	4.3	105	-0.02	7.21- 7.27
37	AR1260-B	2.239	2.150 E6	4.0	103	-0.02	7.75- 7.81
38	AR1260-C	2.471	2.338 E6	5.4	103	-0.02	8.10- 8.16
39	AR1260-D	6.358	5.821 E6	8.4	102	-0.02	8.54- 8.60
40	AR1260-E	3.966	3.910 E6	1.4	110	-0.02	8.89- 9.04
41	AR1262-A		----------NA----------				

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3562-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124594.D
Project: Alcoa, Edgewater, NJ

42		AR1262-B		----------NA----------				
43		AR1262-C		----------NA----------				
44		AR1262-D		----------NA----------				
45		AR1262-E		----------NA----------				
46		AR1268-A		----------NA----------				
47		AR1268-B		----------NA----------				
48		AR1268-C		----------NA----------				
49		AR1268-D		----------NA----------				
50		AR1268-E		----------NA----------				
51	S	Decachlorobiphenyl	53.745	61.381 E6	-14.2	112	-0.02	10.48-10.54

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	53.806	54.775 E6	-1.8	97	-0.01	3.62- 3.68
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1016-A	868.218	836.565 E3	3.6	97	0.00	4.29- 4.35
32		AR1016-B	1.904	1.745 E6	8.4	96	-0.01	4.85- 4.91
33		AR1016-C	3.986	3.738 E6	6.2	99	0.00	5.50- 5.56
34		AR1016-D	1.605	1.436 E6	10.5	94	0.00	5.69- 5.75
35		AR1016-E	1.234	1.163 E6	5.8	100	0.00	6.36- 6.42
36		AR1260-A	2.939	2.828 E6	3.8	101	0.00	8.46- 8.52
37		AR1260-B	1.845	1.789 E6	3.0	103	0.00	9.11- 9.17
38		AR1260-C	2.206	2.156 E6	2.3	104	0.00	9.55- 9.61
39		AR1260-D	4.470	4.536 E6	-1.5	110	0.00	9.90- 9.96
40		AR1260-E	4.252	4.212 E6	0.9	106	0.00	10.44-10.50
41		AR1262-A		----------NA----------				
42		AR1262-B		----------NA----------				
43		AR1262-C		----------NA----------				
44		AR1262-D		----------NA----------				
45		AR1262-E		----------NA----------				
46		AR1268-A		----------NA----------				
47		AR1268-B		----------NA----------				

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3562-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124594.D
Project: Alcoa, Edgewater, NJ

```
48      AR1268-C                          ----------NA----------
49      AR1268-D                          ----------NA----------
50      AR1268-E                          ----------NA----------
51 S    Decachlorobiphenyl      39.050  43.332 E6 -11.0  110   0.00   12.12-12.18
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    2g124399.D 2PCB3559.M       Wed Dec 23 11:59:58 2015   RPT1
```

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3563-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124605.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\2G3563\2g124605.D\ECD1A.CH Vial: 19
Signal #2 : C:\msdchem\1\DATA\2G3563\2g124605.D\ECD2B.CH
Acq On    : 23 Dec 2015  12:20 pm                    Operator: dylang
Sample    : cc3559-1000                              Inst    : HP G1530A
Misc      : op89974,G2G3563,15.4,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\2PCB3559.M (Chemstation Integrator)
Title        :
Last Update  : Mon Dec 21 08:45:44 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	65.025	68.775 E6	-5.8	103	-0.02	3.05- 3.11
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1016-A	1.196	1.186 E6	0.8	104	-0.02	3.45- 3.51
32	AR1016-B	2.159	2.010 E6	6.9	102	-0.02	3.88- 3.94
33	AR1016-C	5.035	4.612 E6	8.4	100	-0.02	4.47- 4.53
34	AR1016-D	1.845	1.731 E6	6.2	102	-0.02	4.64- 4.70
35	AR1016-E	1.958	1.832 E6	6.4	102	-0.02	5.17- 5.23
36	AR1260-A	4.567	4.377 E6	4.2	104	-0.02	7.21- 7.27
37	AR1260-B	2.239	2.161 E6	3.5	105	-0.02	7.75- 7.81
38	AR1260-C	2.471	2.432 E6	1.6	106	-0.02	8.10- 8.16
39	AR1260-D	6.358	6.101 E6	4.0	103	-0.02	8.53- 8.59
40	AR1260-E	3.966	3.812 E6	3.9	105	-0.02	8.89- 9.04
41	AR1262-A		----------NA----------				

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3563-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124605.D
Project: Alcoa, Edgewater, NJ

42		AR1262-B			----------NA----------				
43		AR1262-C			----------NA----------				
44		AR1262-D			----------NA----------				
45		AR1262-E			----------NA----------				
46		AR1268-A			----------NA----------				
47		AR1268-B			----------NA----------				
48		AR1268-C			----------NA----------				
49		AR1268-D			----------NA----------				
50		AR1268-E			----------NA----------				
51	S	Decachlorobiphenyl	53.745	59.967 E6	-11.6	113	-0.02	10.48-10.54	
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	53.806	55.711 E6	-3.5	99	-0.01	3.62- 3.68	
2		AR1221-A			----------NA----------				
3		AR1221-B			----------NA----------				
4		AR1221-C			----------NA----------				
5		AR1221-D			----------NA----------				
6		AR1221-E			----------NA----------				
7		AR1232-A			----------NA----------				
8		AR1232-B			----------NA----------				
9		AR1232-C			----------NA----------				
10		AR1232-D			----------NA----------				
11		AR1232-E			----------NA----------				
12		AR1242-A			----------NA----------				
13		AR1242-B			----------NA----------				
14		AR1242-C			----------NA----------				
15		AR1242-D			----------NA----------				
16		AR1242-E			----------NA----------				
17		AR1248-A			----------NA----------				
18		AR1248-B			----------NA----------				
19		AR1248-C			----------NA----------				
20		AR1248-D			----------NA----------				
21		AR1248-E			----------NA----------				
22		AR1248-F			----------NA----------				
23		AR1248-G			----------NA----------				
24		AR1254-A			----------NA----------				
25		AR1254-B			----------NA----------				
26		AR1254-C			----------NA----------				
27		AR1254-D			----------NA----------				
28		AR1254-E			----------NA----------				
29		AR1254-F			----------NA----------				
30		AR1254-G			----------NA----------				
31		AR1016-A	868.218	803.823 E3	7.4	98	0.00	4.29- 4.35	
32		AR1016-B	1.904	1.654 E6	13.1	94	-0.02	4.85- 4.91	
33		AR1016-C	3.986	3.643 E6	8.6	98	0.00	5.50- 5.56	
34		AR1016-D	1.605	1.383 E6	13.8	92	0.00	5.69- 5.75	
35		AR1016-E	1.234	1.123 E6	9.0	97	0.00	6.36- 6.42	
36		AR1260-A	2.939	2.863 E6	2.6	104	0.00	8.46- 8.52	
37		AR1260-B	1.845	1.806 E6	2.1	106	0.00	9.11- 9.17	
38		AR1260-C	2.206	2.130 E6	3.4	104	0.00	9.55- 9.61	
39		AR1260-D	4.470	4.332 E6	3.1	106	0.00	9.90- 9.96	
40		AR1260-E	4.252	4.276 E6	-0.6	108	0.00	10.44-10.50	
41		AR1262-A			----------NA----------				
42		AR1262-B			----------NA----------				
43		AR1262-C			----------NA----------				
44		AR1262-D			----------NA----------				
45		AR1262-E			----------NA----------				
46		AR1268-A			----------NA----------				
47		AR1268-B			----------NA----------				

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3563-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124605.D
Project: Alcoa, Edgewater, NJ

```
48      AR1268-C                          ----------NA----------
49      AR1268-D                          ----------NA----------
50      AR1268-E                          ----------NA----------
51 S    Decachlorobiphenyl      39.050  44.217 E6 -13.2  112   0.00   12.12-12.18
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    2g124400.D 2PCB3559.M       Thu Dec 24 10:19:52 2015   RPT1
```

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3563-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124615.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\2G3563\2g124615.D\ECD1A.CH Vial: 11
Signal #2 : C:\msdchem\1\DATA\2G3563\2g124615.D\ECD2B.CH
Acq On    : 23 Dec 2015   4:02 pm                    Operator: dylang
Sample    : cc3559-500                               Inst    : HP G1530A
Misc      : op89820,G2G3563,17.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\2PCB3559.M (Chemstation Integrator)
Title        :
Last Update  : Mon Dec 21 08:45:44 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	65.025	73.243 E6	-12.6	107	-0.02	3.05- 3.11
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1016-A	1.196	1.285 E6	-7.4	108	-0.02	3.45- 3.51
32	AR1016-B	2.159	2.205 E6	-2.1	106	-0.02	3.88- 3.94
33	AR1016-C	5.035	4.917 E6	2.3	105	-0.02	4.47- 4.53
34	AR1016-D	1.845	1.862 E6	-0.9	108	-0.02	4.64- 4.70
35	AR1016-E	1.958	1.998 E6	-2.0	109	-0.02	5.17- 5.23
36	AR1260-A	4.567	4.514 E6	1.2	109	-0.02	7.21- 7.27
37	AR1260-B	2.239	2.229 E6	0.4	107	-0.02	7.75- 7.81
38	AR1260-C	2.471	2.412 E6	2.4	106	-0.02	8.10- 8.16
39	AR1260-D	6.358	5.956 E6	6.3	104	-0.02	8.53- 8.59
40	AR1260-E	3.966	4.005 E6	-1.0	113	-0.02	8.89- 9.04
41	AR1262-A		----------NA----------				

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3563-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124615.D
Project: Alcoa, Edgewater, NJ

42		AR1262-B			----------NA----------				
43		AR1262-C			----------NA----------				
44		AR1262-D			----------NA----------				
45		AR1262-E			----------NA----------				
46		AR1268-A			----------NA----------				
47		AR1268-B			----------NA----------				
48		AR1268-C			----------NA----------				
49		AR1268-D			----------NA----------				
50		AR1268-E			----------NA----------				
51	S	Decachlorobiphenyl	53.745	62.243 E6	-15.8	114	-0.02	10.48-10.54	

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	53.806	57.243 E6	-6.4	101	-0.01	3.62- 3.68	
2		AR1221-A			----------NA----------				
3		AR1221-B			----------NA----------				
4		AR1221-C			----------NA----------				
5		AR1221-D			----------NA----------				
6		AR1221-E			----------NA----------				
7		AR1232-A			----------NA----------				
8		AR1232-B			----------NA----------				
9		AR1232-C			----------NA----------				
10		AR1232-D			----------NA----------				
11		AR1232-E			----------NA----------				
12		AR1242-A			----------NA----------				
13		AR1242-B			----------NA----------				
14		AR1242-C			----------NA----------				
15		AR1242-D			----------NA----------				
16		AR1242-E			----------NA----------				
17		AR1248-A			----------NA----------				
18		AR1248-B			----------NA----------				
19		AR1248-C			----------NA----------				
20		AR1248-D			----------NA----------				
21		AR1248-E			----------NA----------				
22		AR1248-F			----------NA----------				
23		AR1248-G			----------NA----------				
24		AR1254-A			----------NA----------				
25		AR1254-B			----------NA----------				
26		AR1254-C			----------NA----------				
27		AR1254-D			----------NA----------				
28		AR1254-E			----------NA----------				
29		AR1254-F			----------NA----------				
30		AR1254-G			----------NA----------				
31		AR1016-A	868.218	846.341 E3	2.5	99	-0.01	4.29- 4.35	
32		AR1016-B	1.904	1.766 E6	7.2	97	-0.02	4.85- 4.91	
33		AR1016-C	3.986	3.742 E6	6.1	99	0.00	5.50- 5.56	
34		AR1016-D	1.605	1.389 E6	13.5	91	0.00	5.69- 5.75	
35		AR1016-E	1.234	1.185 E6	4.0	102	0.00	6.36- 6.42	
36		AR1260-A	2.939	2.830 E6	3.7	101	0.00	8.46- 8.52	
37		AR1260-B	1.845	1.778 E6	3.6	102	0.00	9.11- 9.17	
38		AR1260-C	2.206	2.131 E6	3.4	103	0.00	9.55- 9.61	
39		AR1260-D	4.470	4.277 E6	4.3	104	0.00	9.90- 9.96	
40		AR1260-E	4.252	4.149 E6	2.4	104	0.00	10.44-10.50	
41		AR1262-A			----------NA----------				
42		AR1262-B			----------NA----------				
43		AR1262-C			----------NA----------				
44		AR1262-D			----------NA----------				
45		AR1262-E			----------NA----------				
46		AR1268-A			----------NA----------				
47		AR1268-B			----------NA----------				

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3563-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124615.D
Project: Alcoa, Edgewater, NJ

```
48      AR1268-C                          ----------NA----------
49      AR1268-D                          ----------NA----------
50      AR1268-E                          ----------NA----------
51 S    Decachlorobiphenyl      39.050  42.456 E6  -8.7  108  -0.01   12.12-12.18
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    2g124399.D 2PCB3559.M       Thu Dec 24 12:29:08 2015   RPT1
```

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3563-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124626.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\2G3563\2g124626.D\ECD1A.CH Vial: 19
Signal #2 : C:\msdchem\1\DATA\2G3563\2g124626.D\ECD2B.CH
Acq On    : 23 Dec 2015   7:09 pm                    Operator: dylang
Sample    : cc3559-1000                              Inst    : HP G1530A
Misc      : op89820,G2G3563,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\2PCB3559.M (Chemstation Integrator)
Title        :
Last Update  : Mon Dec 21 08:45:44 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	65.025	69.598 E6	-7.0	104	-0.02	3.05- 3.11
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1016-A	1.196	1.194 E6	0.2	104	-0.02	3.46- 3.52
32	AR1016-B	2.159	1.993 E6	7.7	101	-0.02	3.89- 3.95
33	AR1016-C	5.035	4.630 E6	8.0	100	-0.01	4.47- 4.53
34	AR1016-D	1.845	1.771 E6	4.0	105	-0.01	4.64- 4.70
35	AR1016-E	1.958	1.871 E6	4.4	105	-0.01	5.17- 5.23
36	AR1260-A	4.567	4.486 E6	1.8	107	-0.01	7.21- 7.27
37	AR1260-B	2.239	2.131 E6	4.8	103	-0.01	7.76- 7.82
38	AR1260-C	2.471	2.464 E6	0.3	107	-0.01	8.10- 8.16
39	AR1260-D	6.358	6.188 E6	2.7	104	-0.01	8.54- 8.60
40	AR1260-E	3.966	4.145 E6	-4.5	114	-0.01	8.89- 9.05
41	AR1262-A		----------NA----------				

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3563-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124626.D
Project: Alcoa, Edgewater, NJ

42		AR1262-B		----------NA----------				
43		AR1262-C		----------NA----------				
44		AR1262-D		----------NA----------				
45		AR1262-E		----------NA----------				
46		AR1268-A		----------NA----------				
47		AR1268-B		----------NA----------				
48		AR1268-C		----------NA----------				
49		AR1268-D		----------NA----------				
50		AR1268-E		----------NA----------				
51	S	Decachlorobiphenyl	53.745	59.760 E6	-11.2	113	-0.01	10.49-10.55

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	53.806	55.273 E6	-2.7	99	-0.01	3.62- 3.68
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1016-A	868.218	794.161 E3	8.5	96	0.00	4.29- 4.35
32		AR1016-B	1.904	1.634 E6	14.2	93	-0.01	4.86- 4.92
33		AR1016-C	3.986	3.654 E6	8.3	98	0.00	5.50- 5.56
34		AR1016-D	1.605	1.375 E6	14.3	92	0.00	5.69- 5.75
35		AR1016-E	1.234	1.121 E6	9.2	96	0.00	6.36- 6.42
36		AR1260-A	2.939	2.779 E6	5.4	101	0.00	8.46- 8.52
37		AR1260-B	1.845	1.707 E6	7.5	100	0.00	9.11- 9.17
38		AR1260-C	2.206	2.094 E6	5.1	102	0.00	9.55- 9.61
39		AR1260-D	4.470	4.253 E6	4.9	104	0.00	9.90- 9.96
40		AR1260-E	4.252	4.107 E6	3.4	104	0.00	10.45-10.51
41		AR1262-A		----------NA----------				
42		AR1262-B		----------NA----------				
43		AR1262-C		----------NA----------				
44		AR1262-D		----------NA----------				
45		AR1262-E		----------NA----------				
46		AR1268-A		----------NA----------				
47		AR1268-B		----------NA----------				

Continuing Calibration Summary

Job Number: JC10583 **Sample:** G2G3563-CC3559
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** 2G124626.D
Project: Alcoa, Edgewater, NJ

```
48     AR1268-C                          ----------NA----------
49     AR1268-D                          ----------NA----------
50     AR1268-E                          ----------NA----------
51 S   Decachlorobiphenyl      39.050  40.159 E6  -2.8  101   0.00   12.13-12.19
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    2g124400.D 2PCB3559.M       Thu Dec 24 11:50:12 2015   RPT1
```

Initial Calibration Summary

Job Number: JC10583 **Sample:** GXX5543-ICC5543
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** XX182293.D
Project: Alcoa, Edgewater, NJ

Response Factor Report HP G1530A

Method : C:\msdchem\1\METHODS\PCB5543.M (Chemstation Integrator)
Title :
Last Update : Tue Dec 15 13:16:56 2015
Response via : Initial Calibration

Calibration Files
50 =xx182290.D 250 =xx182291.D 500 =xx182292.D 1000=xx182293.D
2000 =xx182294.D 3000 =xx182295.D

	Compound	50	250	500	1000	2000	3000	Avg	%RSD
1) S	Tetrachloro-m-xylen	6.943	7.926	8.190	8.938	8.694	8.833	8.254 E6	9.11
2)	AR1221-A				4.744			4.744 E4	0.00
3)	AR1221-B				8.048			8.048 E4	0.00
4)	AR1221-C				2.429			2.429 E5	0.00
5)	AR1221-D				1.972			1.972 E4	0.00
6)	AR1221-E				2.556			2.556 E4	0.00
7)	AR1232-A				1.816			1.816 E5	0.00
8)	AR1232-B				1.291			1.291 E5	0.00
9)	AR1232-C				2.676			2.676 E5	0.00
10)	AR1232-D				1.049			1.049 E5	0.00
11)	AR1232-E				9.455			9.455 E4	0.00
12)	AR1242-A				2.255			2.255 E5	0.00
13)	AR1242-B				4.827			4.827 E5	0.00
14)	AR1242-C				1.914			1.914 E5	0.00
15)	AR1242-D				1.981			1.981 E5	0.00
16)	AR1242-E				3.110			3.110 E5	0.00
17)	AR1248-A				1.142			1.142 E5	0.00
18)	AR1248-B				3.200			3.200 E5	0.00
19)	AR1248-C				3.081			3.081 E5	0.00
20)	AR1248-D				3.164			3.164 E5	0.00
21)	AR1248-E				3.107			3.107 E5	0.00
22)	AR1248-F				3.683			3.683 E5	0.00
23)	AR1248-G				5.637			5.637 E5	0.00
24)	AR1254-A				2.668			2.668 E5	0.00
25)	AR1254-B				4.892			4.892 E5	0.00
26)	AR1254-C				4.146			4.146 E5	0.00
27)	AR1254-D				5.672			5.672 E5	0.00
28)	AR1254-E				3.942			3.942 E5	0.00
29)	AR1254-F				4.060			4.060 E5	0.00
30)	AR1254-G				6.643			6.643 E5	0.00
31)	AR1262-A				6.028			6.028 E5	0.00
32)	AR1262-B				5.823			5.823 E5	0.00
33)	AR1262-C				4.751			4.751 E5	0.00
34)	AR1262-D				1.311			1.311 E6	0.00
35)	AR1262-E				7.595			7.595 E5	0.00
36)	AR1268-A				1.292			1.292 E6	0.00
37)	AR1268-B				1.698			1.698 E6	0.00
38)	AR1268-C				1.257			1.257 E6	0.00
39)	AR1268-D				4.784			4.784 E5	0.00
40)	AR1268-E				4.011			4.011 E6	0.00
41)	AR1016-A	1.241	1.128	1.324	1.338	1.444	1.474	1.325 E5	9.68
42)	AR1016-B	2.297	2.576	2.546	2.587	2.715	2.762	2.580 E5	6.32
43)	AR1016-C	5.070	5.606	5.797	5.807	6.188	6.414	5.814 E5	8.06
44)	AR1016-D	1.982	2.216	2.291	2.271	2.380	2.441	2.264 E5	7.06
45)	AR1016-E	2.123	2.314	2.368	2.379	2.485	2.559	2.371 E5	6.35
46)	AR1260-A	5.898	6.601	6.925	7.155	7.661	8.019	7.043 E5	10.75
47)	AR1260-B	2.591	3.089	3.165	3.393	3.556	3.620	3.236 E5	11.71

Initial Calibration Summary

Job Number: JC10583 **Sample:** GXX5543-ICC5543
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** XX182293.D
Project: Alcoa, Edgewater, NJ

48)		AR1260-C	2.311	2.882	3.013	3.130	3.304	3.434	3.012	E5	13.16
49)		AR1260-D	0.739	0.867	0.907	0.948	1.011	1.044	0.919	E6	11.94
50)		AR1260-E	4.478	5.110	5.244	5.417	5.799	6.020	5.344	E5	10.19
51)	S	Decachlorobiphenyl	9.777	8.466	9.536	9.603	9.067	9.361	9.302	E6	5.11

Signal #2

1)	S	Tetrachloro-m-xylen	0.901	0.915	1.032	1.038	0.990	1.020	0.983	E7	6.13
2)		AR1221-A				5.429			5.429	E4	0.00
3)		AR1221-B				8.914			8.914	E4	0.00
4)		AR1221-C				2.265			2.265	E5	0.00
5)		AR1221-D				3.762			3.762	E4	0.00
6)		AR1221-E				3.074			3.074	E4	0.00
7)		AR1232-A				1.984			1.984	E5	0.00
8)		AR1232-B				1.528			1.528	E5	0.00
9)		AR1232-C				3.396			3.396	E5	0.00
10)		AR1232-D				1.373			1.373	E5	0.00
11)		AR1232-E				8.998			8.998	E4	0.00
12)		AR1242-A				2.569			2.569	E5	0.00
13)		AR1242-B				5.987			5.987	E5	0.00
14)		AR1242-C				2.394			2.394	E5	0.00
15)		AR1242-D				1.758			1.758	E5	0.00
16)		AR1242-E				2.346			2.346	E5	0.00
17)		AR1248-A				1.367			1.367	E5	0.00
18)		AR1248-B				3.846			3.846	E5	0.00
19)		AR1248-C				2.075			2.075	E5	0.00
20)		AR1248-D				2.802			2.802	E5	0.00
21)		AR1248-E				3.228			3.228	E5	0.00
22)		AR1248-F				4.060			4.060	E5	0.00
23)		AR1248-G				3.647			3.647	E5	0.00
24)		AR1254-A				3.638			3.638	E5	0.00
25)		AR1254-B				3.991			3.991	E5	0.00
26)		AR1254-C				3.218			3.218	E5	0.00
27)		AR1254-D				6.690			6.690	E5	0.00
28)		AR1254-E				5.262			5.262	E5	0.00
29)		AR1254-F				5.284			5.284	E5	0.00
30)		AR1254-G				6.811			6.811	E5	0.00
31)		AR1262-A				5.389			5.389	E5	0.00
32)		AR1262-B				8.723			8.723	E5	0.00
33)		AR1262-C				6.681			6.681	E5	0.00
34)		AR1262-D				1.661			1.661	E6	0.00
35)		AR1262-E				1.072			1.072	E6	0.00
36)		AR1268-A				1.944			1.944	E6	0.00
37)		AR1268-B				1.844			1.844	E6	0.00
38)		AR1268-C				1.538			1.538	E6	0.00
39)		AR1268-D				6.213			6.213	E5	0.00
40)		AR1268-E				4.451			4.451	E6	0.00
41)		AR1016-A	1.329	1.556	1.509	1.500	1.548	1.567	1.502	E5	5.89
42)		AR1016-B	2.770	3.054	2.990	2.942	3.052	3.077	2.981	E5	3.85
43)		AR1016-C	6.848	7.175	7.048	6.981	7.266	7.410	7.122	E5	2.86
44)		AR1016-D	3.034	2.933	2.786	2.770	2.860	2.874	2.876	E5	3.39
45)		AR1016-E	2.236	2.037	2.036	2.010	2.093	2.140	2.092	E5	4.06
46)		AR1260-A	0.831	0.959	0.957	0.959	1.006	1.030	0.957	E6	7.19
47)		AR1260-B	4.101	4.688	4.685	4.690	4.897	5.017	4.680	E5	6.73
48)		AR1260-C	4.377	4.550	4.550	4.578	4.805	4.934	4.632	E5	4.34
49)		AR1260-D	0.987	1.168	1.177	1.198	1.259	1.282	1.179	E6	8.86
50)		AR1260-E	6.640	7.453	7.480	7.581	7.997	8.246	7.566	E5	7.30
51)	S	Decachlorobiphenyl	1.055	0.961	1.071	1.078	1.009	1.039	1.035	E7	4.26

(#) = Out of Range

Initial Calibration Summary

Job Number: JC10583 **Sample:** GXX5543-ICC5543
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** XX182293.D
Project: Alcoa, Edgewater, NJ

PCB5543.M Tue Dec 15 13:21:09 2015

Initial Calibration Verification

Job Number: JC10583 **Sample:** GXX5543-ICV5543
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** XX182300.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\gx...3\xx182300.D\ECD1A.CH Vial: 41
Signal #2 : C:\msdchem\1\DATA\gxx5543\xx182300.D\ECD2B.CH
Acq On    : 15 Dec 2015  12:17 pm                    Operator: kevinm2
Sample    : icv5543-1000                             Inst    : HP G1530A
Misc      : op89593,GXX5543,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\msdchem\1\METHODS\PCB5543.M (Chemstation Integrator)
Title        :
Last Update  : Tue Dec 15 13:16:56 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
12	AR1242-A	225.494	235.136 E3	-4.3	104	0.00	3.78- 3.98
13	AR1242-B	482.706	503.349 E3	-4.3	104	0.00	4.41- 4.61
14	AR1242-C	191.368	199.839 E3	-4.4	104	0.00	4.59- 4.79
15	AR1242-D	198.120	207.764 E3	-4.9	105	0.00	5.13- 5.33
16	AR1242-E	311.019	318.045 E3	-2.3	102	0.00	5.77- 5.97
36	AR1268-A	1.292	1.301 E6	-0.7	101	0.00	9.02- 9.22
37	AR1268-B	1.698	1.964 E6	-15.7	116	0.00	9.08- 9.28
38	AR1268-C	1.257	1.225 E6	2.5	97	0.00	9.35- 9.55
39	AR1268-D	478.414	441.090 E3	7.8	92	0.00	9.87-10.07
40	AR1268-E	4.011	3.444 E6	14.1	86	0.00	10.27-10.47

***** Signal #2 *****

12	AR1242-A	256.873	268.513 E3	-4.5	105	0.00	4.33- 4.53
13	AR1242-B	598.700	626.186 E3	-4.6	105	0.00	4.95- 5.15
14	AR1242-C	239.375	249.632 E3	-4.3	104	0.00	5.14- 5.34
15	AR1242-D	175.831	183.521 E3	-4.4	104	0.00	5.79- 5.99
16	AR1242-E	234.604	246.255 E3	-5.0	105	0.00	6.39- 6.59
36	AR1268-A	1.944	2.009 E6	-3.3	103	0.00	9.82-10.02
37	AR1268-B	1.844	2.128 E6	-15.4	115	0.00	9.89-10.09
38	AR1268-C	1.538	1.502 E6	2.3	98	0.00	10.25-10.45
39	AR1268-D	621.344	564.169 E3	9.2	91	0.00	10.67-10.87
40	AR1268-E	4.451	3.852 E6	13.5	87	0.00	11.14-11.34

(#) = Out of Range SPCC's out = 0 CCC's out = 0
xx182293.D PCB5543.M Tue Dec 15 13:20:41 2015

Initial Calibration Verification

Job Number: JC10583 **Sample:** GXX5543-ICV5543
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** XX182301.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\gx...3\xx182301.D\ECD1A.CH Vial: 42
Signal #2 : C:\msdchem\1\DATA\gxx5543\xx182301.D\ECD2B.CH
Acq On    : 15 Dec 2015  12:34 pm                    Operator: kevinm2
Sample    : icv5543-1000                             Inst    : HP G1530A
Misc      : op89593,GXX5543,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\msdchem\1\METHODS\PCB5543.M (Chemstation Integrator)
Title        :
Last Update  : Tue Dec 15 13:16:56 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	8.254	7.976 E6	3.4	89	0.00	2.98- 3.04
41		AR1016-A	132.486	141.496 E3	-6.8	106	0.00	3.41- 3.47
42		AR1016-B	258.034	298.007 E3	-15.5	115	0.00	3.85- 3.91
43		AR1016-C	581.368	649.162 E3	-11.7	112	0.00	4.48- 4.54
44		AR1016-D	226.351	258.573 E3	-14.2	114	0.00	4.66- 4.72
45		AR1016-E	237.139	263.799 E3	-11.2	111	0.00	5.19- 5.26
46		AR1260-A	704.299	717.854 E3	-1.9	100	0.01	7.71- 7.77
47		AR1260-B	323.574	378.502 E3	-17.0	112	0.00	7.84- 7.90
48		AR1260-C	301.228	347.599 E3	-15.4	111	0.00	8.19- 8.26
49		AR1260-D	919.331	1050.753 E3	-14.3	111	0.01	8.65- 8.71
50		AR1260-E	534.445	589.189 E3	-10.2	109	0.01	9.08- 9.14
51	S	Decachlorobiphenyl	9.302	8.792 E6	5.5	92	0.00	10.60-10.67

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	9.828	9.526 E6	3.1	92	0.00	3.24- 3.30
41		AR1016-A	150.157	165.760 E3	-10.4	110	0.00	3.86- 3.92
42		AR1016-B	298.071	339.642 E3	-13.9	115	0.00	4.39- 4.45
43		AR1016-C	712.154	801.188 E3	-12.5	115	0.00	5.02- 5.08
44		AR1016-D	287.605	315.953 E3	-9.9	114	0.00	5.21- 5.27
45		AR1016-E	209.195	223.949 E3	-7.1	111	0.00	5.86- 5.92
46		AR1260-A	957.075	1005.052 E3	-5.0	105	0.00	8.47- 8.53
47		AR1260-B	467.954	526.655 E3	-12.5	112	0.00	8.59- 8.65
48		AR1260-C	463.205	504.504 E3	-8.9	110	0.00	9.01- 9.07
49		AR1260-D	1178.527	1261.514 E3	-7.0	105	0.00	9.38- 9.44
50		AR1260-E	756.635	798.816 E3	-5.6	105	0.00	9.91- 9.97
51	S	Decachlorobiphenyl	10.354	10.559 E6	-2.0	98	0.00	11.58-11.64

(#) = Out of Range SPCC's out = 0 CCC's out = 0
xx182293.D PCB5543.M Tue Dec 15 13:20:42 2015

Initial Calibration Verification

Job Number: JC10583 **Sample:** GXX5543-ICV5543
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** XX182302.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\gx...3\xx182302.D\ECD1A.CH Vial: 43
Signal #2 : C:\msdchem\1\DATA\gxx5543\xx182302.D\ECD2B.CH
Acq On    : 15 Dec 2015  12:51 pm                    Operator: kevinm2
Sample    : icv5543-1000                             Inst    : HP G1530A
Misc      : op89593,GXX5543,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\msdchem\1\METHODS\PCB5543.M (Chemstation Integrator)
Title        :
Last Update  : Tue Dec 15 13:16:56 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
2	AR1221-A	47.437	48.522 E3	-2.3	102	0.00	2.31- 2.51
3	AR1221-B	80.477	73.249 E3	9.0	91	0.00	3.11- 3.31
4	AR1221-C	242.864	255.529 E3	-5.2	105	0.00	3.34- 3.54
5	AR1221-D	19.721	21.369 E3	-8.4	108	0.00	3.79- 3.99
6	AR1221-E	25.563	29.024 E3	-13.5	114	0.00	4.04- 4.24

***** Signal #2 *****

2	AR1221-A	54.291	58.040 E3	-6.9	107	0.00	2.68- 2.74
3	AR1221-B	89.144	96.857 E3	-8.7	109	0.00	3.52- 3.72
4	AR1221-C	226.461	239.922 E3	-5.9	106	0.00	3.79- 3.99
5	AR1221-D	37.624	37.007 E3	1.6	98	0.00	4.32- 4.52
6	AR1221-E	30.738	34.238 E3	-11.4	111	0.00	4.41- 4.61

(#) = Out of Range SPCC's out = 0 CCC's out = 0
xx182293.D PCB5543.M Tue Dec 15 13:20:43 2015

Initial Calibration Verification

Job Number: JC10583 **Sample:** GXX5543-ICV5543
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** XX182303.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\gx...3\xx182303.D\ECD1A.CH Vial: 44
Signal #2 : C:\msdchem\1\DATA\gxx5543\xx182303.D\ECD2B.CH
Acq On    : 15 Dec 2015   1:08 pm                    Operator: kevinm2
Sample    : icv5543-1000                             Inst    : HP G1530A
Misc      : op89593,GXX5543,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\msdchem\1\METHODS\PCB5543.M (Chemstation Integrator)
Title        :
Last Update  : Tue Dec 15 13:16:56 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
24	AR1254-A	266.753	255.938 E3	4.1	96	0.00	5.64- 5.84
25	AR1254-B	489.191	477.863 E3	2.3	98	0.00	6.01- 6.21
26	AR1254-C	414.551	437.179 E3	-5.5	105	0.00	6.40- 6.60
27	AR1254-D	567.169	570.414 E3	-0.6	101	0.00	6.59- 6.79
28	AR1254-E	394.152	419.645 E3	-6.5	106	0.00	7.01- 7.21
29	AR1254-F	405.970	426.636 E3	-5.1	105	0.00	7.23- 7.43
30	AR1254-G	664.349	720.711 E3	-8.5	108	0.00	7.64- 7.84

***** Signal #2 *****

24	AR1254-A	363.841	373.697 E3	-2.7	103	0.00	6.38- 6.58
25	AR1254-B	399.146	395.875 E3	0.8	99	0.00	6.65- 6.85
26	AR1254-C	321.788	328.394 E3	-2.1	102	0.00	7.14- 7.34
27	AR1254-D	669.038	677.439 E3	-1.3	101	0.00	7.31- 7.51
28	AR1254-E	526.183	591.114 E3	-12.3	112	0.00	7.63- 7.83
29	AR1254-F	528.403	586.163 E3	-10.9	111	0.00	8.14- 8.34
30	AR1254-G	681.051	728.356 E3	-6.9	107	0.00	8.40- 8.60

(#) = Out of Range SPCC's out = 0 CCC's out = 0
xx182293.D PCB5543.M Tue Dec 15 14:01:00 2015

Initial Calibration Verification

Job Number: JC10583 **Sample:** GXX5543-ICV5543
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** XX182304.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\gx...3\xx182304.D\ECD1A.CH Vial: 45
Signal #2 : C:\msdchem\1\DATA\gxx5543\xx182304.D\ECD2B.CH
Acq On    : 15 Dec 2015   1:25 pm                    Operator: kevinm2
Sample    : icv5543-1000                             Inst    : HP G1530A
Misc      : op89593,GXX5543,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\msdchem\1\METHODS\PCB5543.M (Chemstation Integrator)
Title        :
Last Update  : Tue Dec 15 13:16:56 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
7	AR1232-A	181.629	193.383 E3	-6.5	106	0.00	3.34- 3.54
8	AR1232-B	129.111	135.562 E3	-5.0	105	0.00	3.78- 3.98
9	AR1232-C	267.580	285.133 E3	-6.6	107	0.00	4.41- 4.61
10	AR1232-D	104.931	114.705 E3	-9.3	109	0.00	4.59- 4.79
11	AR1232-E	94.551	110.898 E3	-17.3	117	0.00	5.13- 5.33
31	AR1262-A	602.835	621.052 E3	-3.0	103	0.00	7.23- 7.43
32	AR1262-B	582.346	589.111 E3	-1.2	101	0.00	7.78- 7.98
33	AR1262-C	475.092	505.624 E3	-6.4	106	0.00	8.13- 8.33
34	AR1262-D	1.311	1.323 E6	-0.9	101	0.00	8.58- 8.78
35	AR1262-E	759.520	763.905 E3	-0.6	101	0.00	9.02- 9.22

***** Signal #2 *****

7	AR1232-A	198.376	211.922 E3	-6.8	107	0.00	3.79- 3.99
8	AR1232-B	152.751	164.476 E3	-7.7	108	0.00	4.33- 4.53
9	AR1232-C	339.572	362.841 E3	-6.9	107	0.00	4.95- 5.15
10	AR1232-D	137.292	147.404 E3	-7.4	107	0.00	5.14- 5.34
11	AR1232-E	89.980	96.984 E3	-7.8	108	0.00	5.79- 5.99
31	AR1262-A	538.877	541.793 E3	-0.5	101	0.00	7.88- 8.08
32	AR1262-B	872.348	889.017 E3	-1.9	102	0.00	8.52- 8.72
33	AR1262-C	668.111	698.358 E3	-4.5	105	0.00	8.94- 9.14
34	AR1262-D	1.661	1.674 E6	-0.8	101	0.00	9.31- 9.51
35	AR1262-E	1.072	1.096 E6	-2.2	102	0.00	9.82-10.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
xx182293.D PCB5543.M Tue Dec 15 14:01:01 2015

Initial Calibration Verification

Job Number: JC10583 **Sample:** GXX5543-ICV5543
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** XX182305.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\gx...3\xx182305.D\ECD1A.CH Vial: 46
Signal #2 : C:\msdchem\1\DATA\gxx5543\xx182305.D\ECD2B.CH
Acq On    : 15 Dec 2015   1:43 pm                    Operator: kevinm2
Sample    : icv5543-1000                             Inst    : HP G1530A
Misc      : op89593,GXX5543,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\msdchem\1\METHODS\PCB5543.M (Chemstation Integrator)
Title        :
Last Update  : Tue Dec 15 13:16:56 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
17	AR1248-A	114.214	117.670 E3	-3.0	103	0.00	3.78- 3.98
18	AR1248-B	319.963	324.611 E3	-1.5	101	0.00	4.41- 4.61
19	AR1248-C	308.079	313.476 E3	-1.8	102	-0.03	4.82- 5.02
20	AR1248-D	316.428	324.860 E3	-2.7	103	0.00	5.13- 5.33
21	AR1248-E	310.694	320.977 E3	-3.3	103	0.00	5.25- 5.45
22	AR1248-F	368.291	388.246 E3	-5.4	105	0.00	5.76- 5.96
23	AR1248-G	563.718	581.065 E3	-3.1	103	0.00	6.06- 6.26

***** Signal #2 *****

17	AR1248-A	136.660	142.742 E3	-4.5	104	0.00	4.32- 4.52
18	AR1248-B	384.580	398.614 E3	-3.6	104	0.00	4.95- 5.15
19	AR1248-C	207.451	215.341 E3	-3.8	104	0.00	5.41- 5.61
20	AR1248-D	280.227	290.110 E3	-3.5	104	0.00	5.79- 5.99
21	AR1248-E	322.843	335.666 E3	-4.0	104	0.00	5.96- 6.16
22	AR1248-F	405.953	423.329 E3	-4.3	104	0.00	6.39- 6.59
23	AR1248-G	364.736	376.729 E3	-3.3	103	0.00	6.72- 6.92

(#) = Out of Range SPCC's out = 0 CCC's out = 0
xx182293.D PCB5543.M Tue Dec 15 14:01:02 2015

Continuing Calibration Summary

Job Number: JC10583 **Sample:** GXX5548-CC5543
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** XX182468.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\gx...8\xx182468.D\ECD1A.CH Vial: 12
Signal #2 : C:\msdchem\1\DATA\gxx5548\xx182468.D\ECD2B.CH
Acq On    : 17 Dec 2015  12:46 pm                    Operator: josephr
Sample    : cc5543-1000                              Inst    : HP G1530A
Misc      : op89763,GXX5548,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\msdchem\1\METHODS\PCB5543.M (Chemstation Integrator)
Title        :
Last Update  : Tue Dec 15 13:16:56 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	8.254	9.777 E6	-18.5	109	0.00	2.98- 3.04
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1262-A		----------NA----------				
32	AR1262-B		----------NA----------				
33	AR1262-C		----------NA----------				
34	AR1262-D		----------NA----------				
35	AR1262-E		----------NA----------				
36	AR1268-A		----------NA----------				
37	AR1268-B		----------NA----------				
38	AR1268-C		----------NA----------				
39	AR1268-D		----------NA----------				
40	AR1268-E		----------NA----------				
41	AR1016-A	132.486	146.126 E3	-10.3	109	0.00	3.41- 3.47

Continuing Calibration Summary

Job Number: JC10583 **Sample:** GXX5548-CC5543
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** XX182468.D
Project: Alcoa, Edgewater, NJ

42		AR1016-B	258.034	285.261	E3	-10.6	110	0.00	3.85- 3.91
43		AR1016-C	581.368	619.693	E3	-6.6	107	0.00	4.48- 4.54
44		AR1016-D	226.351	247.343	E3	-9.3	109	0.00	4.65- 4.71
45		AR1016-E	237.139	258.531	E3	-9.0	109	0.00	5.18- 5.25
46		AR1260-A	704.299	730.032	E3	-3.7	102	0.00	7.70- 7.76
47		AR1260-B	323.574	352.857	E3	-9.0	104	0.00	7.83- 7.89
48		AR1260-C	301.228	317.741	E3	-5.5	102	0.00	8.18- 8.25
49		AR1260-D	919.331	954.870	E3	-3.9	101	0.00	8.64- 8.70
50		AR1260-E	534.445	532.430	E3	0.4	98	0.00	9.07- 9.13
51	S	Decachlorobiphenyl	9.302	9.806	E6	-5.4	102	0.00	10.59-10.66

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	9.828	11.539	E6	-17.4	111	0.00	3.24- 3.30
2		AR1221-A		----------NA----------					
3		AR1221-B		----------NA----------					
4		AR1221-C		----------NA----------					
5		AR1221-D		----------NA----------					
6		AR1221-E		----------NA----------					
7		AR1232-A		----------NA----------					
8		AR1232-B		----------NA----------					
9		AR1232-C		----------NA----------					
10		AR1232-D		----------NA----------					
11		AR1232-E		----------NA----------					
12		AR1242-A		----------NA----------					
13		AR1242-B		----------NA----------					
14		AR1242-C		----------NA----------					
15		AR1242-D		----------NA----------					
16		AR1242-E		----------NA----------					
17		AR1248-A		----------NA----------					
18		AR1248-B		----------NA----------					
19		AR1248-C		----------NA----------					
20		AR1248-D		----------NA----------					
21		AR1248-E		----------NA----------					
22		AR1248-F		----------NA----------					
23		AR1248-G		----------NA----------					
24		AR1254-A		----------NA----------					
25		AR1254-B		----------NA----------					
26		AR1254-C		----------NA----------					
27		AR1254-D		----------NA----------					
28		AR1254-E		----------NA----------					
29		AR1254-F		----------NA----------					
30		AR1254-G		----------NA----------					
31		AR1262-A		----------NA----------					
32		AR1262-B		----------NA----------					
33		AR1262-C		----------NA----------					
34		AR1262-D		----------NA----------					
35		AR1262-E		----------NA----------					
36		AR1268-A		----------NA----------					
37		AR1268-B		----------NA----------					
38		AR1268-C		----------NA----------					
39		AR1268-D		----------NA----------					
40		AR1268-E		----------NA----------					
41		AR1016-A	150.157	166.269	E3	-10.7	111	0.00	3.86- 3.92
42		AR1016-B	298.071	323.062	E3	-8.4	110	0.00	4.39- 4.45
43		AR1016-C	712.154	760.058	E3	-6.7	109	0.00	5.02- 5.08
44		AR1016-D	287.605	305.637	E3	-6.3	110	0.00	5.21- 5.27
45		AR1016-E	209.195	221.772	E3	-6.0	110	0.00	5.86- 5.92
46		AR1260-A	957.075	976.100	E3	-2.0	102	0.00	8.46- 8.52
47		AR1260-B	467.954	479.970	E3	-2.6	102	0.00	8.58- 8.64

Continuing Calibration Summary

Job Number: JC10583 **Sample:** GXX5548-CC5543
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** XX182468.D
Project: Alcoa, Edgewater, NJ

48		AR1260-C	463.205	470.497	E3	-1.6	103	0.00	9.01- 9.07
49		AR1260-D	1178.527	1217.762	E3	-3.3	102	0.00	9.37- 9.43
50		AR1260-E	756.635	738.650	E3	2.4	97	0.00	9.91- 9.97
51	S	Decachlorobiphenyl	10.354	11.204	E6	-8.2	104	0.00	11.57-11.63

(#) = Out of Range SPCC's out = 0 CCC's out = 0
xx182293.D PCB5543.M Thu Dec 17 13:00:42 2015

Continuing Calibration Summary

Job Number: JC10583 **Sample:** GXX5548-CC5543
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** XX182477.D
Project: Alcoa, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\gx...8\xx182477.D\ECD1A.CH Vial: 20
Signal #2 : C:\msdchem\1\DATA\gxx5548\xx182477.D\ECD2B.CH
Acq On    : 17 Dec 2015   3:43 pm                    Operator: josephr
Sample    : cc5543-500                               Inst    : HP G1530A
Misc      : op89820,GXX5548,15.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\msdchem\1\METHODS\PCB5543.M (Chemstation Integrator)
Title        :
Last Update  : Tue Dec 15 13:16:56 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	8.254	9.740 E6	-18.0	119	0.00	2.98- 3.04
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1262-A		----------NA----------				
32	AR1262-B		----------NA----------				
33	AR1262-C		----------NA----------				
34	AR1262-D		----------NA----------				
35	AR1262-E		----------NA----------				
36	AR1268-A		----------NA----------				
37	AR1268-B		----------NA----------				
38	AR1268-C		----------NA----------				
39	AR1268-D		----------NA----------				
40	AR1268-E		----------NA----------				
41	AR1016-A	132.486	149.471 E3	-12.8	113	0.00	3.41- 3.47

Continuing Calibration Summary

Job Number: JC10583 **Sample:** GXX5548-CC5543
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** XX182477.D
Project: Alcoa, Edgewater, NJ

42		AR1016-B	258.034	293.027	E3	-13.6	115	0.00	3.85- 3.91
43		AR1016-C	581.368	602.739	E3	-3.7	104	0.00	4.48- 4.54
44		AR1016-D	226.351	251.464	E3	-11.1	110	0.00	4.66- 4.72
45		AR1016-E	237.139	264.194	E3	-11.4	112	0.00	5.18- 5.25
46		AR1260-A	704.299	713.372	E3	-1.3	103	0.01	7.71- 7.77
47		AR1260-B	323.574	376.864	E3	-16.5	119	0.00	7.84- 7.90
48		AR1260-C	301.228	322.231	E3	-7.0	107	0.00	8.19- 8.26
49		AR1260-D	919.331	987.655	E3	-7.4	109	0.00	8.65- 8.71
50		AR1260-E	534.445	529.926	E3	0.8	101	0.00	9.08- 9.14
51	S	Decachlorobiphenyl	9.302	10.298	E6	-10.7	108	0.00	10.59-10.66

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	9.828	11.663	E6	-18.7	113	0.00	3.24- 3.30
2		AR1221-A		----------NA----------					
3		AR1221-B		----------NA----------					
4		AR1221-C		----------NA----------					
5		AR1221-D		----------NA----------					
6		AR1221-E		----------NA----------					
7		AR1232-A		----------NA----------					
8		AR1232-B		----------NA----------					
9		AR1232-C		----------NA----------					
10		AR1232-D		----------NA----------					
11		AR1232-E		----------NA----------					
12		AR1242-A		----------NA----------					
13		AR1242-B		----------NA----------					
14		AR1242-C		----------NA----------					
15		AR1242-D		----------NA----------					
16		AR1242-E		----------NA----------					
17		AR1248-A		----------NA----------					
18		AR1248-B		----------NA----------					
19		AR1248-C		----------NA----------					
20		AR1248-D		----------NA----------					
21		AR1248-E		----------NA----------					
22		AR1248-F		----------NA----------					
23		AR1248-G		----------NA----------					
24		AR1254-A		----------NA----------					
25		AR1254-B		----------NA----------					
26		AR1254-C		----------NA----------					
27		AR1254-D		----------NA----------					
28		AR1254-E		----------NA----------					
29		AR1254-F		----------NA----------					
30		AR1254-G		----------NA----------					
31		AR1262-A		----------NA----------					
32		AR1262-B		----------NA----------					
33		AR1262-C		----------NA----------					
34		AR1262-D		----------NA----------					
35		AR1262-E		----------NA----------					
36		AR1268-A		----------NA----------					
37		AR1268-B		----------NA----------					
38		AR1268-C		----------NA----------					
39		AR1268-D		----------NA----------					
40		AR1268-E		----------NA----------					
41		AR1016-A	150.157	174.108	E3	-16.0	115	0.00	3.86- 3.92
42		AR1016-B	298.071	336.886	E3	-13.0	113	0.00	4.40- 4.46
43		AR1016-C	712.154	778.274	E3	-9.3	110	0.00	5.03- 5.09
44		AR1016-D	287.605	321.431	E3	-11.8	115	0.00	5.21- 5.27
45		AR1016-E	209.195	229.871	E3	-9.9	113	0.00	5.86- 5.92
46		AR1260-A	957.075	1025.403	E3	-7.1	107	0.00	8.46- 8.52
47		AR1260-B	467.954	509.714	E3	-8.9	109	0.00	8.59- 8.65

Continuing Calibration Summary

Job Number: JC10583 **Sample:** GXX5548-CC5543
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con. **Lab FileID:** XX182477.D
Project: Alcoa, Edgewater, NJ

48		AR1260-C	463.205	491.934	E3	-6.2	108	0.00	9.01- 9.07
49		AR1260-D	1178.527	1243.970	E3	-5.6	106	0.00	9.38- 9.44
50		AR1260-E	756.635	785.900	E3	-3.9	105	0.00	9.91- 9.97
51	S	Decachlorobiphenyl	10.354	11.511	E6	-11.2	107	0.00	11.57-11.63

(#) = Out of Range SPCC's out = 0 CCC's out = 0
xx182292.D PCB5543.M Thu Dec 17 16:04:34 2015

New Jersey

ACCUTEST LABORATORIES

GC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 16:50

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3562\
Data File : 2g124580.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 4:55 am
Operator : kevinm2
Sample : jc10583-1
Misc : op89820,G2G3562,15.4,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 14:53:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.086	3.657	379.4E6	332.3E6	5.835	6.177
	Spiked Amount 40.000			Recovery	=	14.59%	15.44%
51) S	Decachlor...	10.516	12.157	312.6E6	248.1E6	5.817m	6.354
	Spiked Amount 40.000			Recovery	=	14.54%	15.89%
	Target Compounds						
19)	AR1248-C	4.942	6.001	3551.2E6	1477.2E6	1477.229m	1328.065
20)	AR1248-D	5.206	6.394	3680.8E6	2052.4E6	1522.292m	1395.654
21)	AR1248-E	5.320	6.572	2167.6E6	2774.0E6	1642.178	1704.208
22)	AR1248-F	5.810	6.998	4070.1E6	3827.7E6	1759.869	1992.147
37)	AR1260-B	7.791	9.145	256.6E6	218.1E6	114.608	118.217
38)	AR1260-C	8.136	9.580	268.6E6	249.4E6	108.695	113.059
39)	AR1260-D	8.570	9.929	667.4E6	537.0E6	104.974	120.124
40)	AR1260-E	8.967f	10.475	518.3E6	437.4E6	130.665m	102.872m

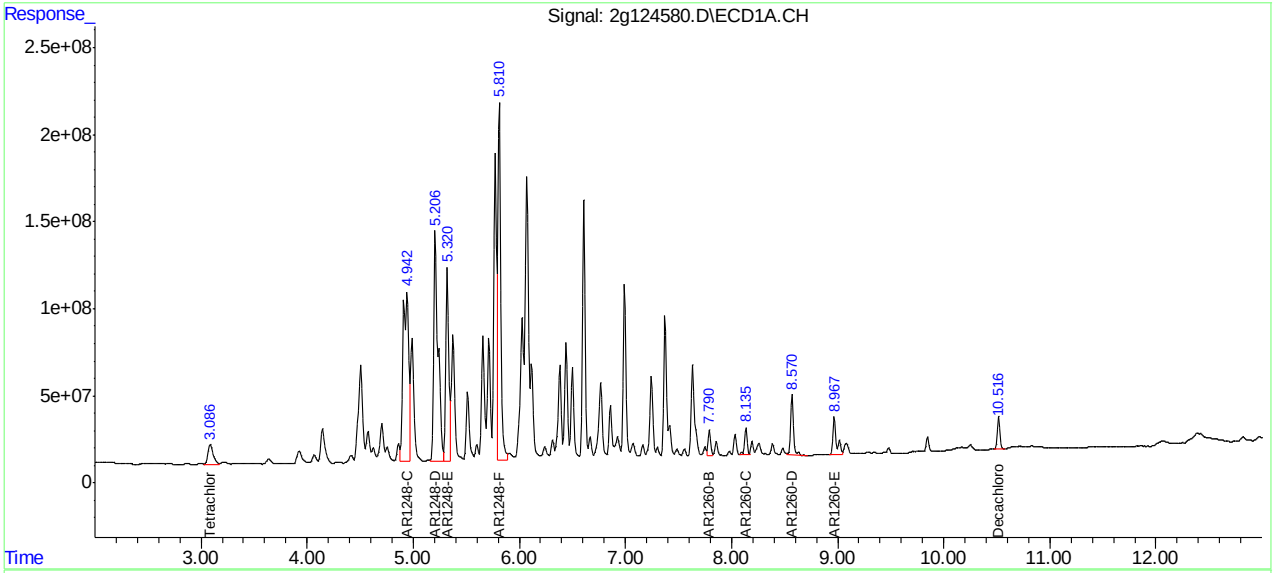
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

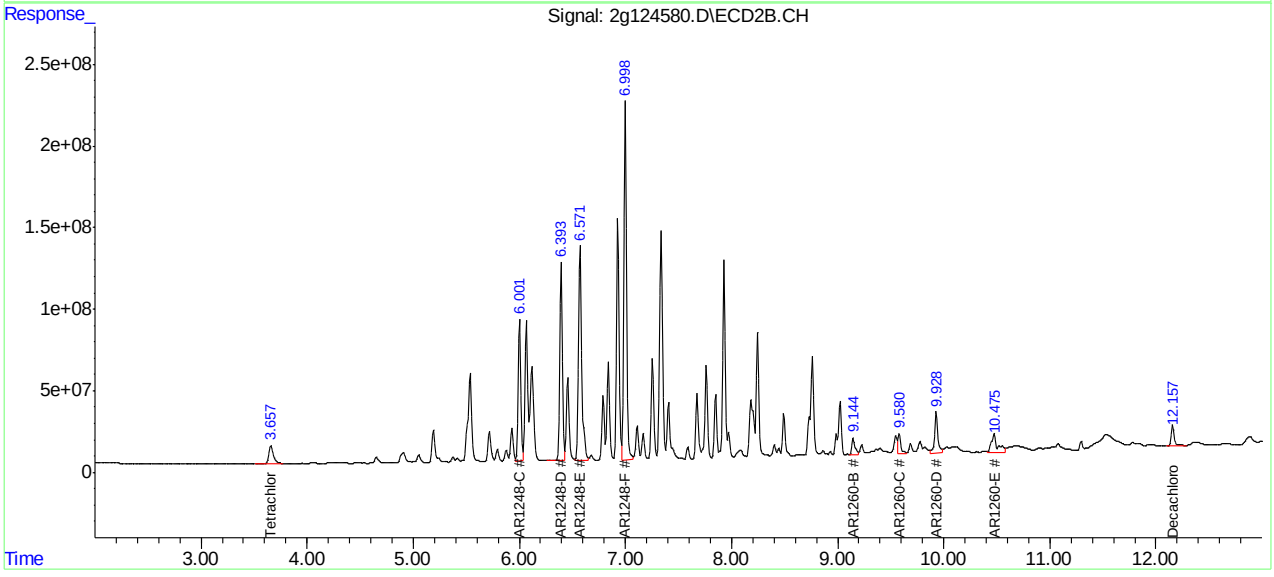
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3562\
Data File : 2g124580.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 4:55 am
Operator : kevinm2
Sample : jc10583-1
Misc : op89820,G2G3562,15.4,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 14:53:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 16:50

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124607.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 12:53 pm
Operator : dylang
Sample : jc10583-1
Misc : op89820,G2G3563,15.4,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:18:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.082f	3.654	1650.5E6	1401.9E6	25.382	26.055
	Spiked Amount 40.000			Recovery	=	63.46%	65.14%
51) S	Decachlor...	10.516	12.156	1926.5E6	1521.2E6	35.845m	38.956
	Spiked Amount 40.000			Recovery	=	89.61%	97.39%
	Target Compounds						
19)	AR1248-C	4.940	6.000	15657.5E6	6753.5E6	6513.235m	6071.721
20)	AR1248-D	5.204	6.392	16322.3E6	9628.4E6	6750.418m	6547.300
21)	AR1248-E	5.317	6.571	9689.4E6	13159.9E6	7340.753	8084.751
22)	AR1248-F	5.808	6.997	18976.4E6	18099.7E6	8205.091	9420.089
23)	AR1248-G	6.070	7.335	17041.5E6	14142.2E6	9881.243	8327.578
37)	AR1260-B	7.789	9.145	1253.0E6	1250.5E6	559.544	677.797
38)	AR1260-C	8.133	9.579	1336.7E6	1311.0E6	540.989	594.220
39)	AR1260-D	8.567f	9.928	3436.4E6	2782.4E6	540.498m	622.471
40)	AR1260-E	8.966f	10.474	2795.0E6	2878.7E6	704.659m	676.999

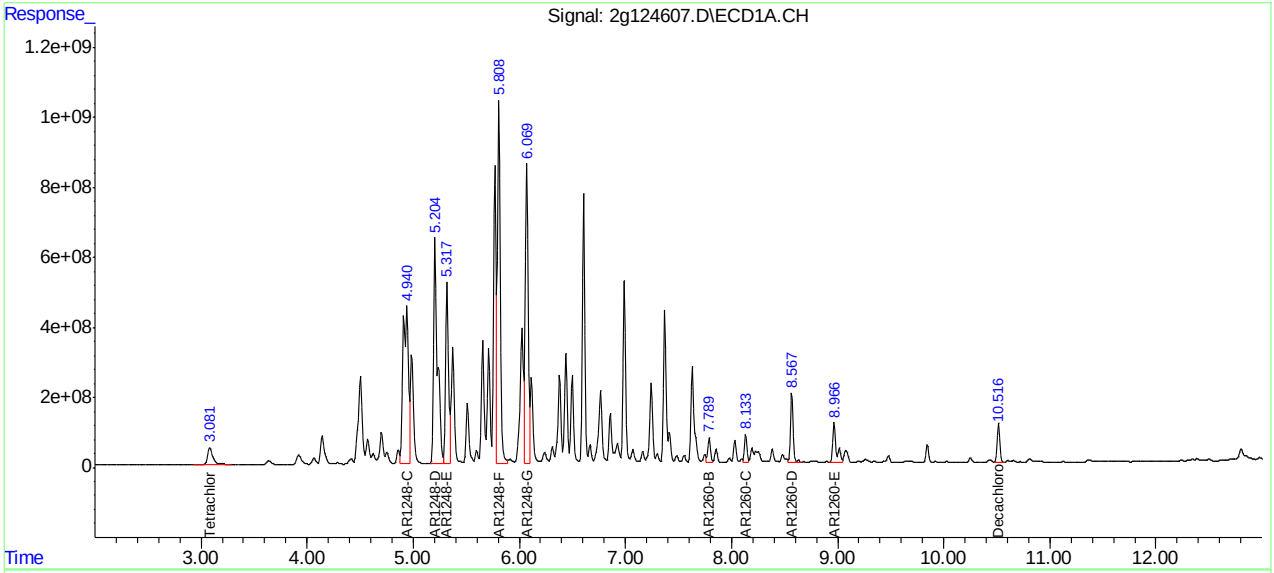
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

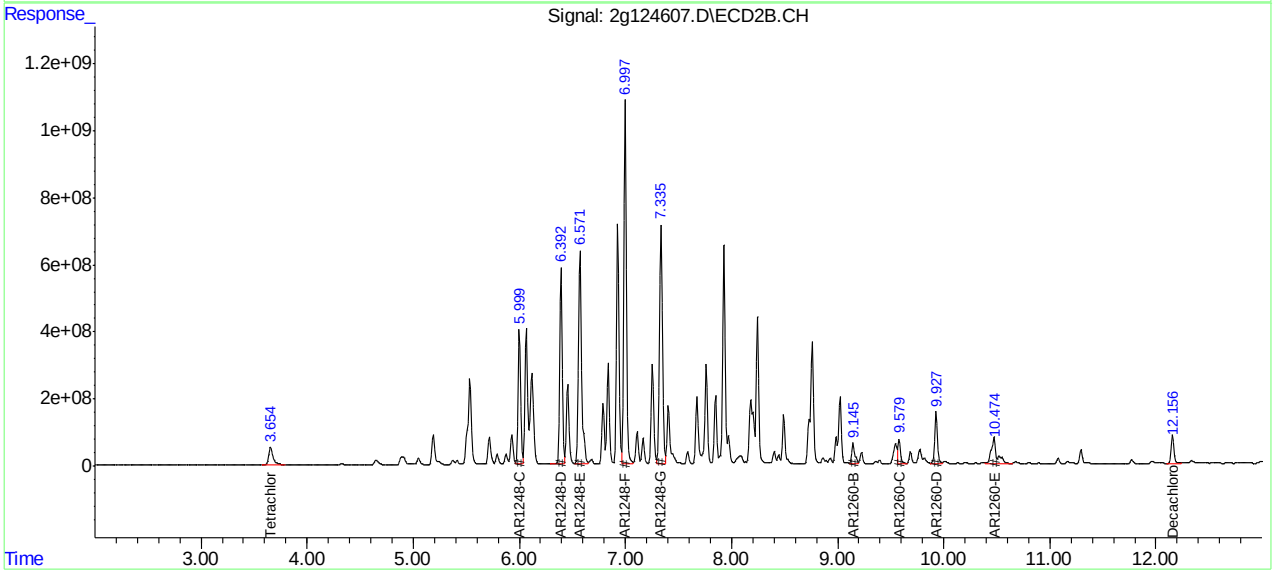
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124607.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 12:53 pm
Operator : dylang
Sample : jc10583-1
Misc : op89820,G2G3563,15.4,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:18:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 16:56

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3562\
Data File : 2g124585.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 6:20 am
Operator : kevinm2
Sample : jc10583-2
Misc : op89820,G2G3562,16.2,,,10,20
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:05:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.083	3.657	145.3E6	113.1E6	2.235	2.101
	Spiked Amount 40.000			Recovery	=	5.59%	5.25%
51) S	Decachlor...	10.517	12.157	112.5E6	97005915	2.094m	2.484m
	Spiked Amount 40.000			Recovery	=	5.23%	6.21%
	Target Compounds						
18)	AR1248-B	4.504	5.535	2628.3E6	1972.5E6	989.043m	1031.266
19)	AR1248-C	4.912	6.001	2518.3E6	1135.3E6	1047.583m	1020.690
20)	AR1248-D	5.206	6.393	2579.6E6	1554.6E6	1066.862	1057.100
21)	AR1248-E	5.320	6.572	1339.1E6	1751.4E6	1014.475	1075.973
22)	AR1248-F	5.811	6.998	2347.2E6	2211.1E6	1014.914	1150.786
23)	AR1248-G	6.071	7.335	2065.7E6	1878.6E6	1197.767	1106.222
37)	AR1260-B	7.791	9.145	153.2E6	138.4E6	68.402	75.037
38)	AR1260-C	8.135	9.579	165.9E6	180.8E6	67.132	81.948
39)	AR1260-D	8.570	9.929	537.6E6	274.5E6	84.559	61.409 #
40)	AR1260-E	8.969	10.477	307.6E6	244.2E6	77.556m	57.438m#

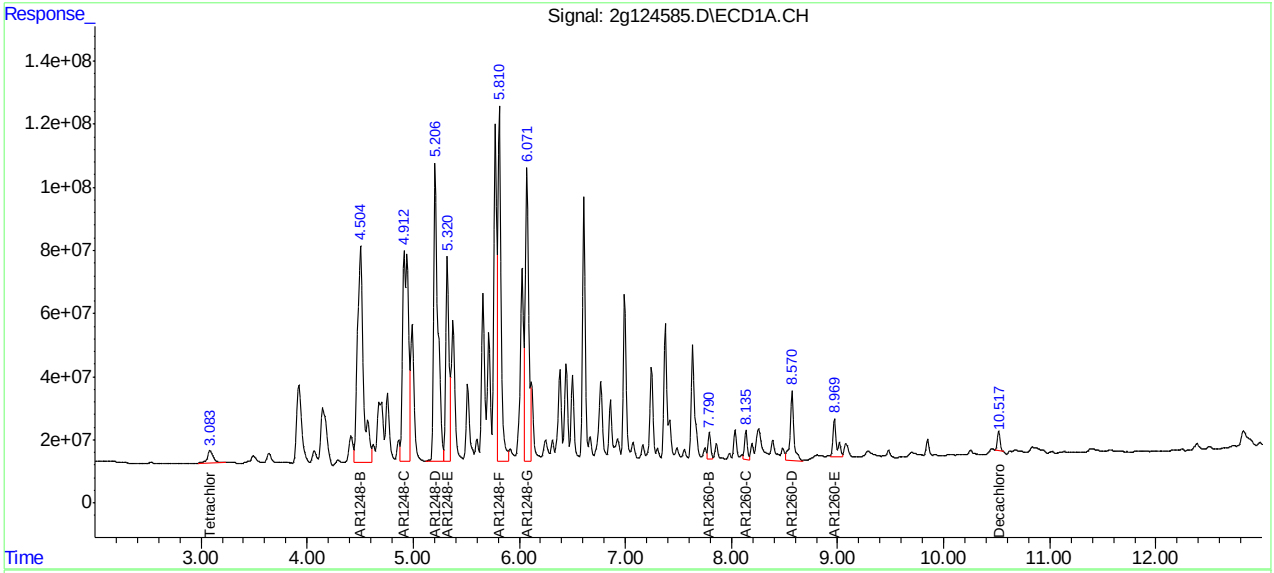
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

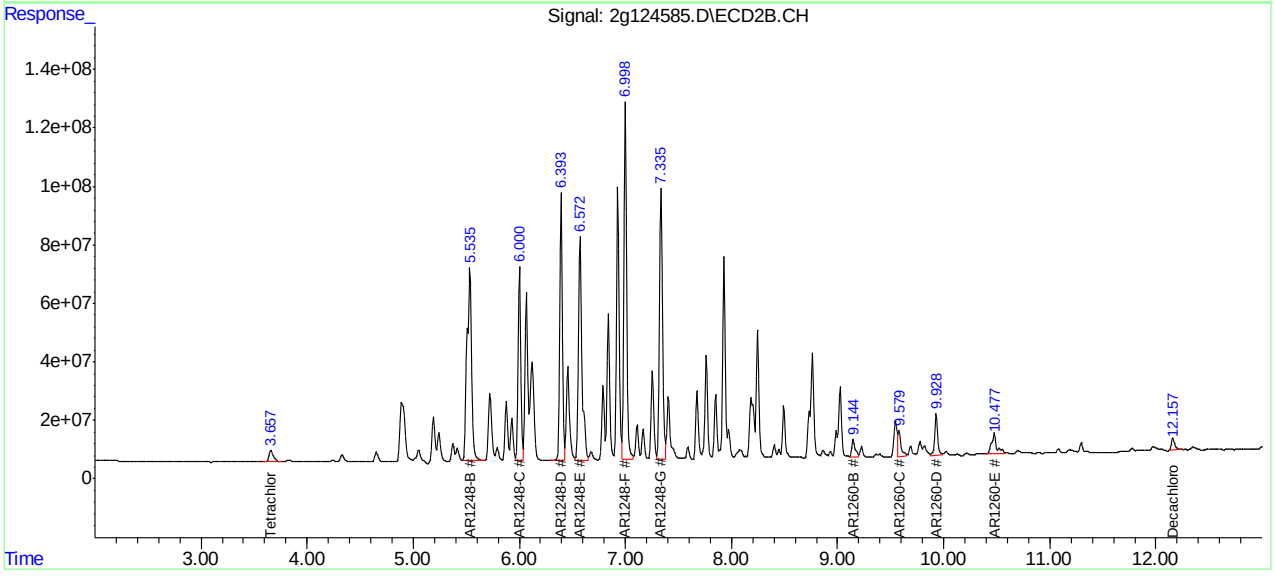
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3562\
Data File : 2g124585.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 6:20 am
Operator : kevinm2
Sample : jc10583-2
Misc : op89820,G2G3562,16.2,,,10,20
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:05:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 16:56

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124608.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 1:10 pm
Operator : dylang
Sample : jc10583-2
Misc : op89820,G2G3563,16.2,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:26:58 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.081f	3.653	2209.9E6	1708.5E6	33.985m	31.754
	Spiked Amount 40.000			Recovery	=	84.96%	79.39%
51) S	Decachlor...	10.516	12.158	1886.5E6	2177.4E6	35.100m	55.760 #
	Spiked Amount 40.000			Recovery	=	87.75%	139.40%
	Target Compounds						
18)	AR1248-B	4.500	5.533	43498.8E6	30674.1E6	16368.525m	16036.721m
19)	AR1248-C	4.909	6.000	40836.5E6	16908.5E6	16987.181m	15201.624
20)	AR1248-D	5.204	6.392	40742.4E6	23022.8E6	16849.907	15655.536
21)	AR1248-E	5.317	6.571	21905.2E6	26878.7E6	16595.518	16512.883
22)	AR1248-F	5.808	6.997	38203.4E6	33066.2E6	16518.556	17209.426
23)	AR1248-G	6.070	7.333	34734.2E6	30150.6E6	20140.046	17754.105
37)	AR1260-B	7.789	9.144	2102.1E6	2086.0E6	938.726	1130.605
38)	AR1260-C	8.134	9.579	2308.6E6	2259.7E6	934.366	1024.241
39)	AR1260-D	8.568	9.927	6347.8E6	4794.6E6	998.402m	1072.629
40)	AR1260-E	8.966f	10.473	5353.7E6	5161.0E6	1349.745m	1213.746

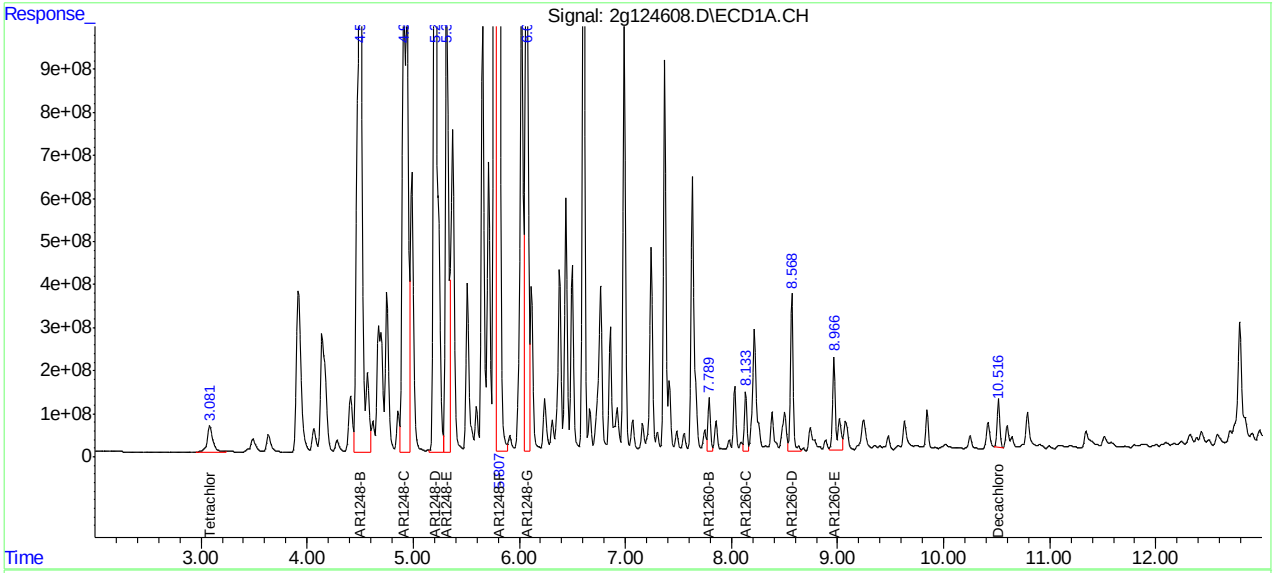
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

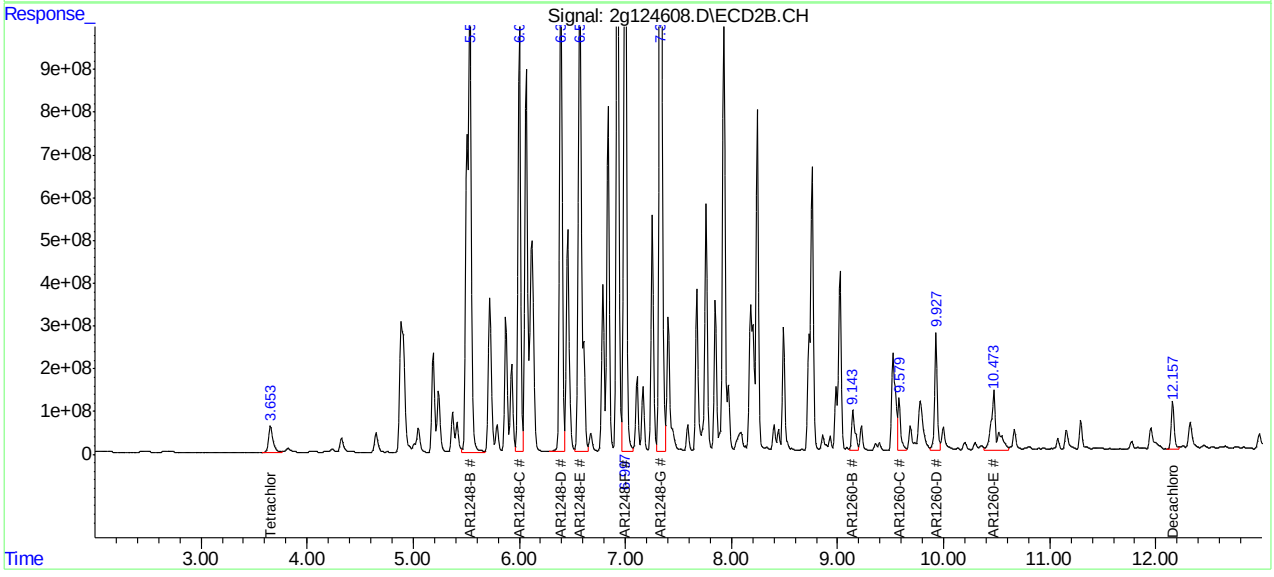
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124608.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 1:10 pm
Operator : dylang
Sample : jc10583-2
Misc : op89820,G2G3563,16.2,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:26:58 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 17:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3562\
Data File : 2g124586.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 6:37 am
Operator : kevinm2
Sample : jc10583-3
Misc : op89820,G2G3562,15.2,,,10,10
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:09:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.085	3.659	106.2E6	108.1E6	1.633m	2.008m
	Spiked Amount 40.000			Recovery	=	4.08%	5.02%
51) S	Decachlor...	10.519	12.156	185.4E6	109.4E6	3.450	2.802m
	Spiked Amount 40.000			Recovery	=	8.63%	7.00%
	Target Compounds						
17)	AR1248-A	3.918	4.888	1307.3E6	1280.6E6	1450.536	1746.246
18)	AR1248-B	4.502	5.536	4267.7E6	3608.1E6	1605.947m	1886.359m
19)	AR1248-C	4.914	6.002	4212.1E6	2239.4E6	1752.163m	2013.326
20)	AR1248-D	5.207	6.395	4221.4E6	2951.6E6	1745.869	2007.118
21)	AR1248-E	5.320	6.574	2210.7E6	3187.2E6	1674.809	1958.035
22)	AR1248-F	5.809	6.999	3383.9E6	4001.0E6	1463.154	2082.313 #
23)	AR1248-G	6.072	7.334	3685.0E6	3931.2E6	2136.686	2314.887
37)	AR1260-B	7.791	9.146	212.7E6	259.6E6	94.967	140.716 #
38)	AR1260-C	8.136	9.580	250.6E6	207.3E6	101.435	93.959
39)	AR1260-D	8.570	9.928	646.9E6	601.3E6	101.743m	134.522 #
40)	AR1260-E	8.967f	10.474	524.6E6	520.2E6	132.257m	122.344

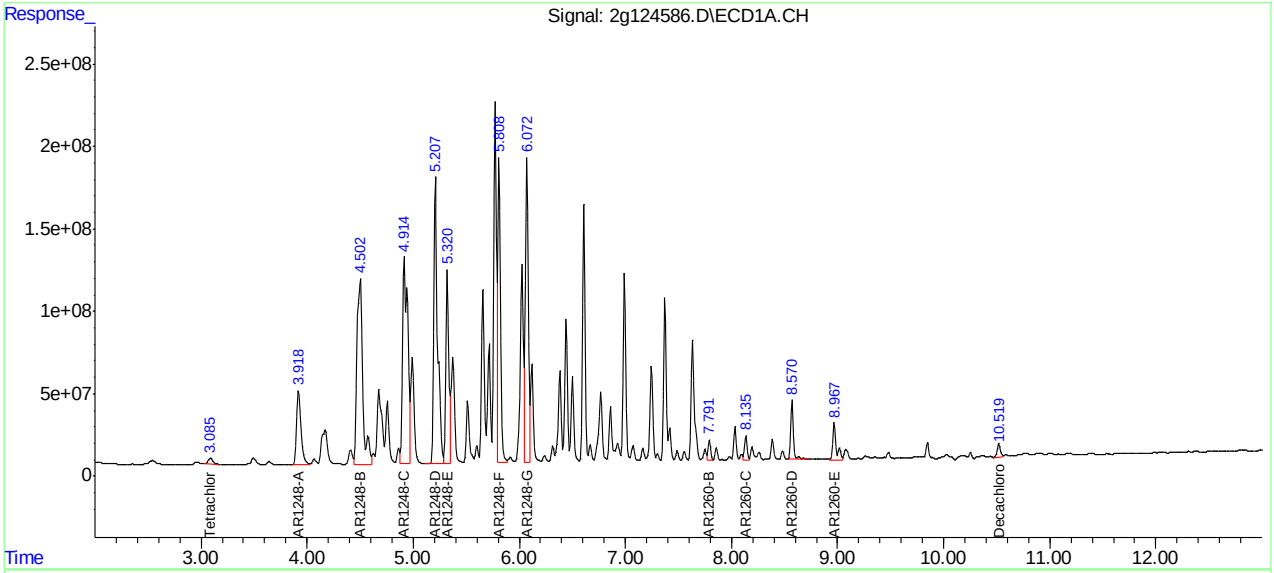
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

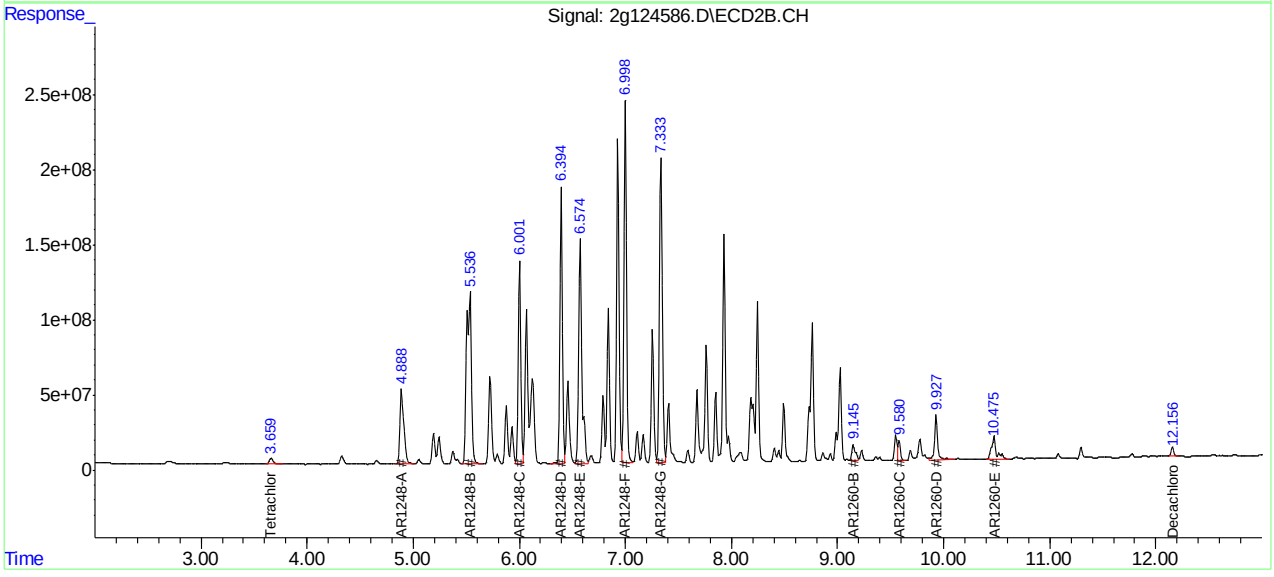
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3562\
Data File : 2g124586.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 6:37 am
Operator : kevinm2
Sample : jc10583-3
Misc : op89820,G2G3562,15.2,,,10,10
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:09:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 17:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124609.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 1:27 pm
Operator : dylang
Sample : jc10583-3
Misc : op89820,G2G3563,15.2,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:30:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.094	3.668	1165.9E6	1140.6E6	17.931m	21.199
	Spiked Amount 40.000			Recovery	=	44.83%	53.00%
51) S	Decachlor...	10.528	12.162	1739.9E6	1023.0E6	32.374m	26.198m
	Spiked Amount 40.000			Recovery	=	80.94%	65.50%
	Target Compounds						
17)	AR1248-A	3.926	4.894	13167.4E6	13008.5E6	14610.539	17738.791
18)	AR1248-B	4.512	5.543	48657.9E6	37254.6E6	18309.901m	19477.056m
19)	AR1248-C	4.923	6.010	45804.4E6	22160.3E6	19053.731m	19923.238
20)	AR1248-D	5.216	6.402	43850.7E6	28617.6E6	18135.405m	19459.992
21)	AR1248-E	5.330	6.581	23357.9E6	31829.2E6	17696.115	19554.281
22)	AR1248-F	5.823	7.007	37298.3E6	38061.2E6	16127.238	19809.093
23)	AR1248-G	6.082	7.341	37569.9E6	38079.8E6	21784.253	22423.208
37)	AR1260-B	7.800	9.152	1691.2E6	2300.9E6	755.264	1247.095 #
38)	AR1260-C	8.143	9.585	1981.8E6	1905.4E6	802.090	863.654
39)	AR1260-D	8.577	9.935	5337.9E6	5762.3E6	839.566m	1289.105 #
40)	AR1260-E	8.976	10.481	3898.8E6	4602.6E6	982.944m	1082.431m

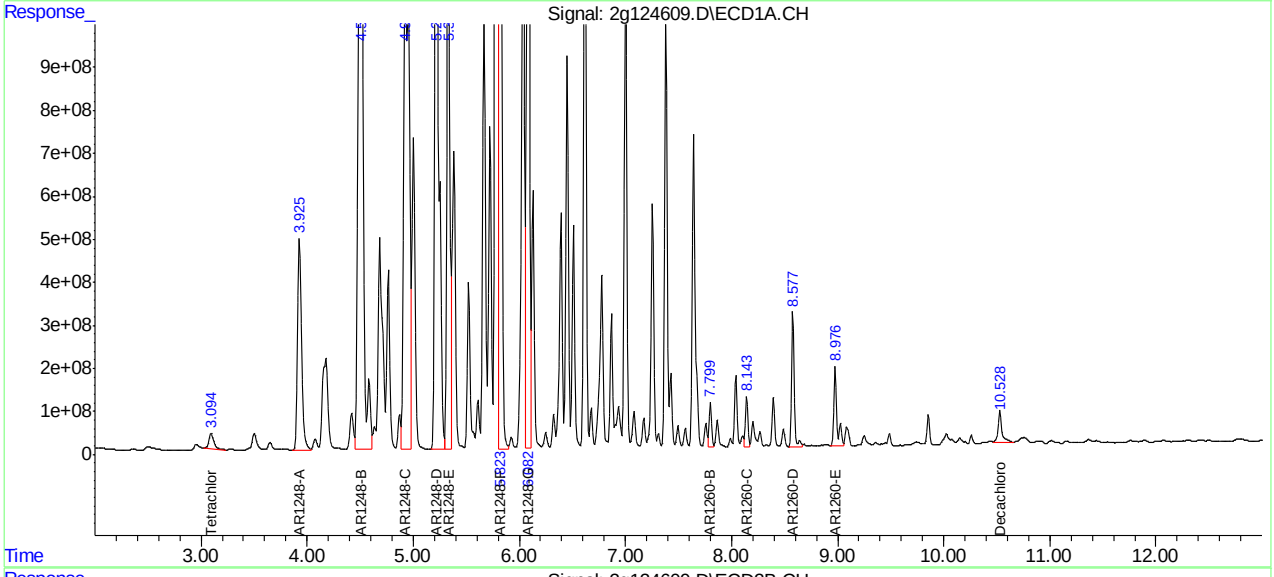
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

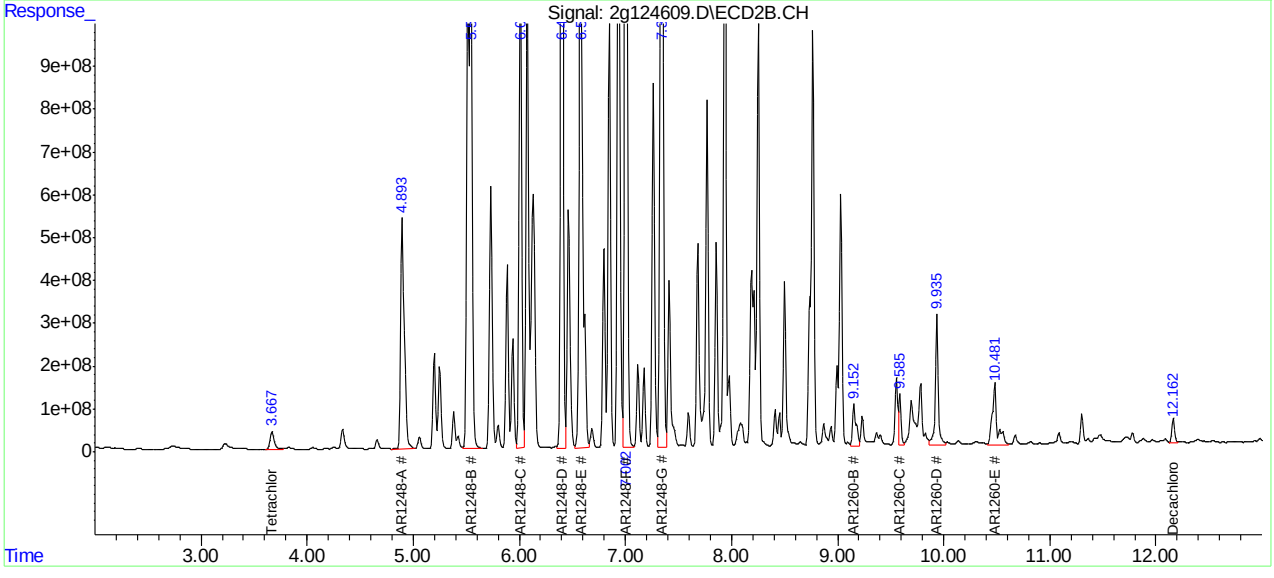
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124609.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 1:27 pm
Operator : dylang
Sample : jc10583-3
Misc : op89820,G2G3563,15.2,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:30:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 17:21

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124610.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 1:44 pm
Operator : dylang
Sample : jc10583-4
Misc : op89820,G2G3563,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 16:13:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) S Tetrachlo...	3.047f	3.665	14117.3E6	1229.7E6	217.106m	22.854m#
Spiked Amount 40.000			Recovery =		542.76%	57.14%
51) S Decachlor...	10.532	12.166	1480.1E6	1241.5E6	27.539m	31.794m
Spiked Amount 40.000			Recovery =		68.85%	79.48%
Target Compounds						

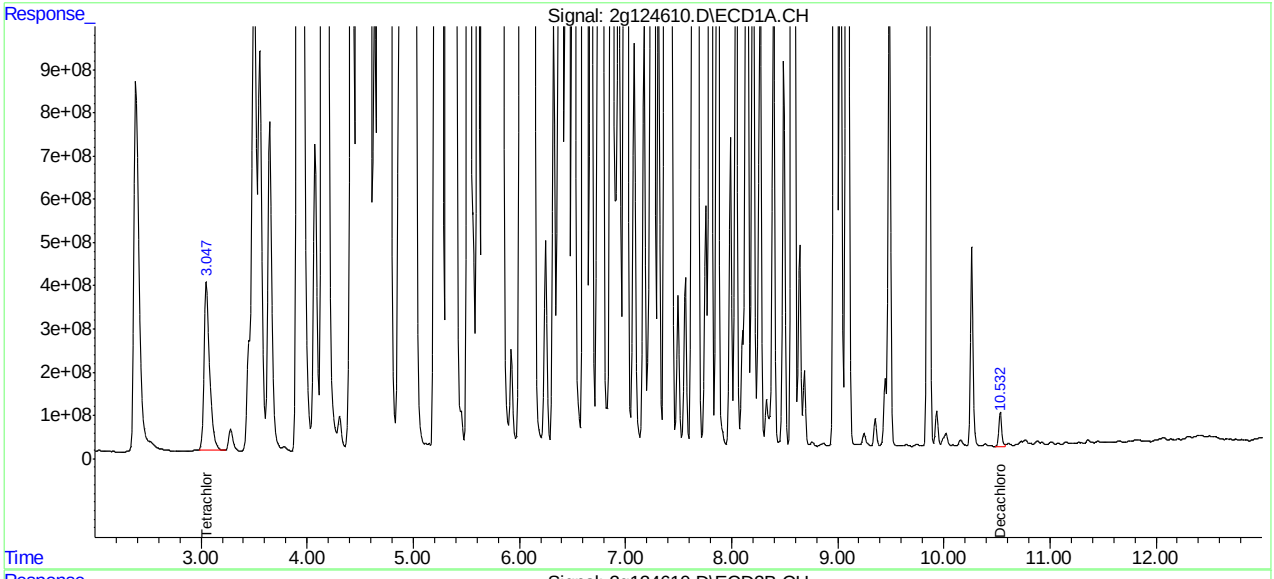
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

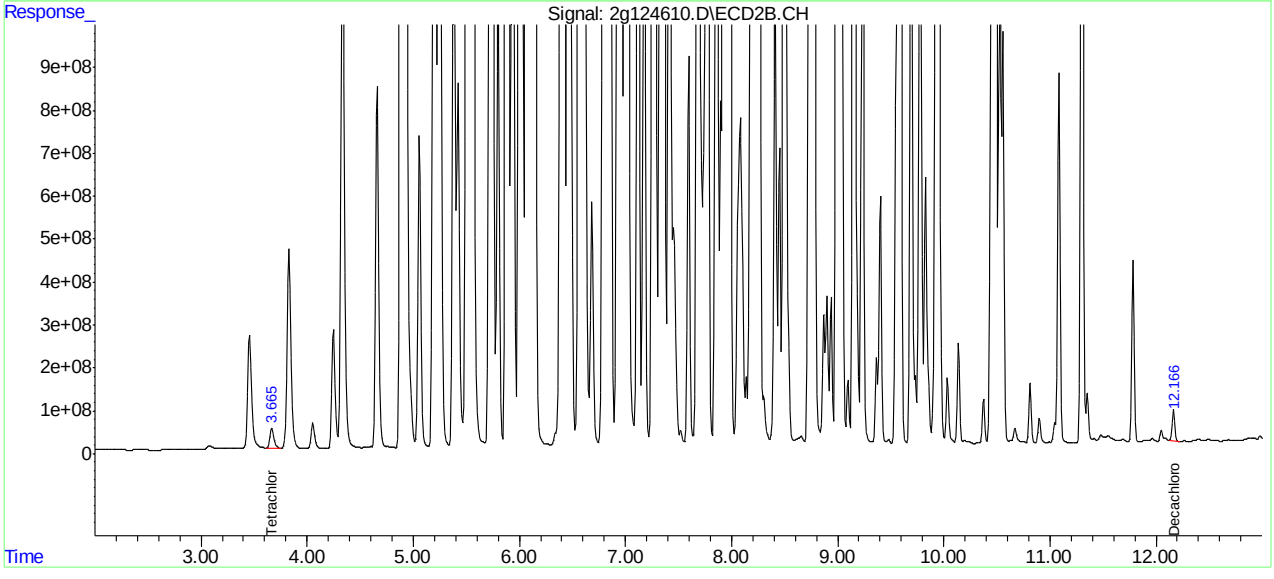
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124610.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 1:44 pm
Operator : dylang
Sample : jc10583-4
Misc : op89820,G2G3563,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 16:13:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 17:21

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124619.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 5:10 pm
Operator : dylang
Sample : jc10583-4
Misc : op89820,G2G3563,15.0,,,10,200
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 16:12:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
	Target Compounds						
18)	AR1248-B	4.500	5.532	5904.7E6	4202.3E6	2221.921m	2197.026m
19)	AR1248-C	4.940	5.998	4657.7E6	1934.3E6	1937.515m	1739.045
20)	AR1248-D	5.203	6.391	4580.2E6	2451.3E6	1894.221m	1666.879
21)	AR1248-E	5.317	6.570	2353.9E6	2627.2E6	1783.316	1614.023
22)	AR1248-F	5.808	6.997	4322.1E6	3483.4E6	1868.814	1812.925
23)	AR1248-G	6.071	7.333	3353.2E6	2910.0E6	1944.320	1713.541
37)	AR1260-B	7.788	9.142	438.7E6	324.1E6	195.918m	175.668m
38)	AR1260-C	8.133	9.580	561.7E6	287.6E6	227.347m	130.377m#
40)	AR1260-E	8.967f	10.474	794.7E6	950.6E6	200.352m	223.568m

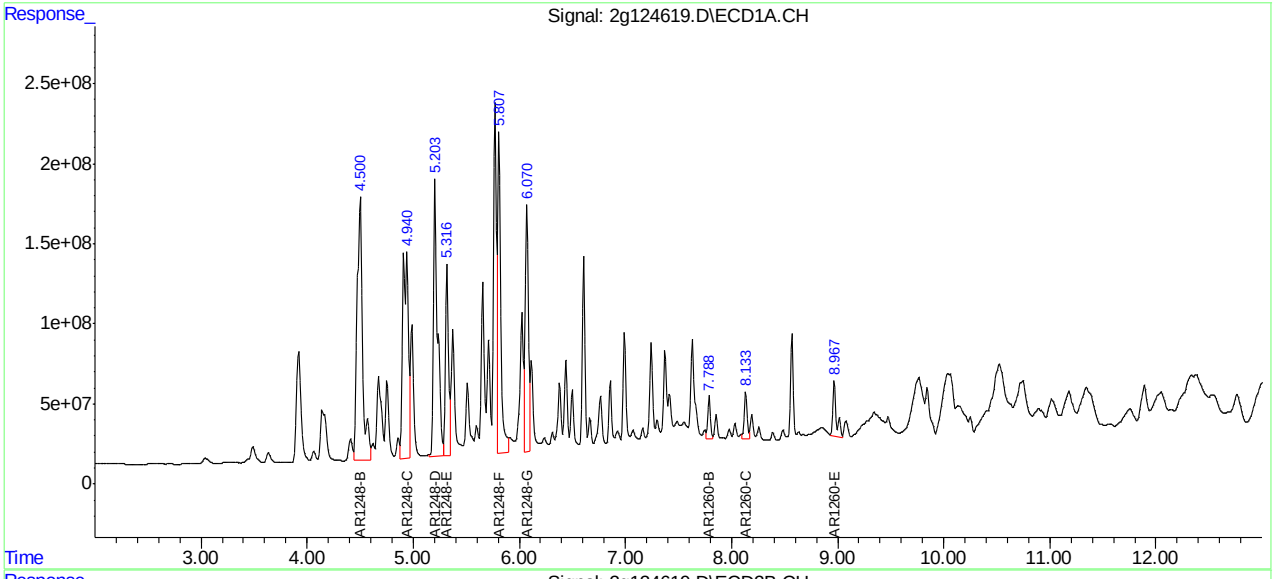
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

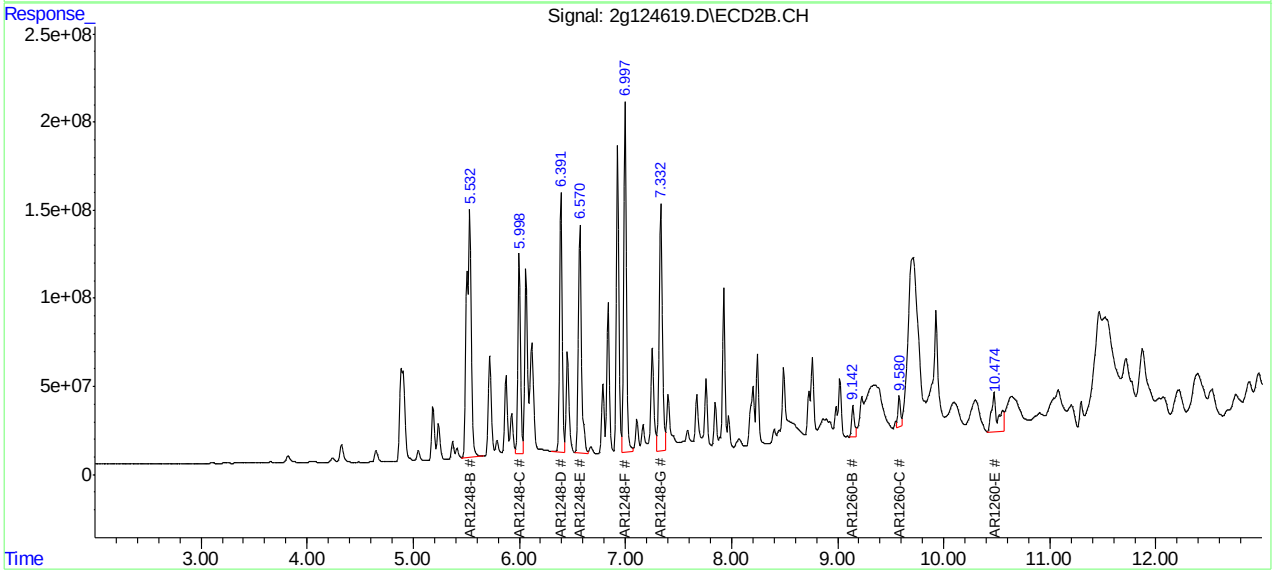
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124619.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 5:10 pm
Operator : dylang
Sample : jc10583-4
Misc : op89820,G2G3563,15.0,,,10,200
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 16:12:37 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 17:06

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3562\
Data File : 2g124578.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 4:21 am
Operator : kevinm2
Sample : jc10583-5
Misc : op89820,G2G3562,16.2,,,10,1
ALS Vial : 98 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 14:51:24 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.087	3.657	2286.0E6	1881.7E6	35.155m	34.972m
	Spiked Amount 40.000			Recovery	=	87.89%	87.43%
51) S	Decachlor...	10.515	12.158	1669.9E6	1574.4E6	31.071m	40.318m#
	Spiked Amount 40.000			Recovery	=	77.68%	100.79%
	Target Compounds						
19)	AR1248-C	4.912	6.001	4192.3E6	1845.4E6	1743.898	1659.090
20)	AR1248-D	5.206	6.393	3610.9E6	2366.1E6	1493.376	1608.934
21)	AR1248-E	5.321	6.572	2365.5E6	2220.1E6	1792.090	1363.925
27)	AR1254-D	6.607	7.929	5520.2E6	4193.5E6	1465.119	1318.815
28)	AR1254-E	6.990	8.244	3588.8E6	2658.6E6	1198.621	1250.015
29)	AR1254-F	7.244	8.760	3531.9E6	3407.8E6	1267.668	1407.601m
37)	AR1260-B	7.790	9.145	741.6E6	503.8E6	331.166	273.056
38)	AR1260-C	8.135	9.579	776.5E6	823.4E6	314.268	373.192
39)	AR1260-D	8.570	9.928	1913.6E6	1259.1E6	300.975	281.676
40)	AR1260-E	8.967f	10.474	1869.1E6	1731.3E6	471.233m	407.167m

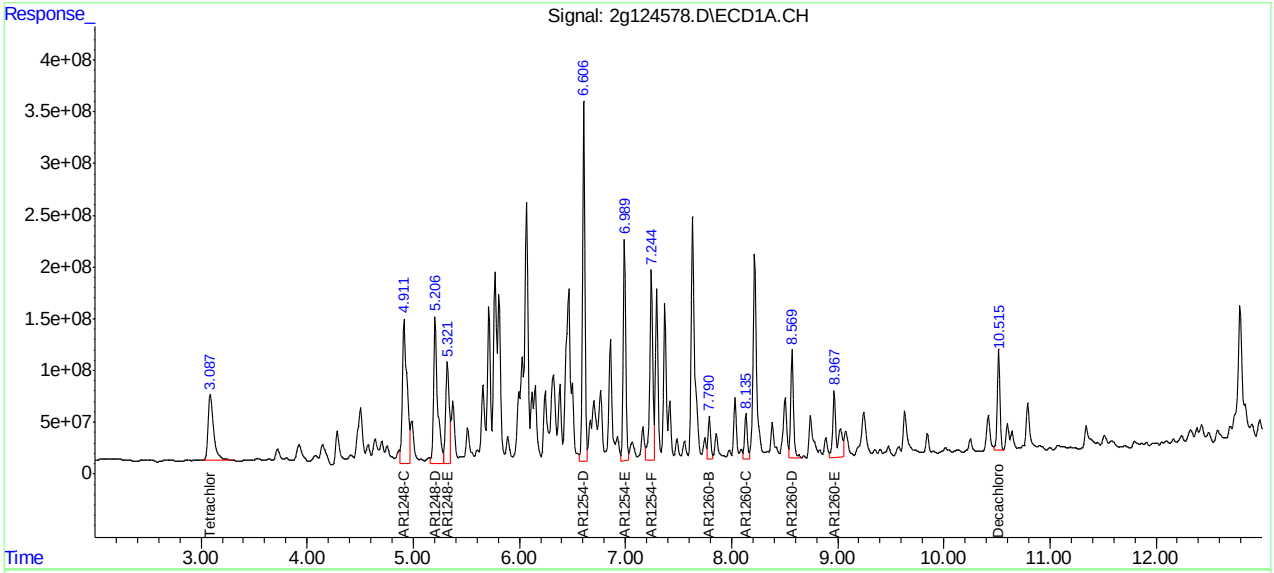
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

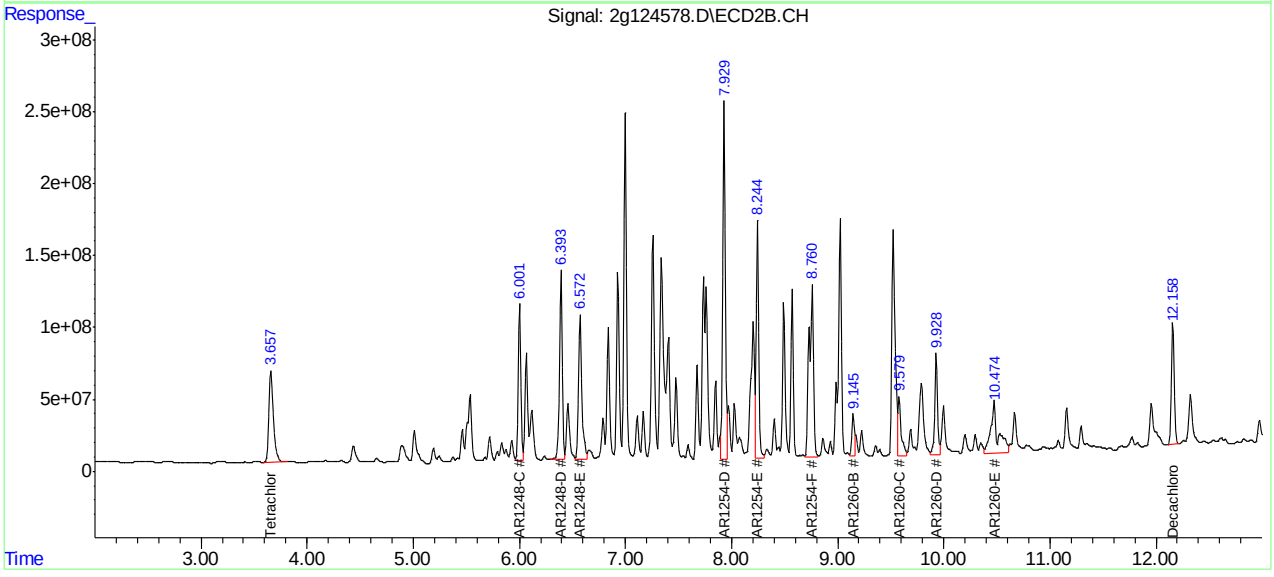
Quantitation Report (QT Reviewed)

```
Data Path : C:\msdchem\1\DATA\2G3562\
Data File : 2g124578.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 23 Dec 2015   4:21 am
Operator  : kevinm2
Sample    : jc10583-5
Misc      : op89820,G2G3562,16.2,,,10,1
ALS Vial  : 98   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 14:51:24 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title  :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul
Signal #1 Phase : ZB5                Signal #2 Phase: RTX-CLP2
Signal #1 Info  : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)
```





Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 17:09

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124611.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 2:01 pm
Operator : dylang
Sample : jc10583-6
Misc : op89820,G2G3563,15.8,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 16:19:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) S Tetrachlo...	3.081f	3.655	2300.8E6	1425.5E6	35.383m	26.492 #
Spiked Amount 40.000			Recovery	=	88.46%	66.23%
51) S Decachlor...	10.520	12.167	1288.4E6	3585.5E6	23.973m	91.818m#
Spiked Amount 40.000			Recovery	=	59.93%	229.54%
Target Compounds						

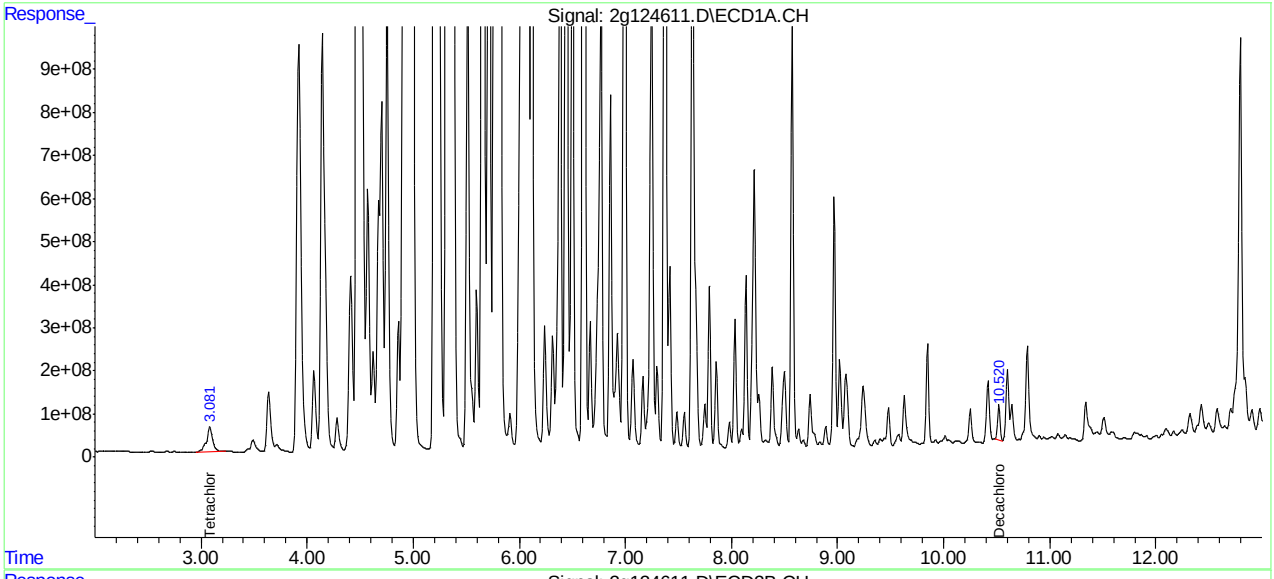
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

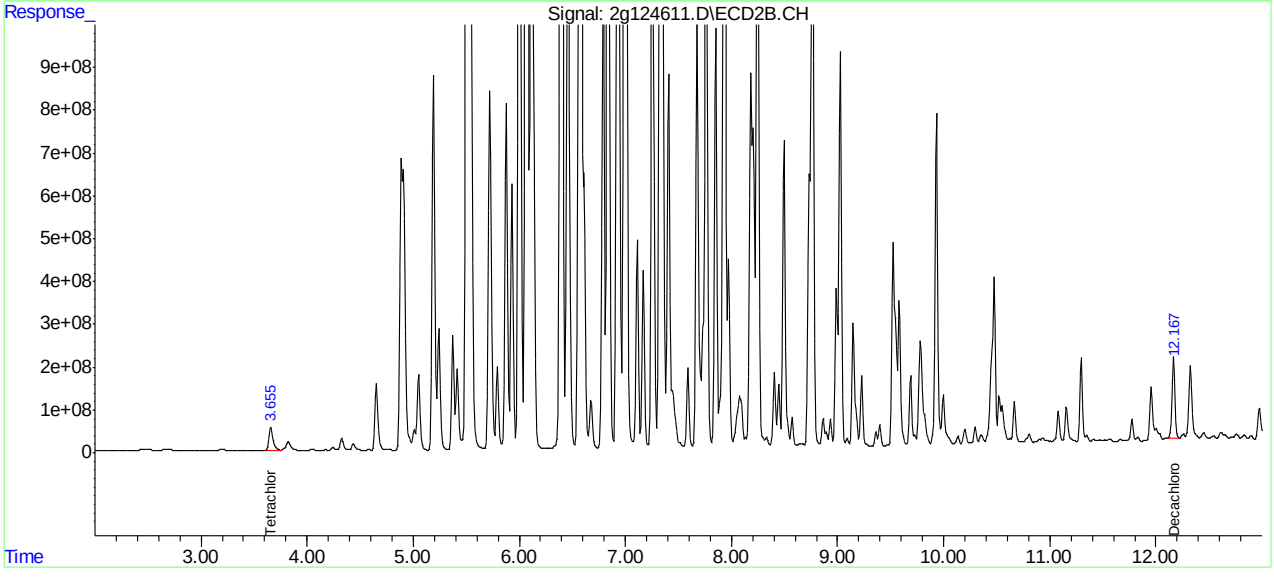
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124611.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 2:01 pm
Operator : dylang
Sample : jc10583-6
Misc : op89820,G2G3563,15.8,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 16:19:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 17:09

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124620.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 5:27 pm
Operator : dylang
Sample : jc10583-6
Misc : op89820,G2G3563,15.8,,,10,40
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 16:18:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.078f	3.654	55840818	56791931	0.859m	1.055
	Spiked Amount 40.000			Recovery	=	2.15%	2.64%
51)	S Decachlor...	10.518	12.172	44895325	92818598	0.835m	2.377m#
	Spiked Amount 40.000			Recovery	=	2.09%	5.94%
	Target Compounds						
18)	AR1248-B	4.501	5.534	4771.2E6	3318.4E6	1795.399m	1734.910m
19)	AR1248-C	4.910	6.000	4445.7E6	1867.4E6	1849.330m	1678.922
20)	AR1248-D	5.204	6.393	4453.6E6	2519.9E6	1841.896	1713.564
21)	AR1248-E	5.318	6.571	2410.2E6	2896.0E6	1825.988	1779.152
22)	AR1248-F	5.809	6.998	4240.5E6	3712.3E6	1833.529	1932.089
23)	AR1248-G	6.071	7.334	3517.2E6	3047.8E6	2039.413	1794.689
37)	AR1260-B	7.790	9.146	280.1E6	264.8E6	125.086	143.502
38)	AR1260-C	8.135	9.579	306.4E6	209.1E6	124.015	94.764
39)	AR1260-D	8.570	9.929	784.3E6	374.6E6	123.354	83.801 #

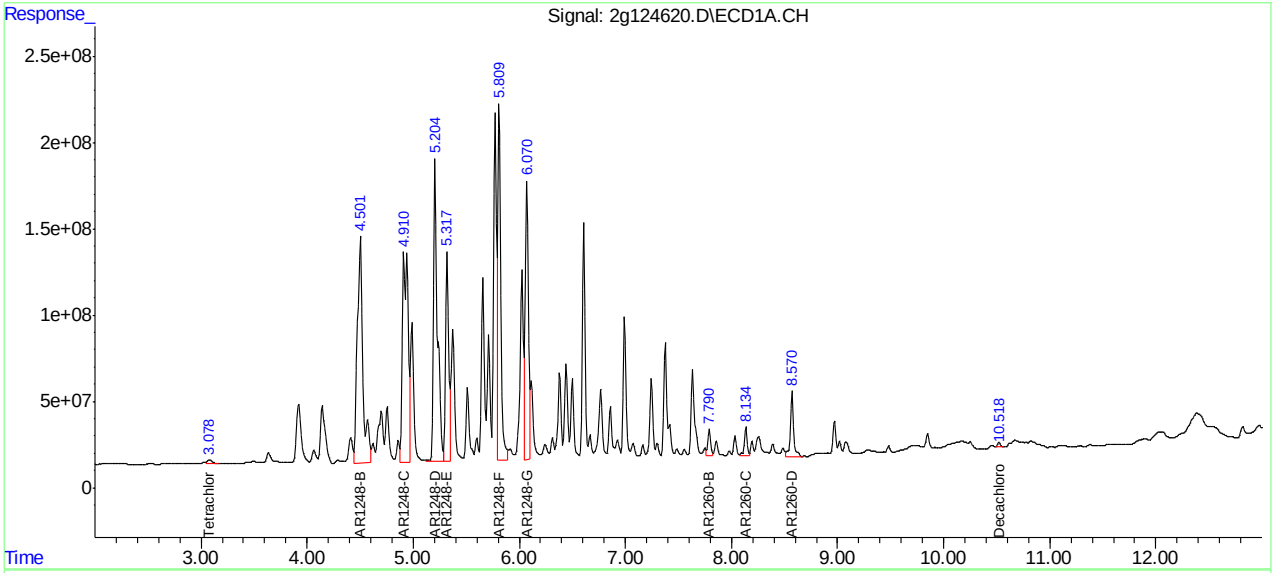
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

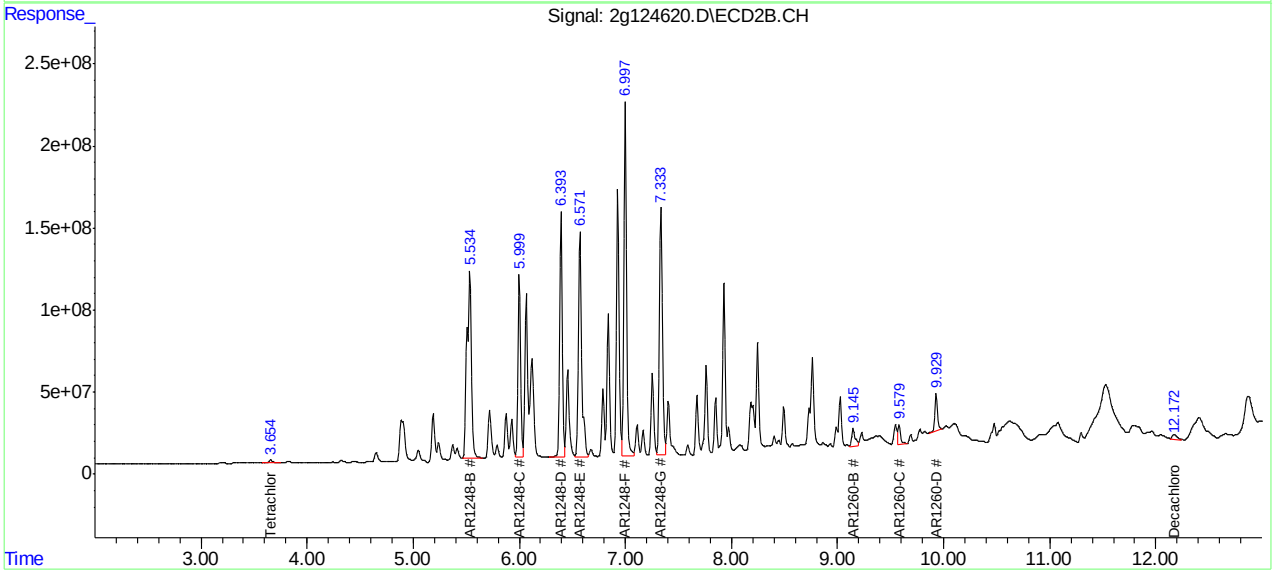
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124620.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 5:27 pm
Operator : dylang
Sample : jc10583-6
Misc : op89820,G2G3563,15.8,,,10,40
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 16:18:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 17:13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3562\
Data File : 2g124589.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 7:27 am
Operator : kevinm2
Sample : jc10583-7
Misc : op89820,G2G3562,15.6,,,10,10
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:11:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.086	3.656	118.4E6	89887421	1.820m	1.671m
	Spiked Amount 40.000			Recovery	=	4.55%	4.18%
51) S	Decachlor...	10.516	12.165	429.1E6	2427.7E6	7.985m	62.168m#
	Spiked Amount 40.000			Recovery	=	19.96%	155.42%
	Target Compounds						
19)	AR1248-C	4.911	6.001	3835.7E6	1768.4E6	1595.595	1589.921
20)	AR1248-D	5.205	6.392	3505.6E6	2134.1E6	1449.797	1451.202
21)	AR1248-E	5.319	6.572	1846.8E6	2265.6E6	1399.165	1391.886
27)	AR1254-D	6.605	7.928	5309.0E6	5558.0E6	1409.089	1747.930
28)	AR1254-E	6.990	8.243	3567.8E6	3249.6E6	1191.592	1527.897 #
29)	AR1254-F	7.243	8.760	3842.8E6	3846.5E6	1379.259	1588.815m
37)	AR1260-B	7.790	9.146	590.8E6	470.8E6	263.850	255.173
38)	AR1260-C	8.134	9.578	631.4E6	686.1E6	255.564	310.966
39)	AR1260-D	8.571	9.929	2223.1E6	1464.2E6	349.658	327.561

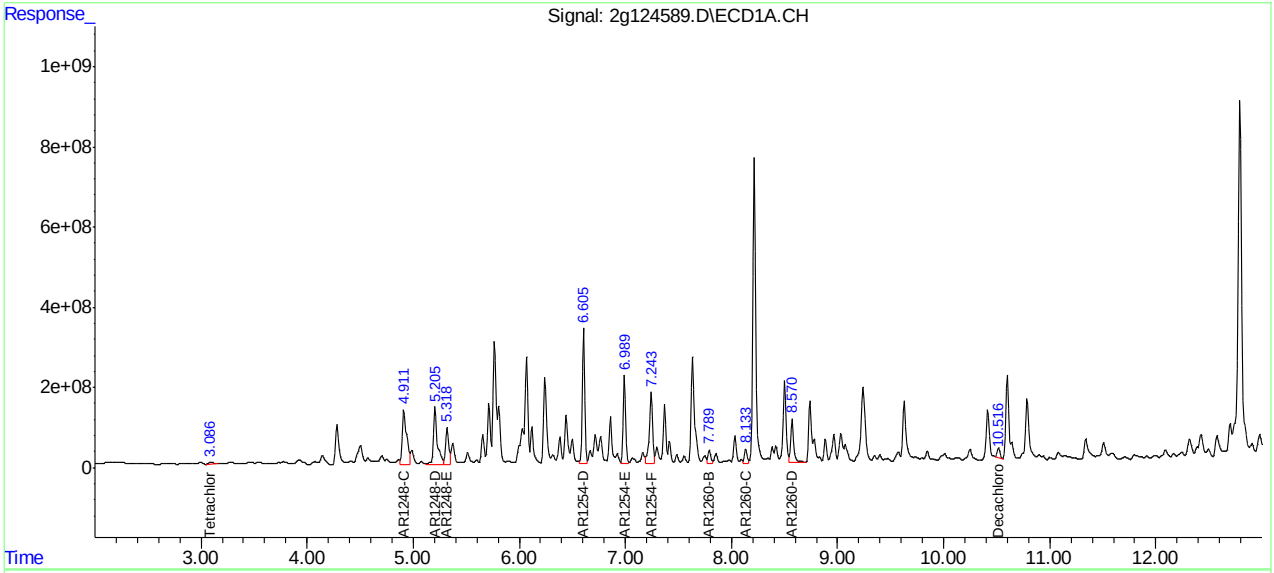
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

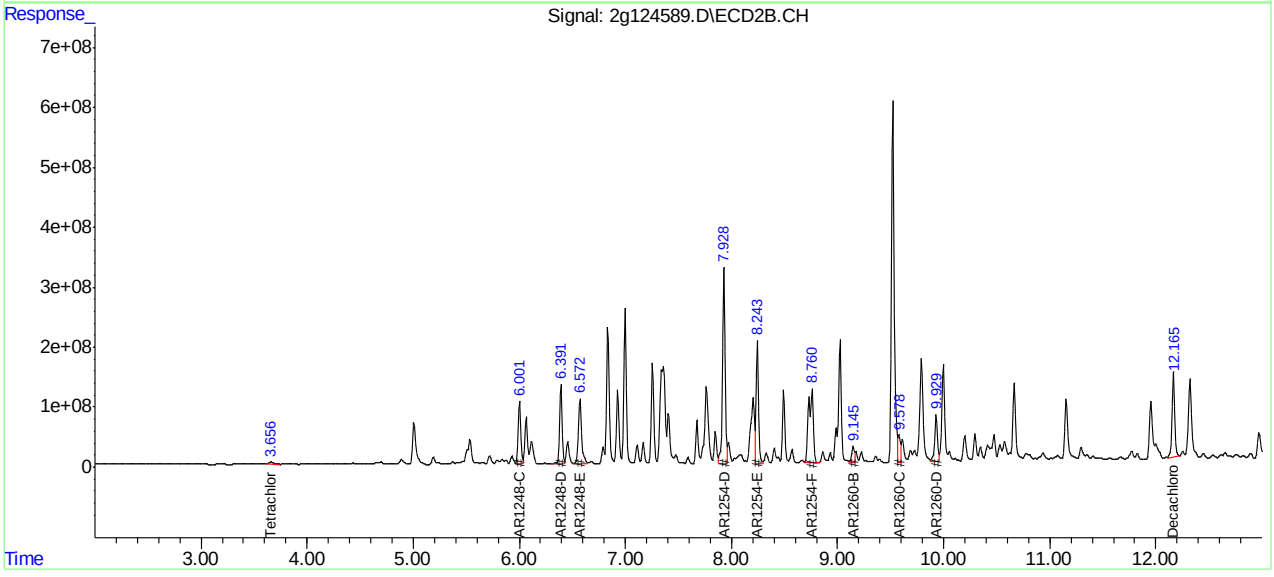
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3562\
Data File : 2g124589.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 7:27 am
Operator : kevinm2
Sample : jc10583-7
Misc : op89820,G2G3562,15.6,,,10,10
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:11:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 17:13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124612.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 2:18 pm
Operator : dylang
Sample : jc10583-7
Misc : op89820,G2G3563,15.6,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:52:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) S Tetrachlo...	3.083f	3.658	1363.6E6	1249.5E6	20.970m	23.222m
Spiked Amount 40.000			Recovery =		52.42%	58.06%
51) S Decachlor...	10.539	12.197f	2902.2E6	41883.3E6	54.000m	1072.556m#
Spiked Amount 40.000			Recovery =		135.00%	2681.39%

Target Compounds

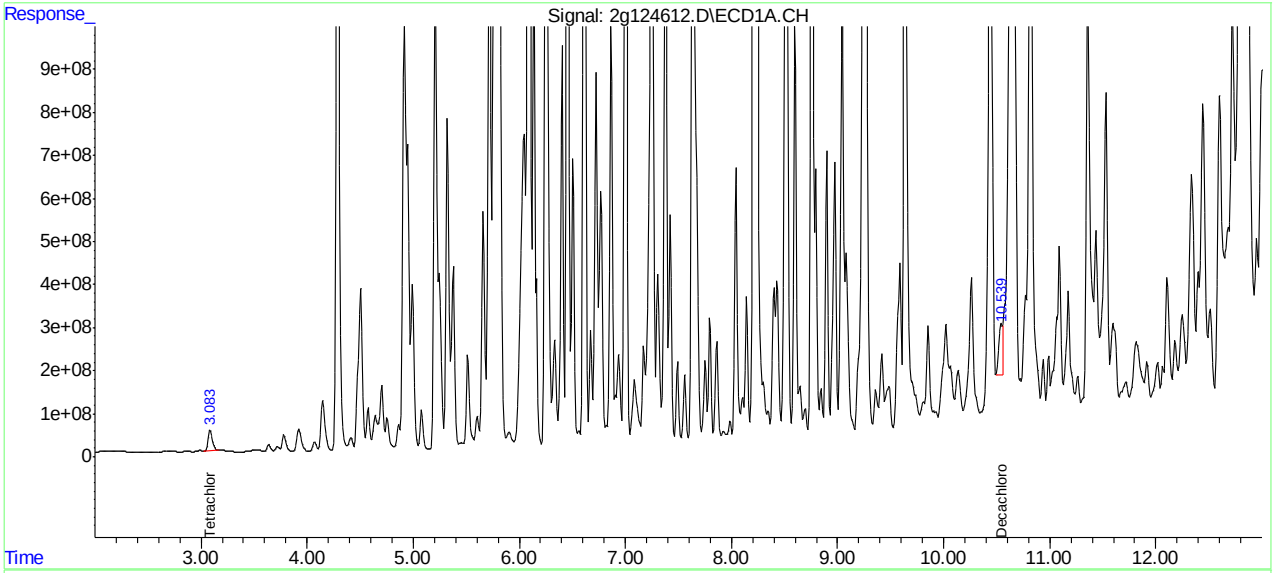
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

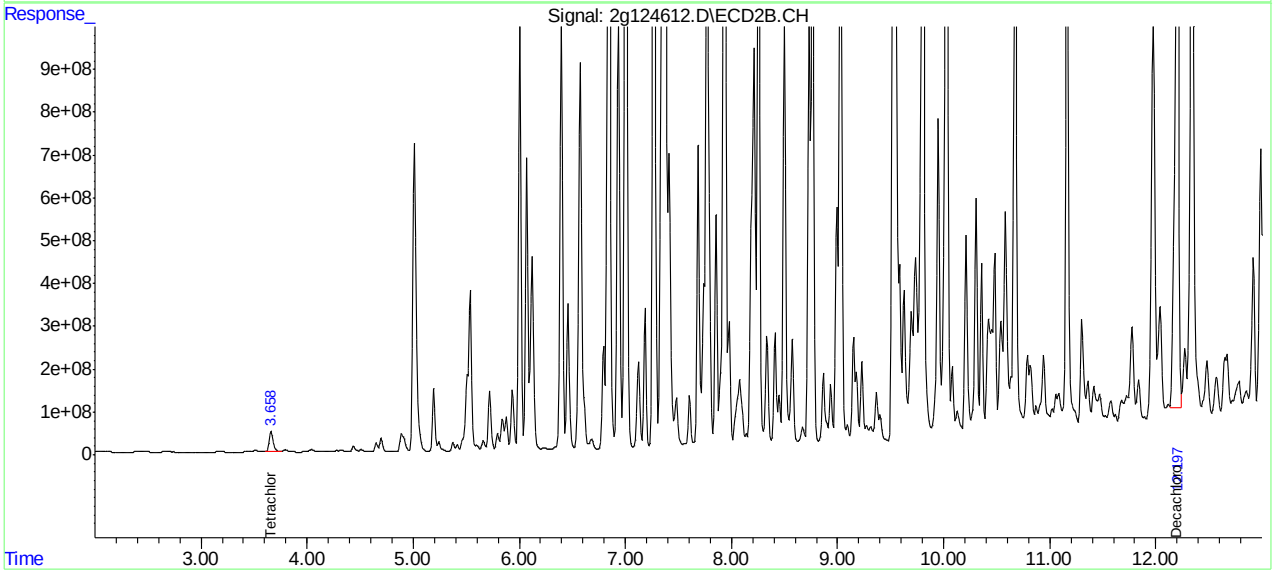
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124612.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 2:18 pm
Operator : dylang
Sample : jc10583-7
Misc : op89820,G2G3563,15.6,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:52:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 17:15

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124613.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 2:35 pm
Operator : dylang
Sample : jc10583-8
Misc : op89820,G2G3563,16.2,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:57:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) S Tetrachlo...	3.062f	3.655	2557.1E6	1469.6E6	39.325m	27.312 #
Spiked Amount 40.000			Recovery =		98.31%	68.28%
51) S Decachlor...	10.528	12.165	21325.5E6	2791.6E6	396.789m	71.488m#
Spiked Amount 40.000			Recovery =		991.97%	178.72%
Target Compounds						

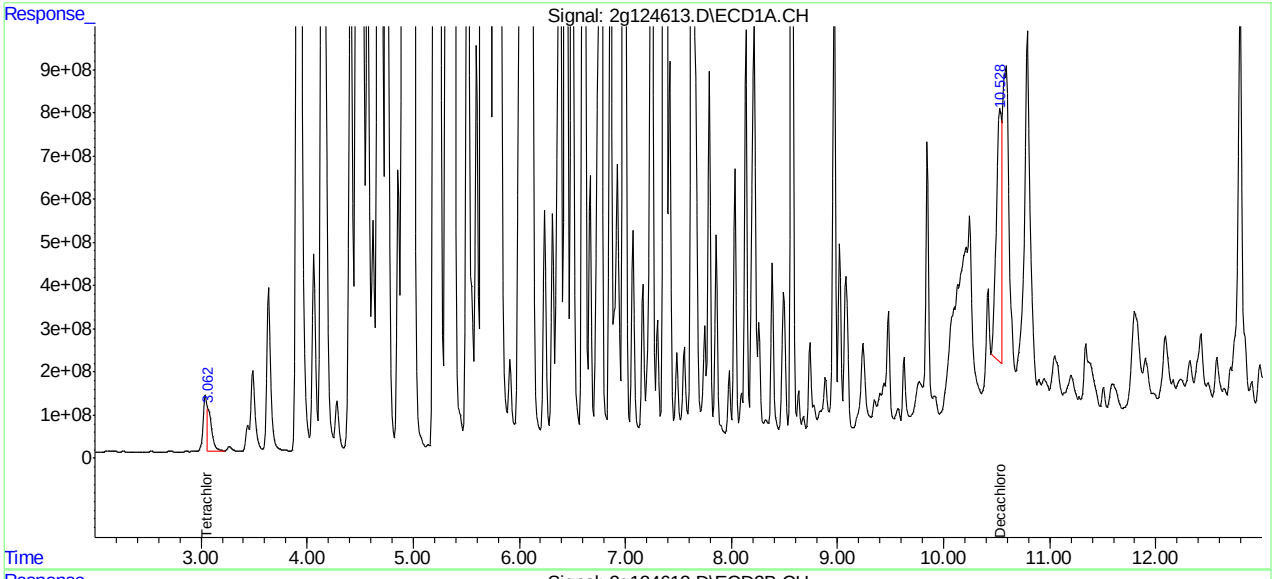
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

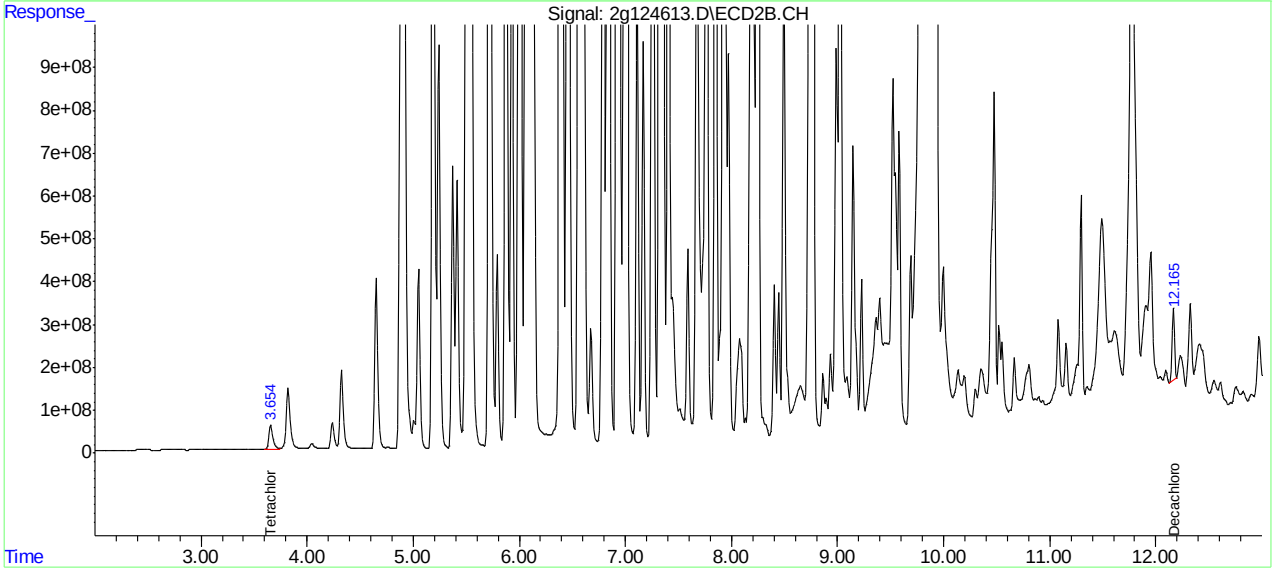
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124613.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 2:35 pm
Operator : dylang
Sample : jc10583-8
Misc : op89820,G2G3563,16.2,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:57:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 17:15

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124621.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 5:44 pm
Operator : dylang
Sample : jc10583-8
Misc : op89820,G2G3563,16.2,,,10,200
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:56:16 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
	Target Compounds						
18)	AR1248-B	4.503	5.534	2756.6E6	2020.9E6	1037.298m	1056.539m
19)	AR1248-C	4.911	6.000	2362.9E6	1033.4E6	982.935m	929.065
20)	AR1248-D	5.206	6.393	2306.3E6	1362.3E6	953.824	926.386
21)	AR1248-E	5.319	6.571	1250.8E6	1627.9E6	947.644	1000.118
22)	AR1248-F	5.811	6.998	2204.0E6	1987.0E6	952.965	1034.144
23)	AR1248-G	6.072	7.335	1779.6E6	1636.7E6	1031.866	963.784
37)	AR1260-B	7.791	9.146	135.6E6	94910834	60.547	51.442
38)	AR1260-C	8.136	9.580	140.8E6	112.8E6	56.977	51.125m
39)	AR1260-D	8.571	9.929	339.2E6	258.8E6	53.351	57.904m
40)	AR1260-E	8.971	10.475	241.4E6	228.3E6	60.865m	53.698m

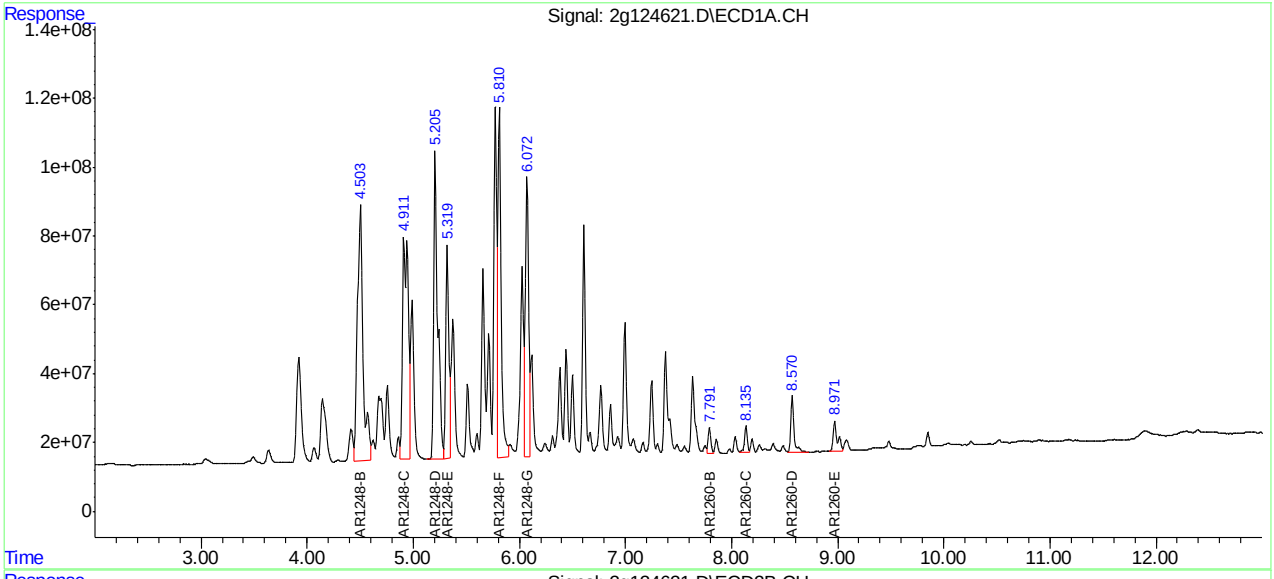
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

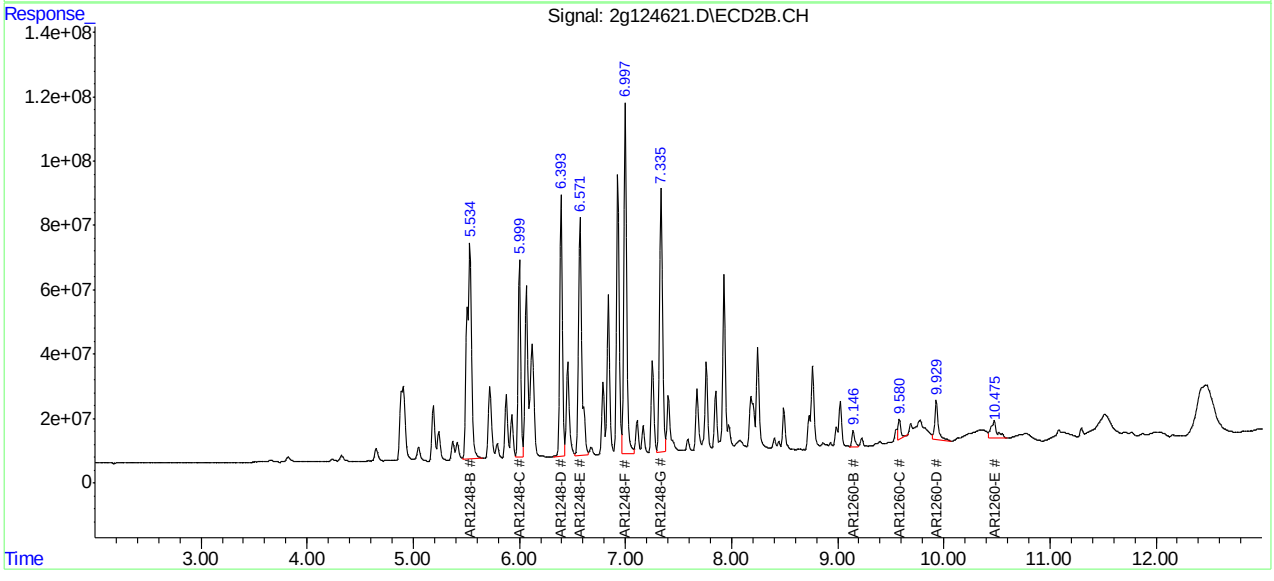
Quantitation Report (QT Reviewed)

```
Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124621.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 23 Dec 2015   5:44 pm
Operator  : dylang
Sample    : jc10583-8
Misc      : op89820,G2G3563,16.2,,,10,200
ALS Vial  : 16   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:56:16 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title  :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul
Signal #1 Phase : ZB5                Signal #2 Phase: RTX-CLP2
Signal #1 Info  : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)
```





Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 17:17

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124614.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 2:52 pm
Operator : dylang
Sample : jc10583-10
Misc : op89820,G2G3563,17.0,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 16:07:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) S Tetrachlo...	3.061f	3.655	2466.9E6	1450.7E6	37.937m	26.962 #
Spiked Amount 40.000			Recovery =		94.84%	67.41%
51) S Decachlor...	10.518	12.164	2183.0E6	3772.5E6	40.618m	96.607m#
Spiked Amount 40.000			Recovery =		101.55%	241.52%
Target Compounds						

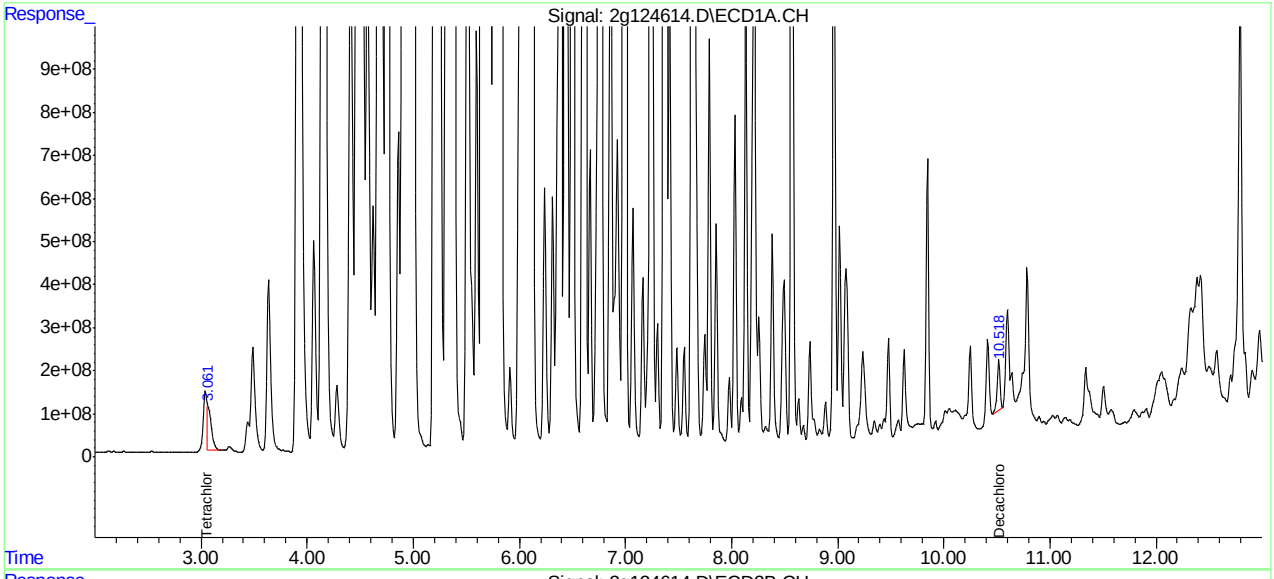
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

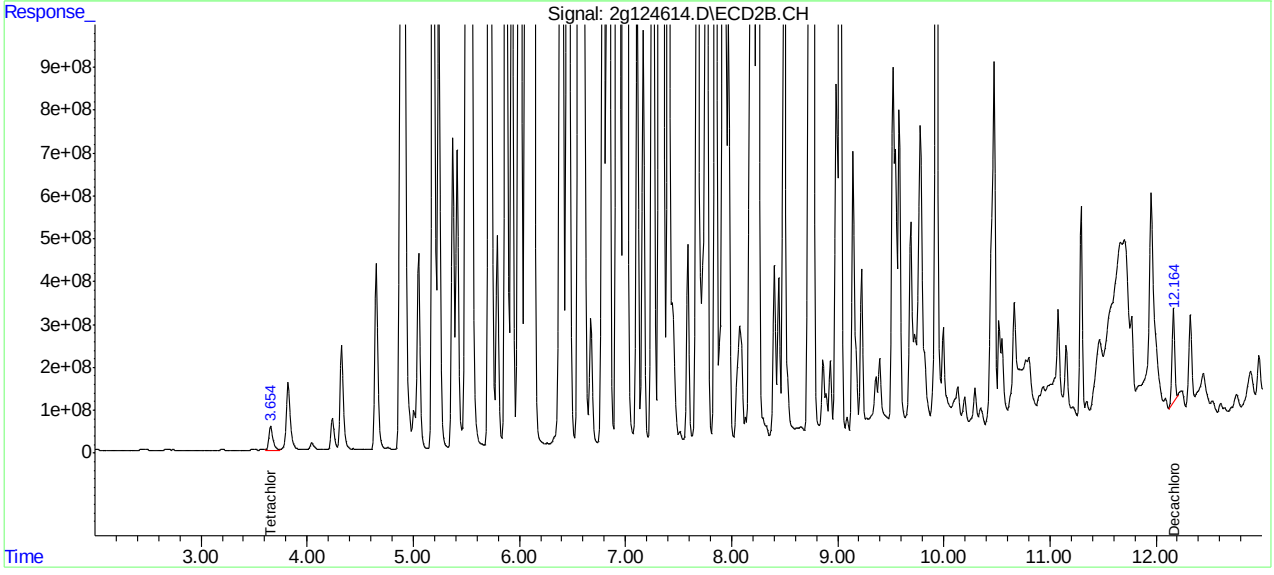
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124614.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 2:52 pm
Operator : dylang
Sample : jc10583-10
Misc : op89820,G2G3563,17.0,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 16:07:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 17:17

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124622.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 6:01 pm
Operator : dylang
Sample : jc10583-10
Misc : op89820,G2G3563,17.0,,,10,200
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 16:03:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
	Target Compounds						
17)	AR1248-A	3.920	4.904	1157.5E6	943.8E6	1284.412	1287.041
18)	AR1248-B	4.501	5.533	3407.3E6	2460.1E6	1282.151m	1286.164m
19)	AR1248-C	4.909	5.999	2905.6E6	1259.6E6	1208.685m	1132.445
20)	AR1248-D	5.204	6.392	2905.1E6	1673.1E6	1201.463	1137.686
21)	AR1248-E	5.317	6.570	1558.5E6	1979.1E6	1180.731	1215.870
22)	AR1248-F	5.809	6.997	2724.7E6	2461.7E6	1178.130	1281.213
23)	AR1248-G	6.070	7.334	2236.8E6	2069.8E6	1296.953	1218.784
37)	AR1260-B	7.790	9.144	167.0E6	132.6E6	74.597	71.868
38)	AR1260-C	8.134	9.579	172.9E6	173.0E6	69.996	78.410m
39)	AR1260-D	8.571	9.928	426.2E6	300.0E6	67.033	67.104m
40)	AR1260-E	8.969	10.476	314.0E6	254.4E6	79.171m	59.827m

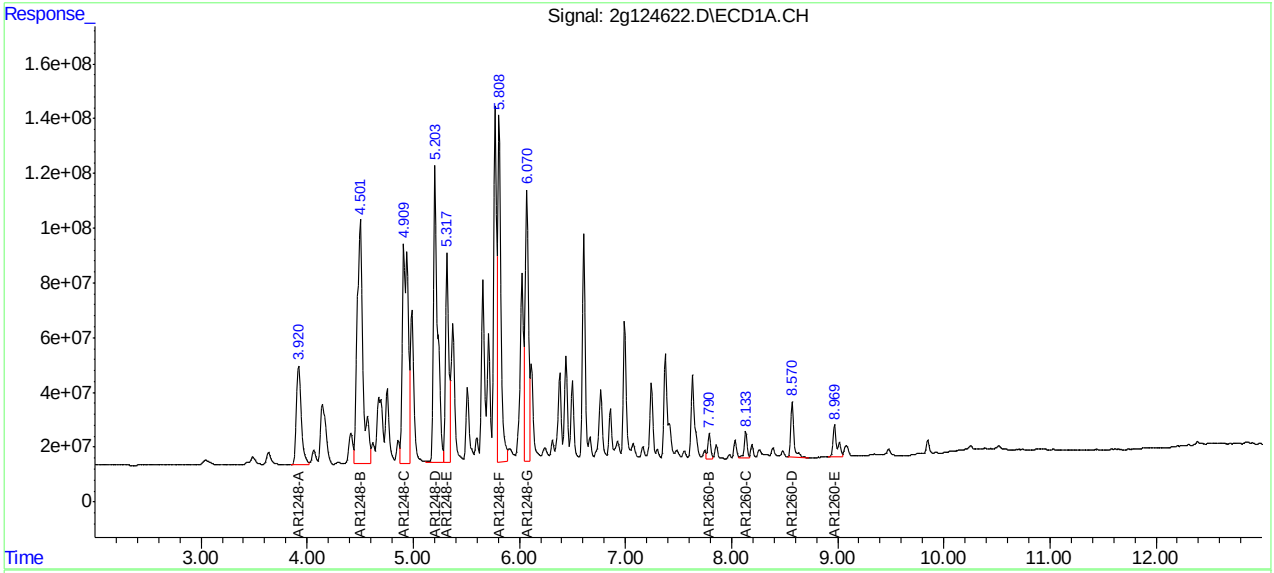
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

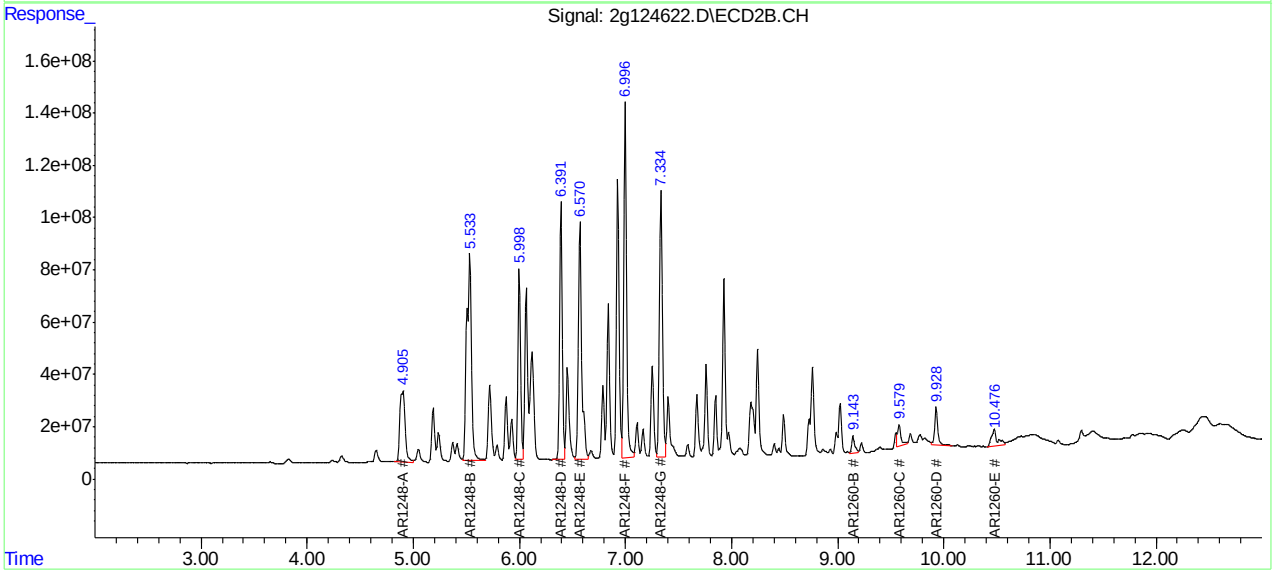
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124622.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 6:01 pm
Operator : dylang
Sample : jc10583-10
Misc : op89820,G2G3563,17.0,,,10,200
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 16:03:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





ACCUTEST LABORATORIES JC10583

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 17:25

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3562\
Data File : 2g124592.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 8:18 am
Operator : kevinm2
Sample : jc10583-11
Misc : op89820,G2G3562,15.0,,,10,40
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 14:56:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.074f	3.653	75476317	55350922	1.161m	1.029m
	Spiked Amount 40.000			Recovery	=	2.90%	2.57%
51) S	Decachlor...	10.517	12.162	61803762	78585301	1.150m	2.012m#
	Spiked Amount 40.000			Recovery	=	2.88%	5.03%
	Target Compounds						
18)	AR1248-B	4.502	5.534	12537.4E6	10385.6E6	4717.793	5429.675m
19)	AR1248-C	4.911	6.001	12585.9E6	5484.6E6	5235.505m	4930.919
20)	AR1248-D	5.205	6.394	12640.8E6	7387.3E6	5227.863	5023.350
21)	AR1248-E	5.319	6.572	6939.5E6	8693.8E6	5257.397	5341.047
22)	AR1248-F	5.810	6.998	12177.0E6	10754.9E6	5265.164	5597.454
23)	AR1248-G	6.072	7.334	10243.5E6	9498.9E6	5939.530	5593.398
37)	AR1260-B	7.790	9.145	643.1E6	553.6E6	287.190	300.029
38)	AR1260-C	8.135	9.580	659.5E6	587.8E6	266.904	266.445
39)	AR1260-D	8.571	9.928	1723.4E6	1259.6E6	271.067	281.794
40)	AR1260-E	8.968	10.475	1309.6E6	1235.7E6	330.179m	290.610

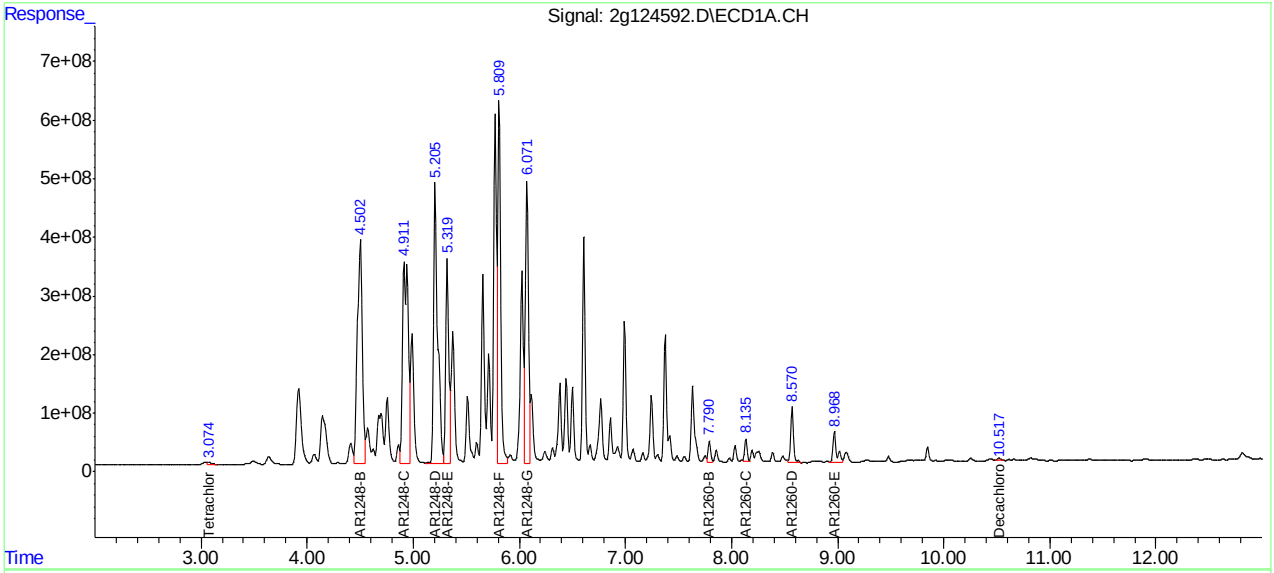
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

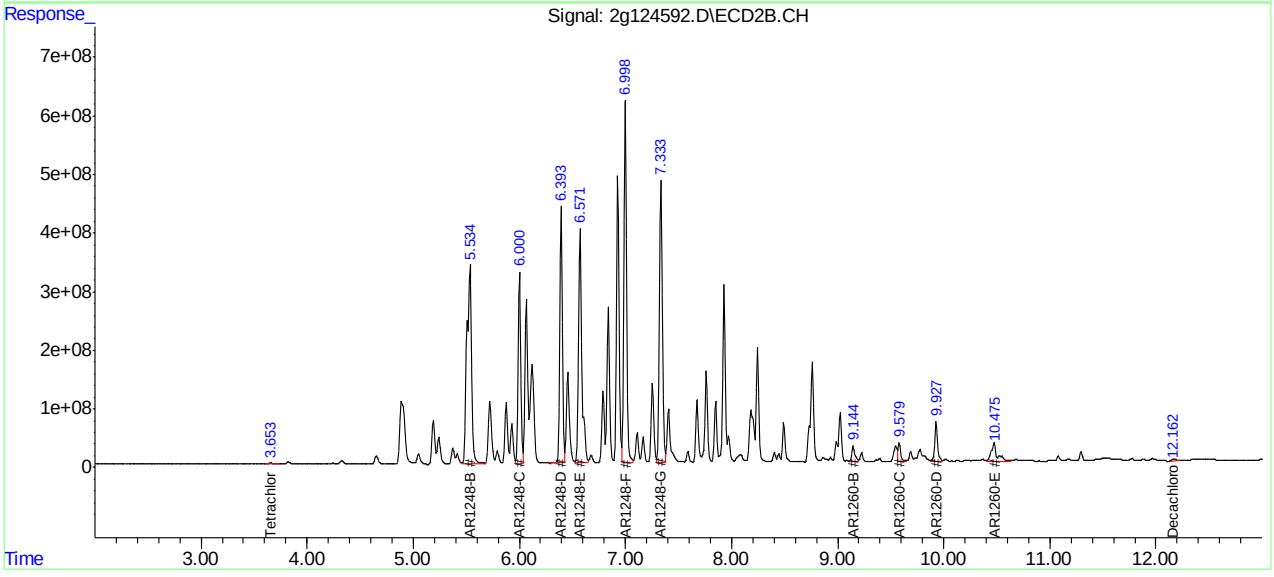
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3562\
Data File : 2g124592.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 8:18 am
Operator : kevinm2
Sample : jc10583-11
Misc : op89820,G2G3562,15.0,,,10,40
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 14:56:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 17:25

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124617.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 4:36 pm
Operator : dylang
Sample : jc10583-11
Misc : op89820,G2G3563,15.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:44:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) S Tetrachlo...	3.074f	3.653	2093.2E6	1312.4E6	32.191m	24.391m
Spiked Amount 40.000			Recovery	=	80.48%	60.98%
51) S Decachlor...	10.517	12.162	1821.7E6	3909.6E6	33.895m	100.118m#
Spiked Amount 40.000			Recovery	=	84.74%	250.29%
Target Compounds						

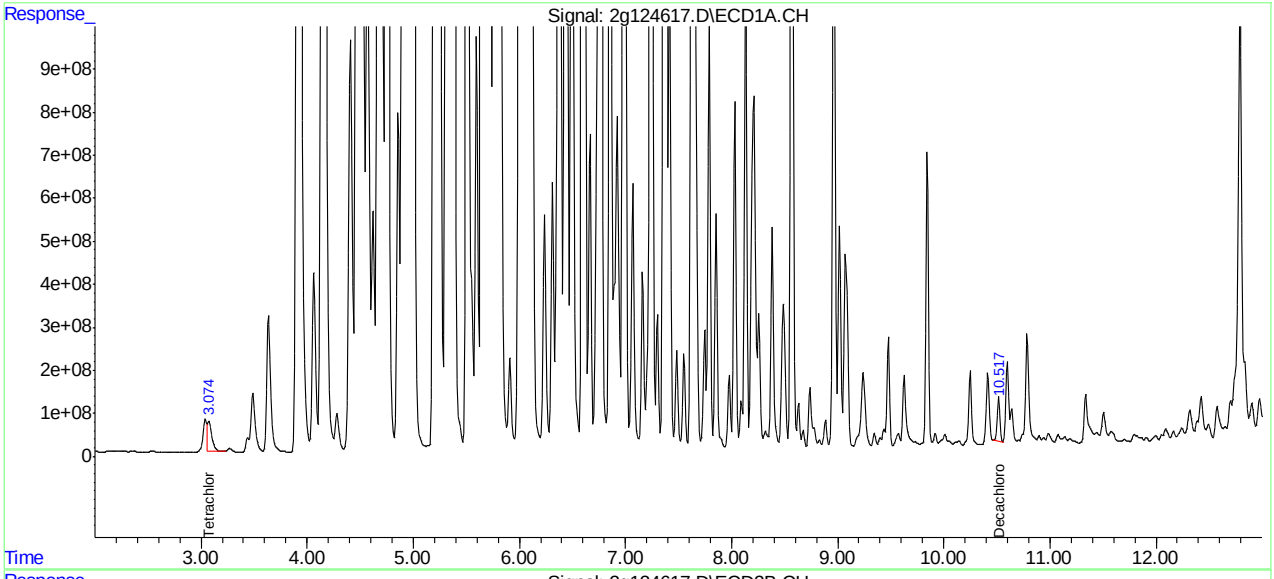
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

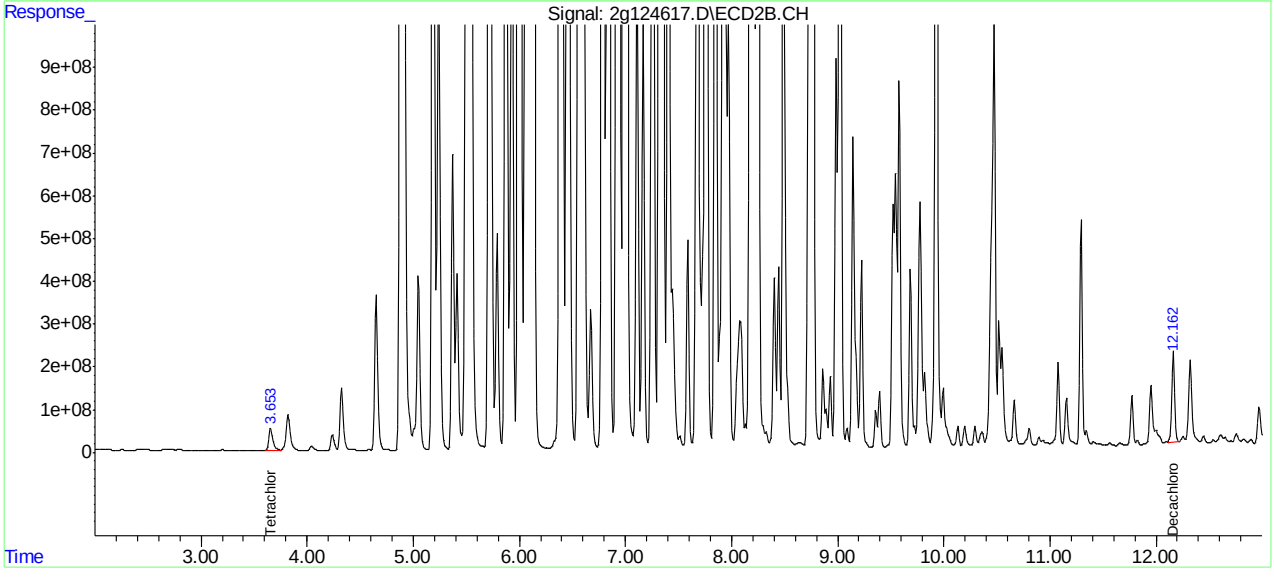
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124617.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 4:36 pm
Operator : dylang
Sample : jc10583-11
Misc : op89820,G2G3563,15.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:44:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 12/28/15 17:25

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124623.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 6:18 pm
Operator : dylang
Sample : jc10583-11
Misc : op89820,G2G3563,15.0,,,10,200
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:42:02 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
	Target Compounds						
17)	AR1248-A	3.918	4.886	993.6E6	821.3E6	1102.485	1119.988
18)	AR1248-B	4.501	5.533	2978.8E6	2163.7E6	1120.917m	1131.215m
19)	AR1248-C	4.910	6.000	2720.9E6	1201.1E6	1131.850m	1079.835
20)	AR1248-D	5.205	6.393	2732.4E6	1613.1E6	1130.026	1096.893
21)	AR1248-E	5.319	6.571	1460.0E6	1879.3E6	1106.118	1154.565
22)	AR1248-F	5.810	6.998	2550.4E6	2290.8E6	1102.745	1192.245
23)	AR1248-G	6.072	7.334	2080.6E6	1928.5E6	1206.406	1135.573
37)	AR1260-B	7.790	9.145	163.6E6	128.0E6	73.045	69.374
38)	AR1260-C	8.135	9.580	168.1E6	153.9E6	68.055	69.764
39)	AR1260-D	8.571	9.929	390.3E6	252.0E6	61.381	56.371
40)	AR1260-E	8.969	10.475	283.9E6	232.2E6	71.577m	54.614m

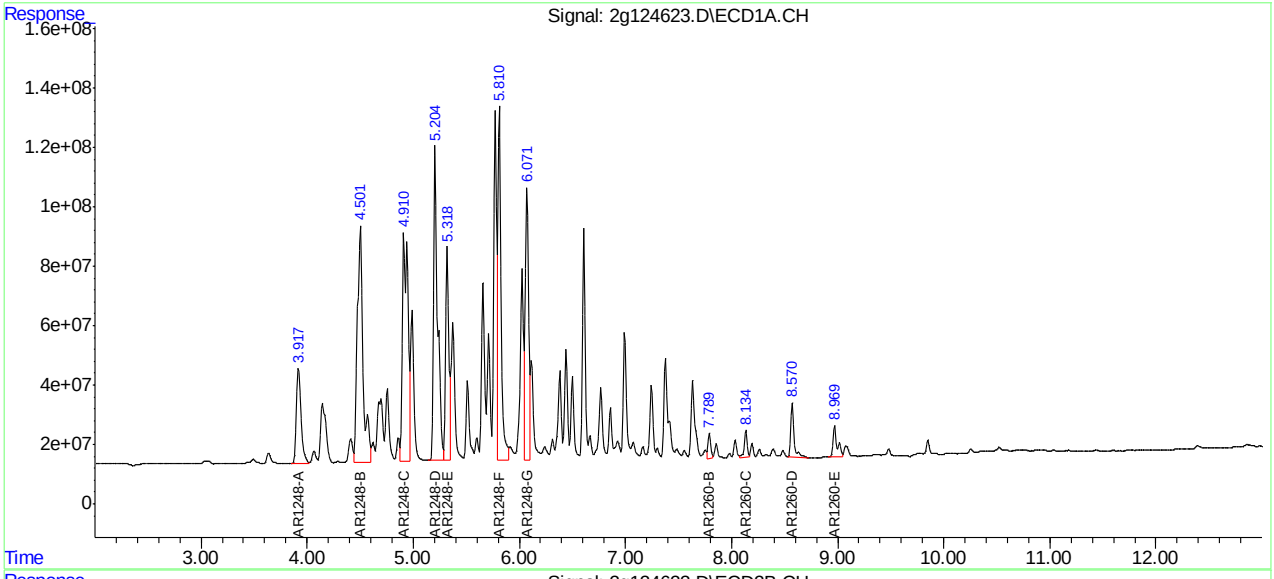
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

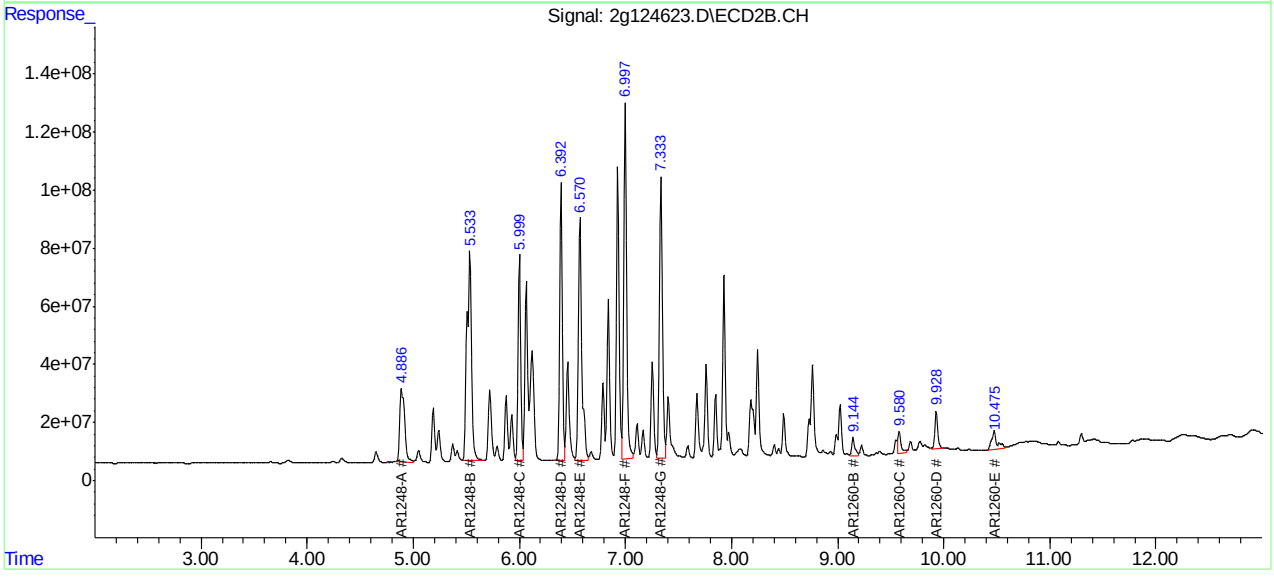
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124623.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 6:18 pm
Operator : dylang
Sample : jc10583-11
Misc : op89820,G2G3563,15.0,,,10,200
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:42:02 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/29/15 06:36

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3562\
Data File : 2g124593.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 8:35 am
Operator : kevinm2
Sample : jc10583-12
Misc : op89820,G2G3562,16.5,,,10,200
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 14:58:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
	Target Compounds						
19)	AR1248-C	4.942	6.001	1135.5E6	462.0E6	472.326m	415.371
20)	AR1248-D	5.206	6.393	1280.0E6	669.2E6	529.371m	455.039
21)	AR1248-E	5.320	6.572	1039.7E6	1331.7E6	787.660	818.128
22)	AR1248-F	5.812	6.998	1434.3E6	1407.7E6	620.170	732.618
23)	AR1248-G	6.072	7.337	1373.1E6	1191.7E6	796.161	701.751

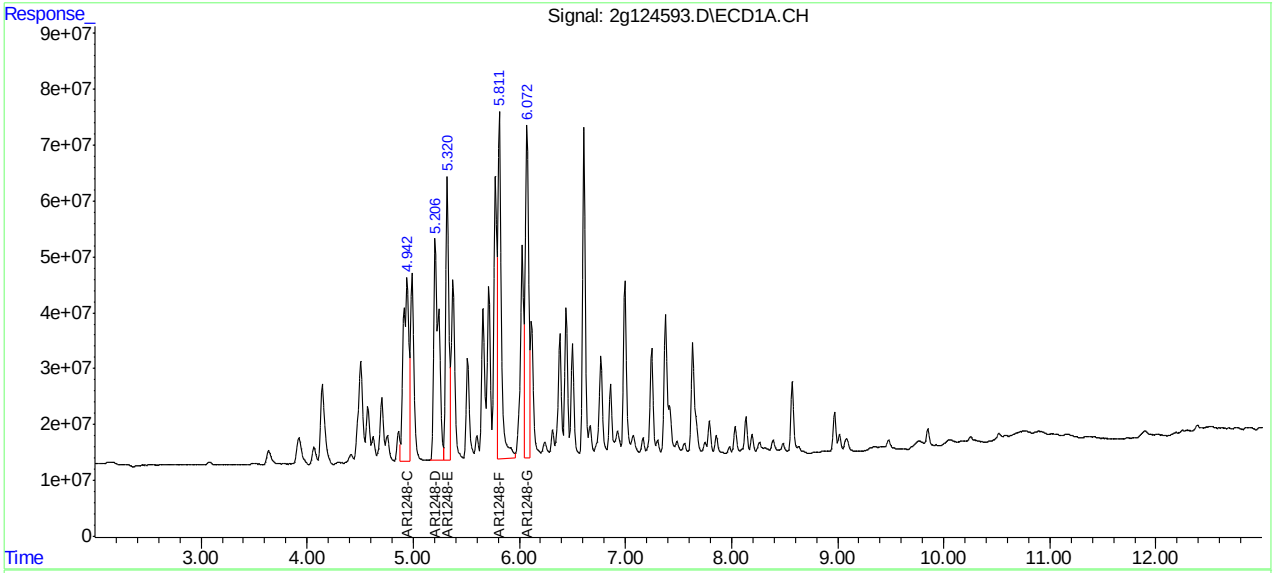
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

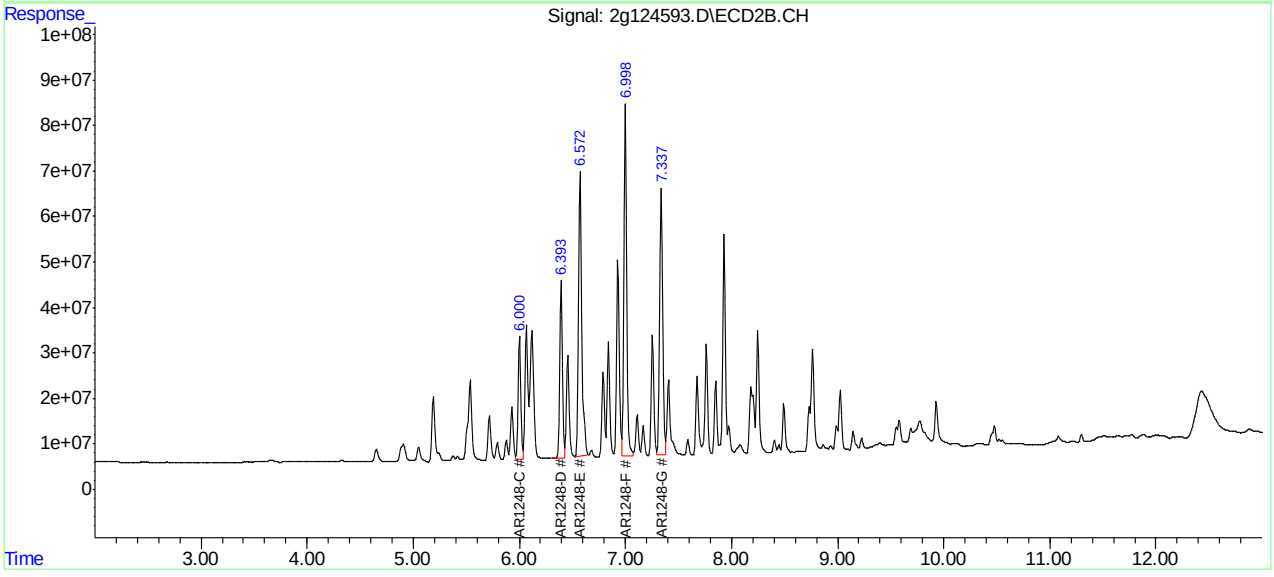
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3562\
Data File : 2g124593.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 8:35 am
Operator : kevinm2
Sample : jc10583-12
Misc : op89820,G2G3562,16.5,,,10,200
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 14:58:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





ACCUTEST LABORATORIES JC10583

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 12/29/15 06:36

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124618.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 4:53 pm
Operator : dylang
Sample : jc10583-12
Misc : op89820,G2G3563,16.5,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:48:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) S Tetrachlo...	3.081f	3.654	2028.0E6	1464.4E6	31.188m	27.215
Spiked Amount 40.000			Recovery	=	77.97%	68.04%
51) S Decachlor...	10.517	12.160	2420.0E6	2695.2E6	45.026m	69.019m#
Spiked Amount 40.000			Recovery	=	112.57%	172.55%

Target Compounds

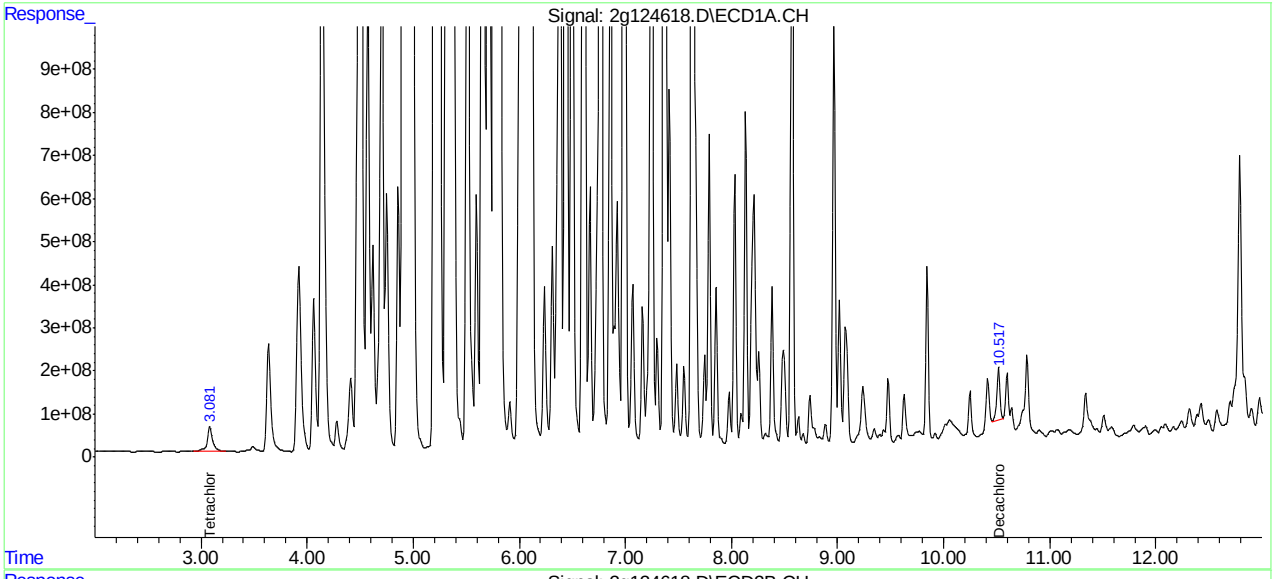
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

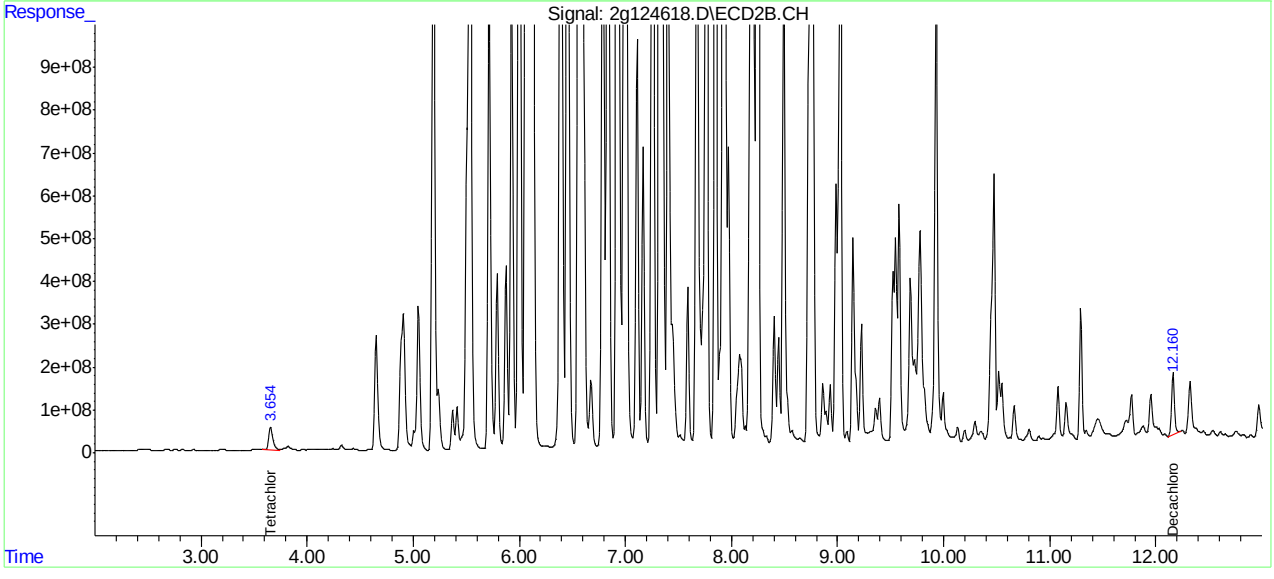
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3563\
Data File : 2g124618.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Dec 2015 4:53 pm
Operator : dylang
Sample : jc10583-12
Misc : op89820,G2G3563,16.5,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 28 15:48:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:45:44 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





7.1.22
7
ACCUTEST LABORATORIES
JC10583

Manual Integrations
APPROVED
(compounds with "m" flag)
Owen McKenna
12/23/15 14:06

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx5548\
Data File : xx182474.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17 Dec 2015 2:36 pm
Operator : josephr
Sample : op89820-mb1
Misc : op89820,GXX5548,15.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 17 14:54:48 2015
Quant Method : C:\msdchem\1\METHODS\PCB5543.M
Quant Title :
QLast Update : Tue Dec 15 13:16:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.012	3.272	315.7E6	390.6E6	38.246m	39.748
	Spiked Amount 40.000			Recovery	=	95.62%	99.37%
51) S	Decachlor...	10.625	11.603	326.7E6	358.7E6	35.127	34.647
	Spiked Amount 40.000			Recovery	=	87.82%	86.62%
	Target Compounds						
17)	AR1248-A	3.884	4.443	2610154	2901280	22.853	21.230
18)	AR1248-B	4.518	5.057	6192142	7489380	19.353	19.474
19)	AR1248-C	4.944	5.509	5420268	3372868	17.594	16.259
20)	AR1248-D	5.220	5.887	4834958	4353886	15.280	15.537
21)	AR1248-E	5.345	6.062	4020890	4689355	12.942m	14.525
22)	AR1248-F	5.851	6.489	6873973	6153056	18.665	15.157
23)	AR1248-G	6.155	6.817	6739694	4489346	11.956m	12.308m

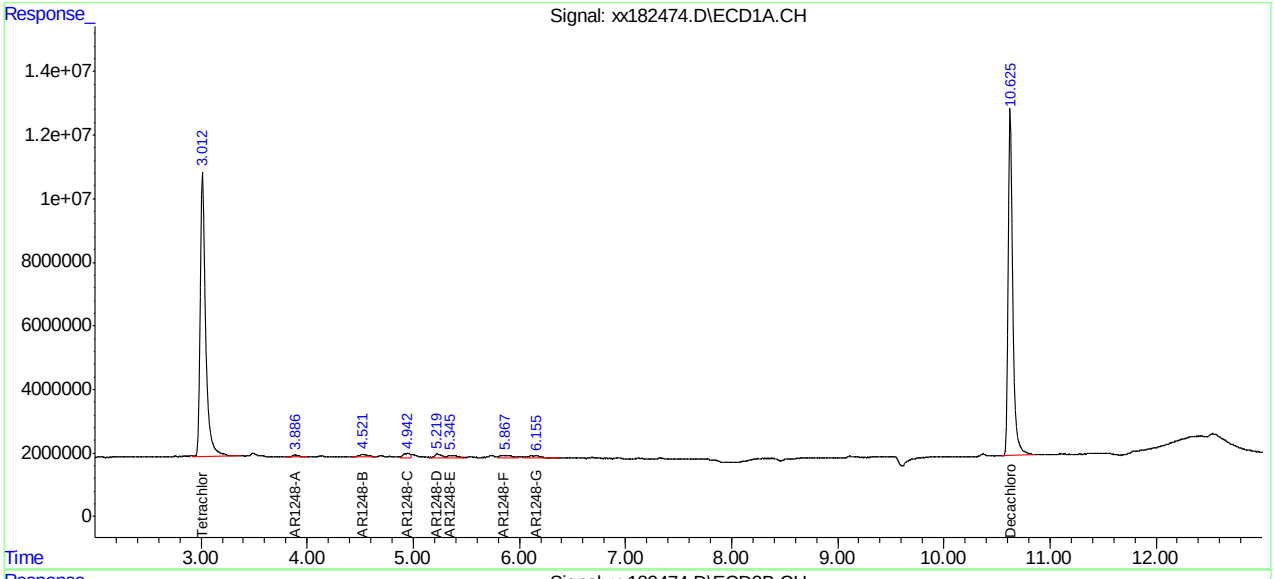
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

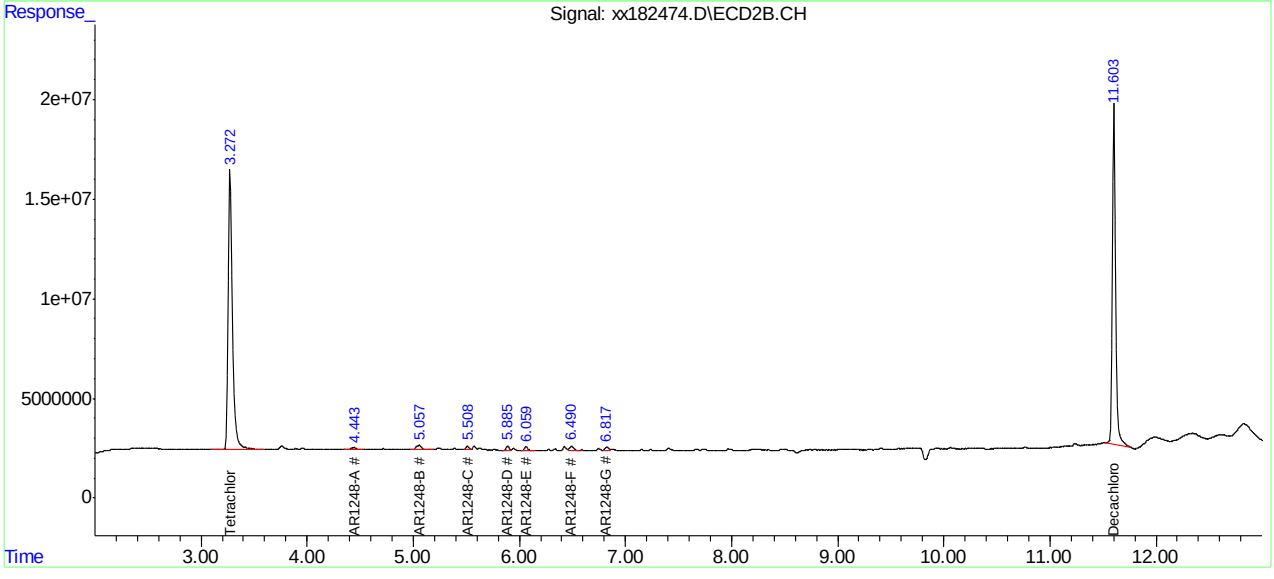
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\gxx5548\
Data File : xx182474.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17 Dec 2015 2:36 pm
Operator : josephr
Sample : op89820-mb1
Misc : op89820,GXX5548,15.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 17 14:54:48 2015
Quant Method : C:\msdchem\1\METHODS\PCB5543.M
Quant Title :
QLast Update : Tue Dec 15 13:16:56 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





ACCUTEST LABORATORIES JC10583

Manual Integrations
APPROVED
(compounds with "m" flag)
Owen McKenna
12/21/15 16:02

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3559\
Data File : 2g124400.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Dec 2015 4:44 pm
Operator : kevinm2
Sample : icc3559-1000
Misc : op89801,G2G3559,16.1,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 21 08:26:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Wed Dec 16 10:24:09 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.097	3.663	2681.0E6	2242.1E6	43.470	46.450
	Spiked Amount 40.000			Recovery	=	108.67%	116.13%
51) S	Decachlor...	10.532f	12.165	2123.4E6	1582.8E6	52.640	51.145
	Spiked Amount 40.000			Recovery	=	131.60%	127.86%
	Target Compounds						
31)	AR1016-A	3.506	4.332	1145.7E6	824.0E6	1009.868	989.787
32)	AR1016-B	3.932	4.897	1978.3E6	1755.8E6	942.312	1021.644
33)	AR1016-C	4.513	5.540	4612.8E6	3721.9E6	1003.544	1084.521
34)	AR1016-D	4.688	5.731	1691.5E6	1495.7E6	990.892	1042.450
35)	AR1016-E	5.218	6.399	1788.7E6	1163.1E6	960.163	1088.098
36)	AR1260-A	7.257	8.499	4201.3E6	2753.9E6	1228.691	1145.528
37)	AR1260-B	7.803	9.151	2065.3E6	1701.5E6	1023.523	1116.438
38)	AR1260-C	8.147	9.587	2300.5E6	2047.9E6	1235.954	1241.073
39)	AR1260-D	8.585	9.937	5937.6E6	4084.5E6	1127.276	1129.041
40)	AR1260-E	8.986f	10.484	3641.2E6	3954.4E6	1452.490m	1257.634

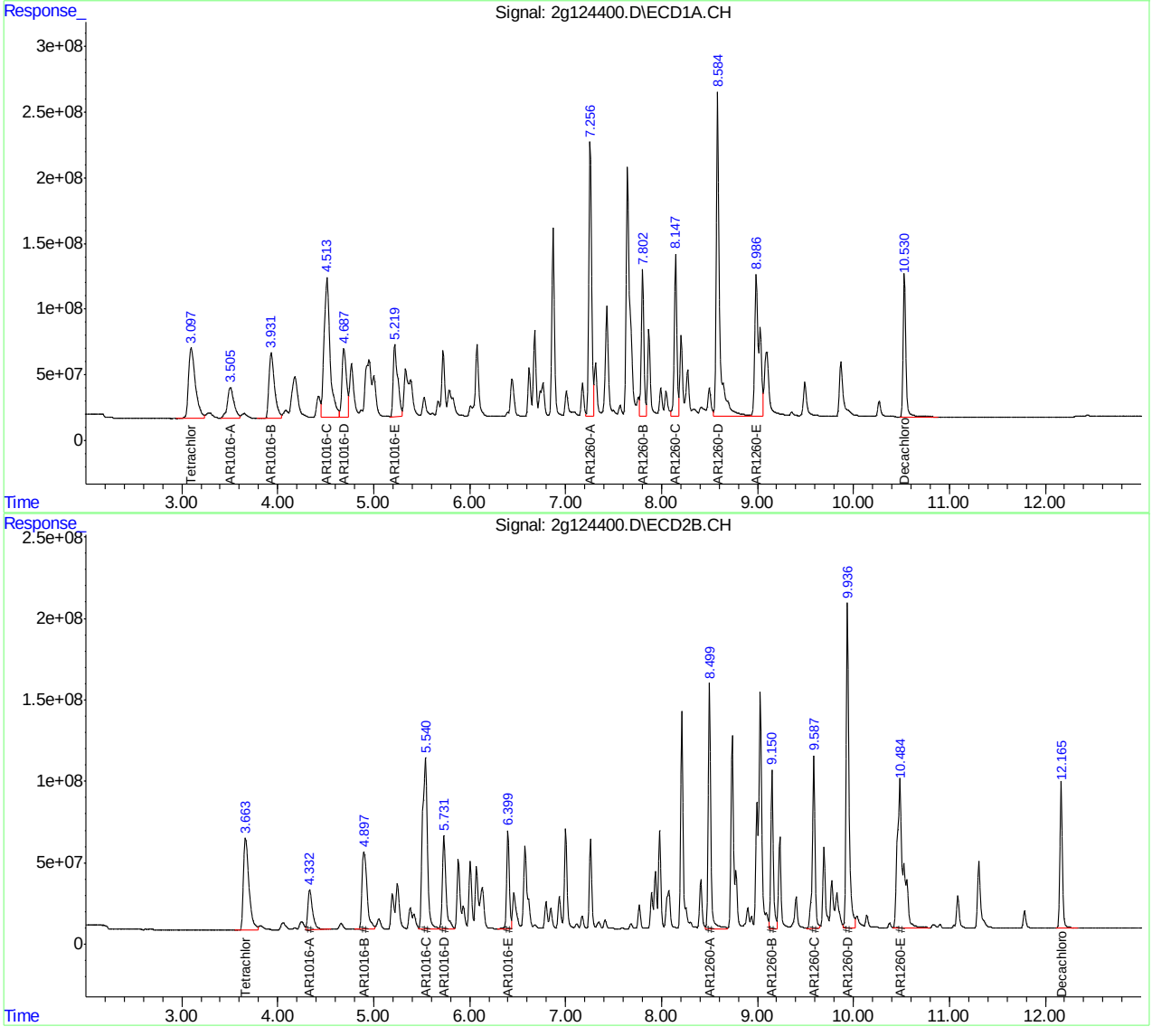
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3559\
Data File : 2g124400.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Dec 2015 4:44 pm
Operator : kevinm2
Sample : icc3559-1000
Misc : op89801,G2G3559,16.1,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 21 08:26:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Wed Dec 16 10:24:09 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)



ACCUTEST LABORATORIES JC10583

Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna
12/21/15 16:02

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3559\
Data File : 2g124403.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Dec 2015 5:35 pm
Operator : kevinm2
Sample : ic3559-1000
Misc : op89801,G2G3559,16.1,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 21 08:37:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:26:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.096	3.665	2641.8E6	2048.5E6	42.835	42.440
	Spiked Amount 40.000			Recovery	=	107.09%	106.10%
51) S	Decachlor...	10.532	12.164	2024.4E6	1498.8E6	50.187	48.428
	Spiked Amount 40.000			Recovery	=	125.47%	121.07%
	Target Compounds						
2)	AR1221-A	2.548	3.084	320.9E6	297.3E6	914.728	1027.734
3)	AR1221-B	3.282	4.053	650.7E6	495.8E6	995.560	1065.884
4)	AR1221-C	3.502	4.333	1898.6E6	1219.0E6	1020.097	1055.003
5)	AR1221-D	3.933	4.889	174.5E6	222.7E6	1006.150	1146.802m
6)	AR1221-E	4.096	4.978	163.6E6	139.9E6	1558.132	1389.177
24)	AR1254-A	5.724	7.000	1971.5E6	1908.5E6	1070.901	1085.315
25)	AR1254-B	6.077	7.260	3912.7E6	2018.7E6	1530.323	1095.512 #
26)	AR1254-C	6.452	7.767	2191.8E6	1671.3E6	1133.067	1165.696
27)	AR1254-D	6.620	7.935	3767.7E6	3179.8E6	1011.261	1042.856
28)	AR1254-E	7.008	8.252	2994.1E6	2126.9E6	2850.943	1651.190m#
29)	AR1254-F	7.258	8.734	2786.2E6	2421.0E6	1039.854	1503.078m#
30)	AR1254-G	7.645	9.029	3911.8E6	3080.6E6	1214.273	1205.113m

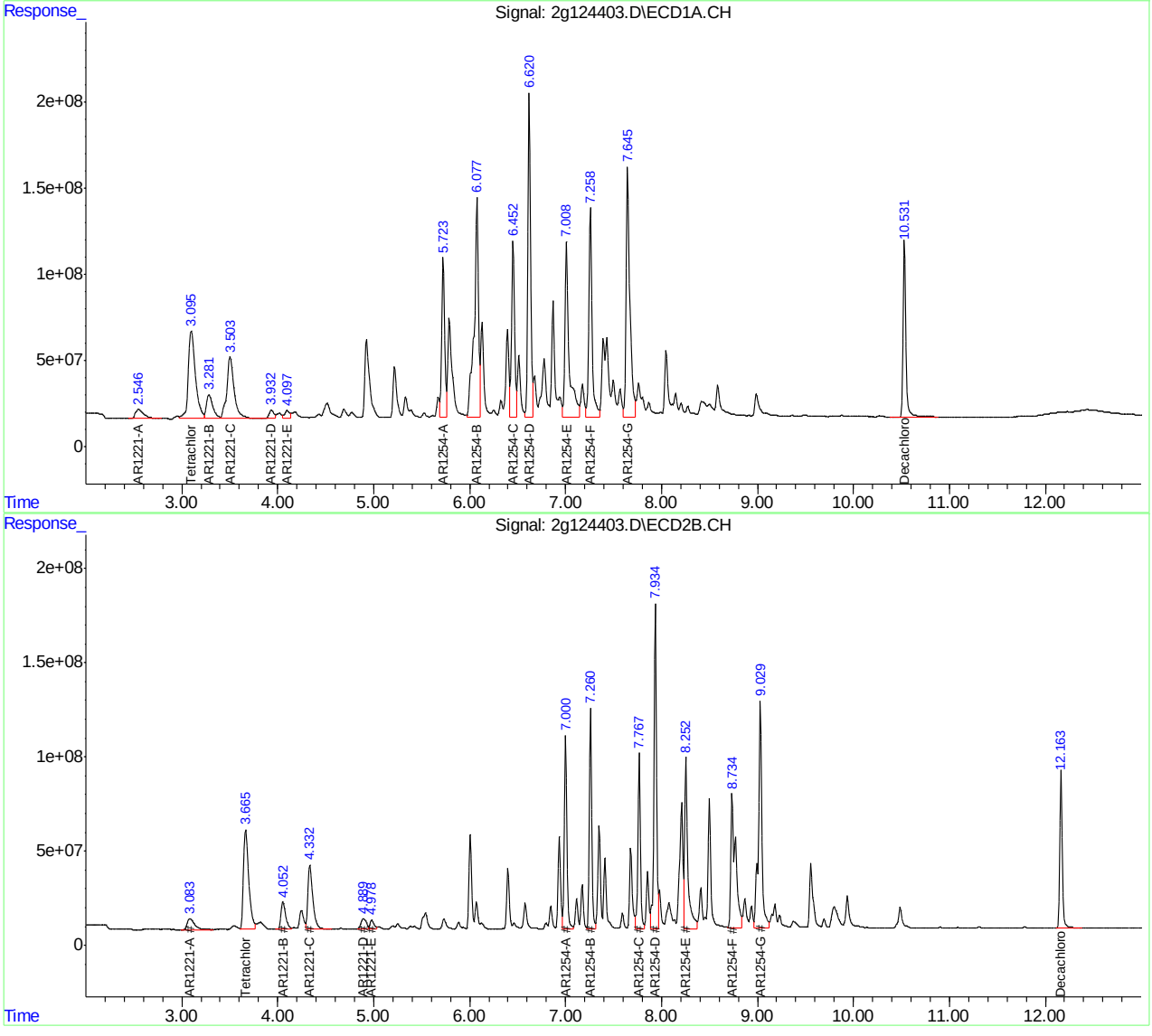
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3559\
Data File : 2g124403.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Dec 2015 5:35 pm
Operator : kevinm2
Sample : ic3559-1000
Misc : op89801,G2G3559,16.1,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 21 08:37:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:26:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)



ACCUTEST LABORATORIES JC10583

Manual Integrations
APPROVED
(compounds with "m" flag)
Owen McKenna
12/21/15 16:02

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3559\
Data File : 2g124404.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Dec 2015 5:51 pm
Operator : kevinm2
Sample : ic3559-1000
Misc : op89801,G2G3559,16.1,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 21 08:40:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:26:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.097	3.665	2453.0E6	1866.7E6	39.773	38.672
	Spiked Amount 40.000			Recovery	=	99.43%	96.68%
51) S	Decachlor...	10.531	12.164	1902.7E6	1380.4E6	47.170	44.604
	Spiked Amount 40.000			Recovery	=	117.93%	111.51%
	Target Compounds						
7)	AR1232-A	3.504	4.334	1553.1E6	1030.3E6	1039.407	1022.336
8)	AR1232-B	3.931	4.897	1051.3E6	844.5E6	1038.564	1035.939
9)	AR1232-C	4.513	5.540	2254.5E6	1759.0E6	1093.697	1092.264
10)	AR1232-D	4.689	5.733	834.8E6	724.2E6	1085.852	1062.099
11)	AR1232-E	5.219	6.400	814.4E6	513.6E6	1065.544	1118.011
41)	AR1262-A	7.256	8.499	2847.2E6	2120.6E6	1338.927	1147.478
42)	AR1262-B	7.802	9.150	3753.8E6	2906.5E6	1195.714	1178.786
43)	AR1262-C	8.147	9.587	3493.3E6	2746.6E6	1269.855	1217.431
44)	AR1262-D	8.584	9.936	8158.4E6	5425.4E6	1240.413	1095.426m
45)	AR1262-E	9.028	10.458	4973.9E6	6250.7E6	1483.262	1254.585m

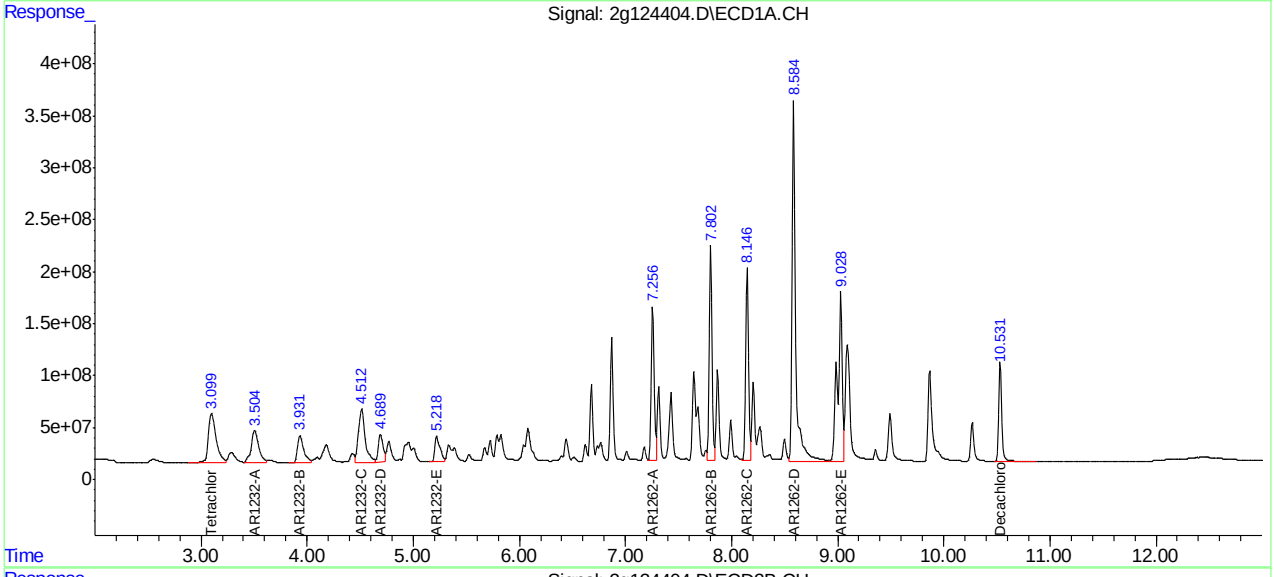
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

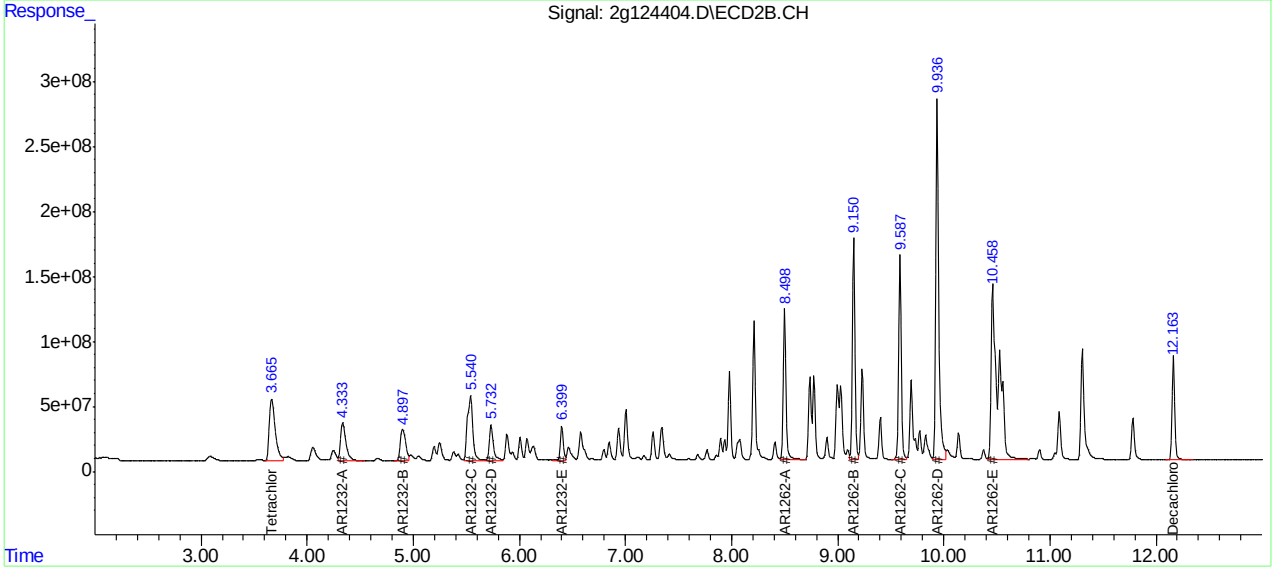
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3559\
Data File : 2g124404.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Dec 2015 5:51 pm
Operator : kevinm2
Sample : ic3559-1000
Misc : op89801,G2G3559,16.1,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 21 08:40:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:26:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)





ACCUTEST LABORATORIES JC10583

Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna
12/21/15 16:02

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3559\
Data File : 2g124405.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Dec 2015 6:08 pm
Operator : kevinm2
Sample : ic3559-1000
Misc : op89801,G2G3559,16.1,,,10,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 21 08:43:10 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:26:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.097	3.664	2460.5E6	1958.3E6	39.894	40.570m
	Spiked Amount 40.000			Recovery	=	99.73%	101.43%
51) S	Decachlor...	10.529	12.162	6077.7E6	4123.6E6	150.672	133.240
	Spiked Amount 40.000			Recovery	=	376.68%	333.10%
	Target Compounds						
12)	AR1242-A	3.933	4.900	1720.4E6	1445.6E6	1027.855	1032.165
13)	AR1242-B	4.515	5.539	3937.8E6	3027.0E6	1097.009	1088.494
14)	AR1242-C	4.688	5.731	1451.6E6	1230.2E6	1086.076	1061.402
15)	AR1242-D	5.218	5.882	1570.3E6	718.6E6	1060.247	1134.559
16)	AR1242-E	5.824	7.004	1358.1E6	1143.7E6	1034.557	1175.691
46)	AR1268-A	9.028	10.457	7929.9E6	5865.9E6	1320.473	1244.358
47)	AR1268-B	9.083	10.526	8250.4E6	5875.0E6	1125.057	1136.889
48)	AR1268-C	9.355	10.900	6529.2E6	4707.5E6	1195.666	1199.174
49)	AR1268-D	9.864	11.304	2732.4E6	1970.3E6	1281.799m	1248.387
50)	AR1268-E	10.264	11.780	21107.8E6	14592.9E6	1269.604	1150.164

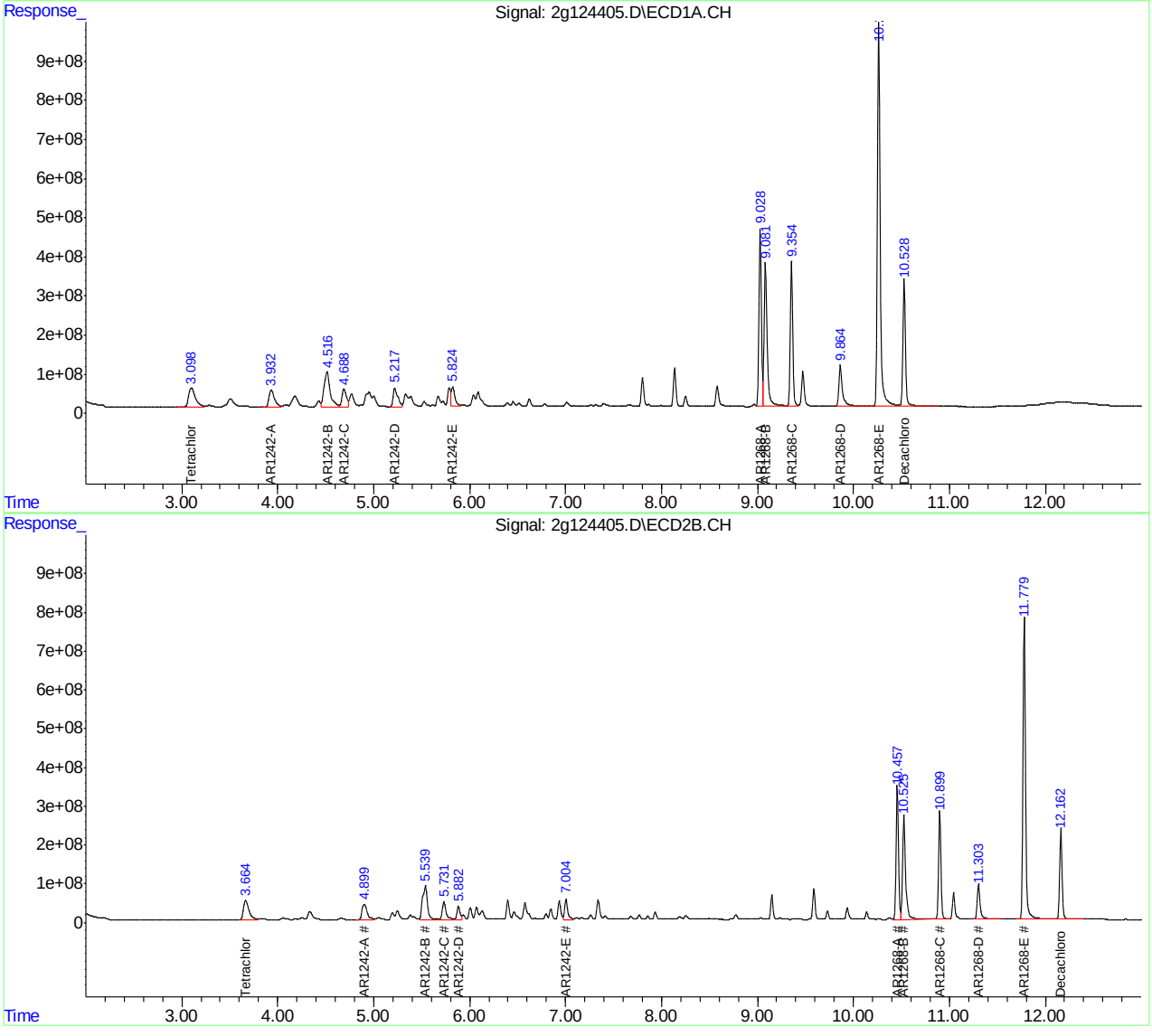
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3559\
Data File : 2g124405.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Dec 2015 6:08 pm
Operator : kevinm2
Sample : ic3559-1000
Misc : op89801,G2G3559,16.1,,,10,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 21 08:43:10 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:26:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)



Manual Integrations
APPROVED
(compounds with "m" flag)
Owen McKenna
12/21/15 16:02

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3559\
Data File : 2g124406.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Dec 2015 6:25 pm
Operator : kevinm2
Sample : ic3559-1000
Misc : op89801,G2G3559,16.1,,,10,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 21 08:35:02 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:26:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.098	3.664	2356.7E6	1814.4E6	38.211	37.590
	Spiked Amount 40.000			Recovery	=	95.53%	93.98%
51) S	Decachlor...	10.532	12.164	1851.3E6	1331.6E6	45.896	43.026m
	Spiked Amount 40.000			Recovery	=	114.74%	107.57%
	Target Compounds						
17)	AR1248-A	3.930	4.895	901.2E6	733.3E6	1038.490	998.661
18)	AR1248-B	4.513	5.539	2657.5E6	1912.7E6	1109.246	1060.746
19)	AR1248-C	4.948	6.005	2404.0E6	1112.3E6	1088.613m	1037.223
20)	AR1248-D	5.217	6.398	2418.0E6	1470.6E6	1092.541	1070.636
21)	AR1248-E	5.332	6.577	1319.9E6	1627.7E6	1111.433	1074.179
22)	AR1248-F	5.824	7.004	2312.8E6	1921.4E6	1163.320	1150.617
23)	AR1248-G	6.084	7.340	1724.6E6	1698.2E6	1226.293	1362.197

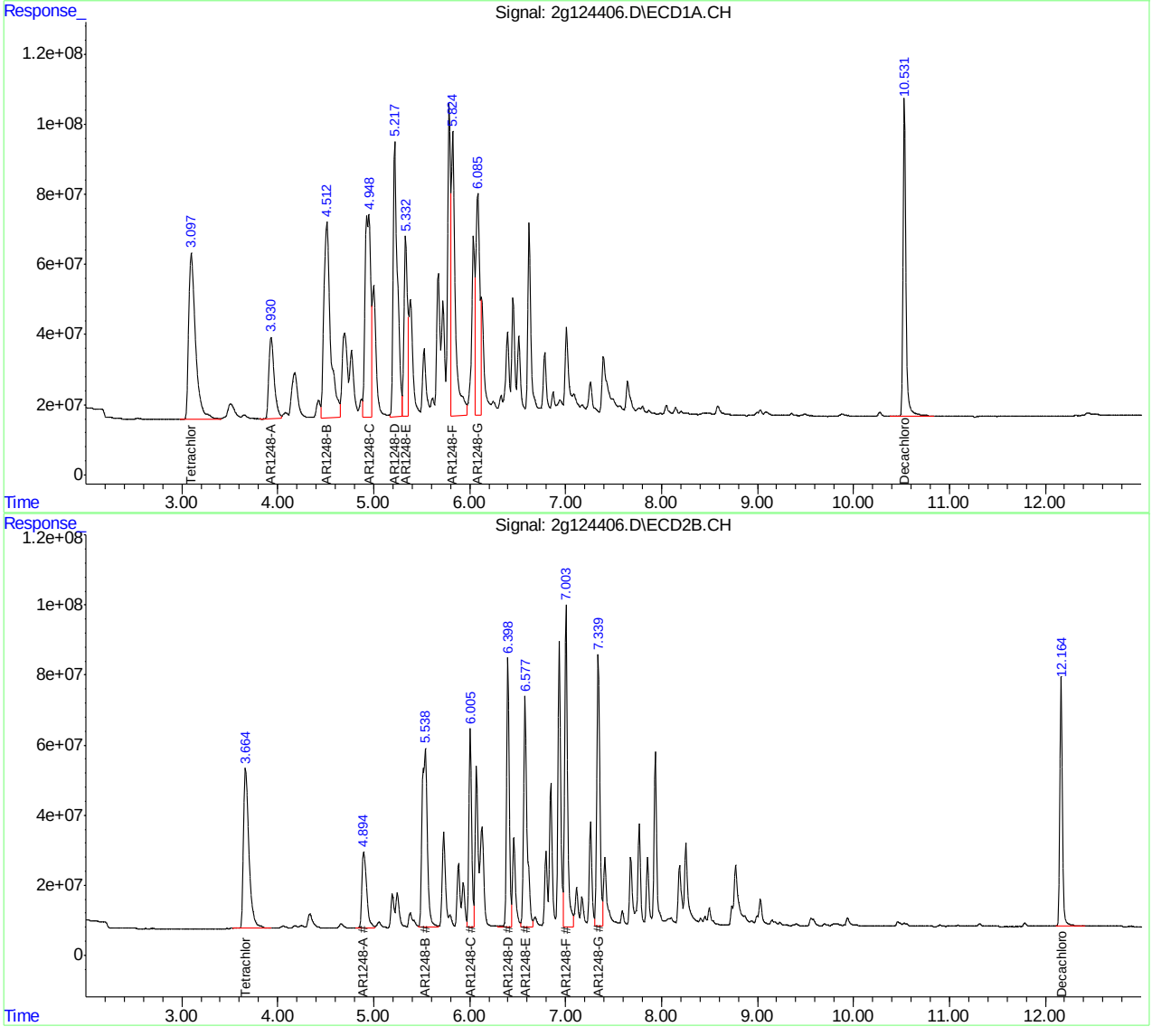
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2G3559\
Data File : 2g124406.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Dec 2015 6:25 pm
Operator : kevinm2
Sample : ic3559-1000
Misc : op89801,G2G3559,16.1,,,10,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 21 08:35:02 2015
Quant Method : C:\MSDCHEM\1\METHODS\2PCB3559.M
Quant Title :
QLast Update : Mon Dec 21 08:26:47 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : ZB5 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30m X 0.32mm(.25u Signal #2 Info : 30m X 0.32 mm (.25um)



ACCUTEST LABORATORIES JC10583

New Jersey

ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: JC10583
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con.
Project: Alcoa, Edgewater, NJ

Sample: JC10583-1 **Analyzed:** 16-DEC-15 by KP **Method:** SM2540 G-97
ClientID: SB-029(14.5-15.0)

Wet Weight (Total)	26.94	g
Tare Weight	19.59	g
Dry Weight (Total)	25.27	g
Solids, Percent	77.3	%

Sample: JC10583-2 **Analyzed:** 16-DEC-15 by KP **Method:** SM2540 G-97
ClientID: SB-030(14.5-15.0)

Wet Weight (Total)	33.45	g
Tare Weight	24.93	g
Dry Weight (Total)	32.62	g
Solids, Percent	90.3	%

Sample: JC10583-3 **Analyzed:** 16-DEC-15 by KP **Method:** SM2540 G-97
ClientID: PE-061R (16.0-16.5)

Wet Weight (Total)	26.22	g
Tare Weight	17.37	g
Dry Weight (Total)	25.31	g
Solids, Percent	89.7	%

Sample: JC10583-4 **Analyzed:** 16-DEC-15 by KP **Method:** SM2540 G-97
ClientID: PE-063R(16.0-16.5)

Wet Weight (Total)	31.39	g
Tare Weight	25.74	g
Dry Weight (Total)	29.8	g
Solids, Percent	71.9	%

Sample: JC10583-5 **Analyzed:** 16-DEC-15 by KP **Method:** SM2540 G-97
ClientID: PS-001R(36.5-37.0)

Wet Weight (Total)	24.47	g
Tare Weight	16.11	g
Dry Weight (Total)	22.99	g
Solids, Percent	82.3	%

Sample: JC10583-6 **Analyzed:** 16-DEC-15 by KP **Method:** SM2540 G-97
ClientID: PS-002R(36.5-37.0)

Wet Weight (Total)	32.82	g
Tare Weight	23.07	g
Dry Weight (Total)	32.12	g
Solids, Percent	92.8	%

Percent Solids Raw Data Summary

Job Number: JC10583
Account: APPALNJB Appalachia Hydrogeologic & Environ. Con.
Project: Alcoa, Edgewater, NJ

Sample: JC10583-7 **Analyzed:** 16-DEC-15 by KP **Method:** SM2540 G-97
ClientID: SB-034(36.5-37.0)

Wet Weight (Total)	25.05	g
Tare Weight	18.37	g
Dry Weight (Total)	24.53	g
Solids, Percent	92.2	%

Sample: JC10583-8 **Analyzed:** 16-DEC-15 by KP **Method:** SM2540 G-97
ClientID: SB-031(25.0-25.5)

Wet Weight (Total)	29.32	g
Tare Weight	21.19	g
Dry Weight (Total)	28.37	g
Solids, Percent	88.3	%

Sample: JC10583-10 **Analyzed:** 16-DEC-15 by KP **Method:** SM2540 G-97
ClientID: SB-032(25.0-25.5)

Wet Weight (Total)	34.74	g
Tare Weight	26.16	g
Dry Weight (Total)	33.77	g
Solids, Percent	88.7	%

Sample: JC10583-11 **Analyzed:** 16-DEC-15 by KP **Method:** SM2540 G-97
ClientID: SB-035(11.0-11.5)

Wet Weight (Total)	31.39	g
Tare Weight	23.37	g
Dry Weight (Total)	30.7	g
Solids, Percent	91.4	%

Sample: JC10583-12 **Analyzed:** 16-DEC-15 by KP **Method:** SM2540 G-97
ClientID: SB-033(36.5-37.0)

Wet Weight (Total)	32.89	g
Tare Weight	26.61	g
Dry Weight (Total)	31.38	g
Solids, Percent	76	%

APPENDIX D

TRILLIUM DATA VALIDATION REPORT
SOIL SAMPLES

DATA VALIDATION (LABEL S4VM)

FOR

ALCOA SITE
EDGEWATER, NEW JERSEY

ORGANIC ANALYSIS DATA
Polychlorinated Biphenyls (PCBs) in Soil

Laboratory Job No. JC10583
Samples Collected December 11, 2015

Chemical Analyses Performed by:
Accutest Laboratories
Dayton, New Jersey

For:

Appalachia Hydrogeologic & Environmental Consultants
Bridgewater, New Jersey

By:

Trillium, Inc.
27 LaFayette Circle
Downingtown, Pennsylvania 19335
(610) 458-0289

January 22, 2016

16201/EKD/PAC
\Alcoa Edgewater JC10583 pcb

EXECUTIVE SUMMARY

Validation of the organic analysis data (PCBs) prepared by Accutest Laboratories for 11 soil samples from the Alcoa site property sampling effort in Edgewater, New Jersey, has been completed by Trillium, Inc. The data were reported by the laboratory in a single data package under laboratory Job No. JC10583. This sample delivery group (SDG) includes the following samples:

SB-029 (14.5-15.0)	SB-030 (14.5-15.0)	PE-061R (16.0-16.5)
PE-063R (16.0-16.5)	PS-001R (36.5-37.0)	PS-002R (36.5-37.0)
SB-034 (36.5-37.0)	SB-031 (25.0-25.5)	SB-032 (25.0-25.5)
SB-035 (11.0-11.5)	SB-033 (36.5-37.0)	

Based on the validation effort, sample results were determined to be valid as reported by the laboratory, with the following exceptions:

- The result for Aroclor 1260 in PE-061R (16.0-16.5) was qualified as estimated (J).
- Based on professional judgment, results for Aroclor 1248, Aroclor 1254, and Aroclor 1260 in PS-001R (36.5-37.0) and SB-034 (36.5-37.0) were qualified as estimated (J).

"B" qualifiers applied by the laboratory to denote results associated with a contaminated blank were removed by the validator.

Brief explanations of the reasons for the actions taken above may be found in the Overall Assessment (Section XI). Details of the validation findings and conclusions based on review of the results for each quality control requirement are provided in the remaining sections of this report. A documentation issue is discussed in Section X.

This validation report should be considered <u>part of the data package</u> for all future distributions of the PCBs data.

INTRODUCTION

Extractions of the soil samples were performed according to EPA Method 3546, and the PCBs analyses were performed according to EPA Method 8082A. Both of these methods are found in SW-846, Test Methods for Evaluating Solid Waste. Results of sample analyses were reported by the laboratory as either qualified or unqualified; various qualifier codes were used by the laboratory to denote specific information regarding the analytical results.

The data were validated by Trillium, Inc., in conformance with the EPA Region II Standard Operating Procedure (SOP) HW-45, "Validating PCB Compounds, PCBs by Gas Chromatography SW-846 Method 8082A" (Rev. 1, 10/06). Professional judgment was applied as necessary and appropriate. The validation effort has the label Stage_4_Validation_Manual (S4VM).

The data validation process is intended to evaluate data on a technical basis rather than a contract or method compliance basis. This requires that the data package contain sufficient raw data documentation to facilitate the validation process and allow verification of all reported results. It is assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate and sufficient quality review prior to submission for validation.

During the validation process, laboratory data are verified against all available supporting documentation. Based on the findings of the evaluation, qualifier codes may be added, deleted, or modified by the data validator. Validated results are, therefore, either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Final validated results are annotated with the following codes as defined in the Region II SOP:

U - The analyte was analyzed for but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified," and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the

actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

These codes are recorded on the data summary forms contained in Attachment A, as well as on the Reports of Analysis in Attachment B of this validation report to indicate qualifications placed on the data as a result of the validation effort.

Two facts should be noted by all data users. First, **the "R" qualifier means that the laboratory-reported result is unusable.** In other words, due to significant quality control problems, the analysis is invalid and provides no information as to whether the analyte is present or not. Rejected results should not appear on data tables because they cannot be relied upon, even as a last resort. Second, **no analyte concentration is guaranteed to be accurate even if all associated quality control is acceptable.** Strict quality control conformance serves only to increase confidence in reported results; any analytical result will always contain some error.

The data user is also cautioned that the validation effort is based on the raw data printouts as provided by the laboratory. Software manipulation cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

I. Holding Times, Preservation, and Sample Integrity

The samples were collected on 12/11/15 and were extracted on 12/17/15. Method 8082A does not specify a maximum holding time for collection to extraction; a holding time of 40 days from extraction to analysis is recommended. The soil sample extracts were analyzed on 12/23/15, well within the 40-day period.

The cooler temperature on receipt at the laboratory (5.5°C) was acceptable (QC 4°C ±2°C) and was documented in the laboratory case narrative. All samples were received intact in a sealed cooler.

II. Calibration and Instrument Performance

All sample and associated quality control (QC) analyses were performed on a single gas chromatograph/electron capture detector (GC/ECD) system identified as HP G1530A. This instrument was equipped with ZB5 and RTX-CLP2 columns.

A. Initial Calibration (IC)

Two ICs were performed in support of the PCBs analyses reported in this data package; these were run on 12/15/15 and 12/18/15. A calibration range of 50 µg/L to 3000 µg/L (equivalent to 33 µg/kg to 2000 µg/kg in soil) was established using six concentration levels for Aroclors 1016 and 1260 in each IC. Single-point calibrations were run in association with both ICs on both columns for Aroclors 1221/1254, 1232/1262, 1242/1268, and 1248; these were all at 1000 µg/L (equivalent to 670 µg/kg in soil).

Documentation of all individual IC standards analyzed was provided. Calibration factors (CFs) and percent relative standard deviation (%RSD) values were correctly calculated and accurately reported. All %RSD values were less than the maximum acceptance limit of 20%.

Laboratory-established retention time (RT) windows were reported in the data package for all selected target Aroclor peaks and for the surrogate compounds. Absolute RTs were very consistent throughout the reported analyses.

B. Continuing Calibration (CC)

The analysis of the 500 µg/L or 1000 µg/L concentration of the Aroclor 1016/1260 mixture constituted the continuing calibration. Eight CC standards were reported in support of the PCBs analyses, and documentation of all eight CC standard analyses on both columns was provided. The percent difference (%D) values in the CC standards were less than the method-specified maximum acceptance limit of 20%, with the following exceptions:

Date and Time	Analyte	Column	%D
12/23/15 at 02:37	Aroclor 1260-4	RTX-CLP2	20.6
12/23/15 at 05:45	Aroclor 1260-2	RTX-CLP2	22.9
	Aroclor 1260-3	RTX-CLP2	21.6
	Aroclor 1260-4	RTX-CLP2	20.8
	Aroclor 1260-5	RTX-CLP2	24.2

All of the high %Ds listed above resulted from low responses relative to the IC, which suggests the potential for reporting false negatives or for sample results that are biased low. For all sample analyses associated with these CC standards, the result for Aroclor 1260 was either reported from the ZB5 column or was reported from a different sample analysis. Therefore, no additional qualifiers were necessary on this basis.

III. Blanks

A solid-matrix method blank was prepared and analyzed with the site samples. Aroclor 1248 was detected in the method blank at 10.9 J µg/kg. Concentrations of Aroclor 1248 in all of the site samples were greater than the reporting limit (RL) and at least ten times the method blank concentration. Therefore, no qualifiers were required based on associated method blank contamination.

"B" qualifiers were applied by the laboratory to all reported results for Aroclor 1248 to indicate that they were associated with a contaminated method blank. All "B" qualifiers were removed by the validator from the sample Reports of Analysis.

No field-submitted blanks were included with this set of samples.

IV. Surrogate Recovery

Tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB) were used as the surrogate compounds for these analyses. Surrogate percent recoveries (%Rs) for the site and laboratory QC sample analyses were within the laboratory-specified acceptance limits (20-152% for TCX and 12-157% for DCB), with the following exceptions:

Sample	Surrogate	Column	%R
PE-063R (16.0-16.5) - undiluted	TCX	ZB5	543
PS-002R (36.5-37.0) - undiluted	DCB	RTX-CLP2	230
PS-002R (36.5-37.0) - 40X dilution	DCB	RTX-CLP2	238
SB-034 (36.5-37.0) - undiluted	DCB	RTX-CLP2	2681

Sample	Surrogate	Column	%R
SB-034 (36.5-37.0) - 10X dilution	DCB	RTX-CLP2	1554
SB-031 (25.0-25.5) - undiluted	DCB	ZB5	992
SB-031 (25.0-25.5) - undiluted	DCB	RTX-CLP2	179
SB-032 (25.0-25.5) - undiluted	DCB	RTX-CLP2	242
SB-035 (11.0-11.5) - undiluted	DCB	RTX-CLP2	250
SB-035 (11.0-11.5) - 40X dilution	DCB	RTX-CLP2	201
SB-033 (36.5-37.0) - undiluted	DCB	RTX-CLP2	173

In all of the above cases, the high recoveries resulted from chromatographic interferences. Therefore, based on professional judgment, no action was taken on this basis.

Aroclor 1260 and/or Aroclor 1248 results for PE-063R (16.0-16.5), SB-031 (25.0-25.5), SB-032 (25.0-25.5), SB-035 (11.0-11.5), and SB-033 (36.5-37.0) were reported from 200-fold dilutions. Both of the surrogate compounds were diluted out on both columns in these analyses.

V. Spiked Analyses

A. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD results for a sample identified as JC10588-1 were reported in the data package. Since JC10588-1 is not a site sample, the MS/MSD results have no relevance to the samples in this data set, and they were not considered in the validation effort.

B. Laboratory Control Sample (LCS)

A solid-matrix LCS (identified as a blank spike) was prepared and analyzed with the soil samples in this data set. Aroclors 1016 and 1260 were included in the LCS, each at a concentration of 130 µg/kg. Recoveries of both Aroclors on both columns in the LCS analysis (106% to 120%) were within the laboratory-specified acceptance limits of 48-167% for Aroclor 1016 and 44-162% for Aroclor 1260.

VI. Field Duplicate

No field duplicate was identified in this data set.

VII. Compound Identification

Target Aroclors were appropriately identified in the site samples based on the presence of characteristic chromatographic peak patterns and the presence of these peaks at the appropriate retention times relative to the calibration standards.

VIII. Compound Quantitation and Reporting Limits

Aroclor concentrations and sample-specific RLs were correctly calculated and accurately reported for the samples in this data set, including appropriate adjustments for actual sample weight, percent solids, and necessary dilutions.

Aroclors 1248, 1254, and 1260 were detected in PS-001R (36.5-37.0) and SB-034 (36.5-37.0). The chromatographic pattern of Aroclor 1248 overlaps the chromatographic pattern of Aroclor 1254, and the chromatographic pattern of Aroclor 1254 overlaps the chromatographic pattern of Aroclor 1260. Based on professional judgment, results for Aroclor 1248, Aroclor 1254, and Aroclor 1260 in PS-001R (36.5-37.0) and SB-034 (36.5-37.0) were qualified as estimated (J) because of the potential for contribution from other Aroclors detected in these samples.

Concentrations of Aroclor 1248 in the undiluted analyses of SB-029 (14.5-15.0), SB-030 (14.5-15.0), PE-061R (16.0-6.5), and SB-033 (36.5-37.0) exceeded the upper limit of the established instrument calibration range. Diluted analyses of these samples were performed (5-fold to 200-fold), and concentrations of Aroclor 1248 in the diluted analyses were within the calibration range. Results for Aroclor 1248 in these four samples were reported by the laboratory from the diluted analyses, and all other sample results were reported from the undiluted sample analyses.

Concentrations of Aroclor 1248 and Aroclor 1260 in the undiluted analyses of PE-063R (16.0-16.5), PS-002R (36.5-37.0), SB-031 (25.0-25.5), and SB-032 (25.0-25.5) exceeded the upper limit of the established instrument calibration range. Diluted analyses of these samples were performed (40-fold to 200-fold), and concentrations of both Aroclors in the diluted analyses were within the calibration range. Results for Aroclor 1248 and Aroclor 1260 in these four samples were reported by the laboratory from the diluted analyses, and all other sample results were reported from the undiluted sample analyses.

Concentrations of Aroclor 1248, Aroclor 1254, and Aroclor 1260 in the undiluted analysis of SB-034 (36.5-37.0) exceeded the upper limit of the established instrument calibration range. A 10-fold diluted analysis of this sample was performed, and concentrations of all three Aroclors in the diluted analysis were within the calibration range. Results for Aroclor 1248, Aroclor 1254, and Aroclor 1260 in SB-034 (36.5-37.0) were reported by the laboratory from the diluted analysis, and all other sample results were reported from the undiluted sample analysis.

Concentrations of Aroclor 1248 and Aroclor 1260 in the undiluted analysis of SB-035 (11.0-11.5) exceeded the upper limit of the established instrument calibration range. Diluted analyses of this sample were performed (40-fold and 200-fold). The concentration of Aroclor 1260 in the 40-fold

dilution was within the calibration range, and the concentration of Aroclor 1248 in the 200-fold diluted analysis was within the calibration range. The result for Aroclor 1248 in SB-035 (11.0-11.5) was reported by the laboratory from the 200-fold dilution, the result for Aroclor 1260 was reported from the 40-fold dilution, and all other sample results were reported from the undiluted sample analysis.

With two exceptions, the lower of the two column measurements was reported for detected Aroclors in the site samples, as specified in the validation SOP. For PS-001R (36.5-37.0) and SB-035 (11.0-11.5), the higher of the two column measurements (in both cases from the ZB5 column) was reported for Aroclor 1260 because of the low bias suggested by unacceptable %Ds on the RTX-CLP2 column in an associated CC standard. The laboratory's approach for these two Aroclor 1260 results was acceptable, and no action was taken on this basis.

Agreement between the two column measurements was acceptable (0-23%D; validation SOP QC ≤25%D), with the exception of Aroclor 1260 in PE-061R (16.0-16.5) (33%). The result for Aroclor 1260 in PE-061R (16.0-16.5) was qualified as estimated (J) due to lack of agreement between the two column measurements.

Unadjusted laboratory-reported RLs for the Aroclors (33 µg/kg in soil) are equivalent to the lowest concentration Aroclor 1016/1260 IC standard mixture analyzed in association with this data set. These unadjusted RLs are supported by the available raw data.

A total solids worksheet was provided, documenting these measurements for the soil samples reported in this data set. All percent solids results were correctly calculated and accurately reported.

The data summary forms in Attachment A list all individual sample analyte results. Only *positive* results are presented on these forms, whether or not the value or qualifier was changed as a result of the validation. Where no result is listed, the analyte was not detected and the RL was not qualified. Sample-specific RLs may be found on the Reports of Analysis for the samples (Attachment B), or may be calculated for the soil samples from the information on the data summary forms as follows: unadjusted RL (far left column) multiplied by the dilution factor, and divided by (percent solids divided by 100).

IX. System Performance

Based on evaluation of the available raw data, the analytical system was working within method specifications at the time of these analyses.

X. Documentation

The chain of custody record provided in the data package included the reported samples and was accurately completed, except that the sample reported in the data package as PE-061R (16.0-16.5) was identified on the chain of custody record as SB-061R (16.0-16.5). According to the sample

receipt summary problem resolution form included in the data package, PE-061R (16.0-16.5), the identification reported in the data package, is the correct sample identification.

XI. Overall Assessment

Based on the validation effort, sample results were determined to be valid as reported by the laboratory, with the following exceptions:

- Based on professional judgment, results for Aroclor 1248, Aroclor 1254, and Aroclor 1260 in PS-001R (36.5-37.0) and SB-034 (36.5-37.0) were qualified as estimated (J) because of the potential for contribution from other Aroclors detected in these samples.

- The result for Aroclor 1260 in PE-061R (16.0-16.5) was qualified as estimated (J) due to lack of agreement between the two column measurements.

"B" qualifiers applied by the laboratory to denote results associated with a contaminated blank were removed by the validator.

A documentation issue is discussed in Section X.

This validation report should be considered <u>part of the data package</u> for all future distributions of the PCBs data.

TRILLIUM INC.

ATTACHMENT A

DATA SUMMARY FORMS
Accutest Laboratories Job No. JC10583
Samples Collected December 11, 2015

DATA SUMMARY FORM: PCBs
SOIL SAMPLES
(ug/kg)

Site Name: Alcoa

Sampling Date: December 11, 2015

Laboratory Job No. JC10583

Trillium Project No. 16201

	Sample Number	SB-029 (14.5-15.0)		SB-030 (14.5-15.0)		PE-061R (16.0-16.5)		PE-063R (16.0-16.5)		PS-001R (36.5-37.0)	
	Lab ID	JC10583-1		JC10583-2		JC10583-3		JC10583-4		JC10583-5	
	Dilution/Concentration Factor*	0.97, 4.9**		0.93, 19**		0.99, 9.9**		1.0, 200***		1.0	
	% Solids	77.3		90.3		89.7		71.9		82.3	
RL											
33	Aroclor 1016										
33	Aroclor 1221										
33	Aroclor 1232										
33	Aroclor 1242										
33	Aroclor 1248	6720		14400		12400		332000		1160	J
33	Aroclor 1254									983	J
33	Aroclor 1260	493		721		620	J	32700		266	J
33	Aroclor 1262										
33	Aroclor 1268										

*Includes adjustment for sample weight greater than 15 grams.
**The result for Aroclor 1248 only was taken from the diluted analysis.
***Results for Aroclor 1248 and Aroclor 1260 only were taken from the diluted analysis.

DATA SUMMARY FORM: PCBs
SOIL SAMPLES
(ug/kg)

Site Name: Alcoa

Sampling Date: December 11, 2015

Laboratory Job No. JC10583

Trillium Project No. 16201

	Sample Number	PS-002R (36.5-37.0)		SB-034 (36.5-37.0)		SB-031 (25.0-25.5)		SB-032 (25.0-25.5)		SB-035 (11.0-11.5)	
	Lab ID	JC10583-6		JC10583-7		JC10583-8		JC10583-10		JC10583-11	
	Dilution/Concentration Factor*	.95, 38**		0.96, 9.6***		0.93, 185**		0.88, 176**		1.0, 40, 200****	
	% Solids	92.8		92.2		88.3		88.7		91.4	
RL											
33	Aroclor 1016										
33	Aroclor 1221										
33	Aroclor 1232										
33	Aroclor 1242										
33	Aroclor 1248	48300		10300	J	138000		162000		165000	
33	Aroclor 1254			9220	J						
33	Aroclor 1260	2930		2010	J	7490		9190		8430	
33	Aroclor 1262										
33	Aroclor 1268										

*Includes adjustment for sample weight greater than 15 grams.
**Results for Aroclor 1248 and Aroclor 1260 only were taken from the diluted analysis.
***Results for Aroclor 1248, Aroclor 1254, and Aroclor 1260 only were taken from the diluted analysis.
****The result for Aroclor 1248 only was reported from the 200-fold dilution, and the result for Aroclor 1260 only was reported from the 40-fold dilution.

DATA SUMMARY FORM: PCBs
SOIL SAMPLES
(ug/kg)

Site Name: Alcoa

Sampling Date: December 11, 2015

Laboratory Job No. JC10583

Trillium Project No. 16201

	Sample Number	SB-033 (36.5-37.0)									
	Lab ID	JC10583-12									
	Dilution/Concentration Factor*	0.91, 182**									
	% Solids	76.0									
RL											
33	Aroclor 1016										
33	Aroclor 1221										
33	Aroclor 1232										
33	Aroclor 1242										
33	Aroclor 1248	99600									
33	Aroclor 1254										
33	Aroclor 1260										
33	Aroclor 1262										
33	Aroclor 1268										

*Includes adjustment for sample weight greater than 15 grams.

**The result for Aroclor 1248 only was taken from the diluted analysis.

TRILLIUM INC.

ATTACHMENT B

REPORTS OF ANALYSIS
Accutest Laboratories Job No. JC10583
Samples Collected December 11, 2015

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-029(14.5-15.0)		
Lab Sample ID:	JC10583-1	Date Sampled:	12/11/15
Matrix:	SO - Soil	Date Received:	12/14/15
Method:	SW846 8082A SW846 3546	Percent Solids:	77.3
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124607.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124580.D	5	12/23/15	KM	12/17/15	OP89820	G2G3562

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2	15.4 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	42	13	ug/kg	
11104-28-2	Aroclor 1221	ND	42	25	ug/kg	
11141-16-5	Aroclor 1232	ND	42	14	ug/kg	
53469-21-9	Aroclor 1242	ND	42	19	ug/kg	
12672-29-6	Aroclor 1248	6720 [a]	210	64	ug/kg	~~B~~
11097-69-1	Aroclor 1254	ND	42	19	ug/kg	
11096-82-5	Aroclor 1260	493	42	18	ug/kg	
11100-14-4	Aroclor 1268	ND	42	13	ug/kg	
37324-23-5	Aroclor 1262	ND	42	12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	63%	73%	20-152%
877-09-8	Tetrachloro-m-xylene	65%	77%	20-152%
2051-24-3	Decachlorobiphenyl	90%	73%	12-157%
2051-24-3	Decachlorobiphenyl	97%	79%	12-157%

(a) Result is from Run# 2

E. Dick 1/22/16

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: 2G124608.D 2G124585.D

Accutest Laboratories

Report of Analysis

4.2 4

Client Sample ID:	SB-030(14.5-15.0)		
Lab Sample ID:	JC10583-2	Date Sampled:	12/11/15
Matrix:	SO - Soil	Date Received:	12/14/15
Method:	SW846 8082A SW846 3546	Percent Solids:	90.3
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124608.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124585.D	20	12/23/15	KM	12/17/15	OP89820	G2G3562

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2	16.2 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	34	11	ug/kg	
11104-28-2	Aroclor 1221	ND	34	20	ug/kg	
11141-16-5	Aroclor 1232	ND	34	11	ug/kg	
53469-21-9	Aroclor 1242	ND	34	15	ug/kg	
12672-29-6	Aroclor 1248	14400 [a]	680	210	ug/kg	~~B~~
11097-69-1	Aroclor 1254	ND	34	15	ug/kg	
11096-82-5	Aroclor 1260	721	34	14	ug/kg	
11100-14-4	Aroclor 1268	ND	34	11	ug/kg	
37324-23-5	Aroclor 1262	ND	34	9.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	85%	112%	20-152%
877-09-8	Tetrachloro-m-xylene	79%	105%	20-152%
2051-24-3	Decachlorobiphenyl	88%	105%	12-157%
2051-24-3	Decachlorobiphenyl	139%	124%	12-157%

(a) Result is from Run# 2

E. Drew 1/22/16

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

4.3
4

Client Sample ID:	PE-061R (16.0-16.5)		
Lab Sample ID:	JC10583-3	Date Sampled:	12/11/15
Matrix:	SO - Soil	Date Received:	12/14/15
Method:	SW846 8082A SW846 3546	Percent Solids:	89.7
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124609.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124586.D	10	12/23/15	KM	12/17/15	OP89820	G2G3562

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2	15.2 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	12	ug/kg	
11104-28-2	Aroclor 1221	ND	37	22	ug/kg	
11141-16-5	Aroclor 1232	ND	37	12	ug/kg	
53469-21-9	Aroclor 1242	ND	37	17	ug/kg	
12672-29-6	Aroclor 1248	12400 [a]	370	110	ug/kg	~~B~~
11097-69-1	Aroclor 1254	ND	37	16	ug/kg	
11096-82-5	Aroclor 1260	620	37	15	ug/kg	J
11100-14-4	Aroclor 1268	ND	37	11	ug/kg	
37324-23-5	Aroclor 1262	ND	37	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	45%	41%	20-152%
877-09-8	Tetrachloro-m-xylene	53%	50%	20-152%
2051-24-3	Decachlorobiphenyl	81%	86%	12-157%
2051-24-3	Decachlorobiphenyl	65%	70%	12-157%

(a) Result is from Run# 2

E. Drel 1/22/16

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	PE-063R(16.0-16.5)		
Lab Sample ID:	JC10583-4	Date Sampled:	12/11/15
Matrix:	SO - Soil	Date Received:	12/14/15
Method:	SW846 8082A SW846 3546	Percent Solids:	71.9
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124610.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124619.D	200	12/23/15	DG	12/17/15	OP89820	G2G3563

	Initial Weight	Final Volume
Run #1	15.0 g	10.0 ml
Run #2	15.0 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	46	15	ug/kg	
11104-28-2	Aroclor 1221	ND	46	27	ug/kg	
11141-16-5	Aroclor 1232	ND	46	15	ug/kg	
53469-21-9	Aroclor 1242	ND	46	21	ug/kg	
12672-29-6	Aroclor 1248	332000 [a]	9300	2800	ug/kg	~~B~~
11097-69-1	Aroclor 1254	ND	46	21	ug/kg	
11096-82-5	Aroclor 1260	32700 [a]	9300	3900	ug/kg	
11100-14-4	Aroclor 1268	ND	46	14	ug/kg	
37324-23-5	Aroclor 1262	ND	46	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	543% [b]	0% [c]	20-152%
877-09-8	Tetrachloro-m-xylene	57%	0% [c]	20-152%
2051-24-3	Decachlorobiphenyl	69%	0% [c]	12-157%
2051-24-3	Decachlorobiphenyl	79%	0% [c]	12-157%

(a) Result is from Run# 2
(b) Outside control limits due to matrix interference.
(c) Outside control limits due to dilution.

L. Drel 1/22/16

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	PS-001R(36.5-37.0)		
Lab Sample ID:	JC10583-5	Date Sampled:	12/11/15
Matrix:	SO - Soil	Date Received:	12/14/15
Method:	SW846 8082A SW846 3546	Percent Solids:	82.3
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124578.D	1	12/23/15	KM	12/17/15	OP89820	G2G3562
Run #2							

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	12	ug/kg	
11104-28-2	Aroclor 1221	ND	38	22	ug/kg	
11141-16-5	Aroclor 1232	ND	38	12	ug/kg	
53469-21-9	Aroclor 1242	ND	38	17	ug/kg	
12672-29-6	Aroclor 1248	1160	38	11	ug/kg	~~B~~ J
11097-69-1	Aroclor 1254	983	38	17	ug/kg	J
11096-82-5	Aroclor 1260 [a]	266	38	16	ug/kg	J
11100-14-4	Aroclor 1268	ND	38	12	ug/kg	
37324-23-5	Aroclor 1262	ND	38	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		20-152%
877-09-8	Tetrachloro-m-xylene	87%		20-152%
2051-24-3	Decachlorobiphenyl	78%		12-157%
2051-24-3	Decachlorobiphenyl	101%		12-157%

(a) Reported from 1st signal. %D of check on 2nd signal excess method criteria (20 %) so using for confirmation only.

K. Dre 1/22/16

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	PS-002R(36.5-37.0)		
Lab Sample ID:	JC10583-6	Date Sampled:	12/11/15
Matrix:	SO - Soil	Date Received:	12/14/15
Method:	SW846 8082A SW846 3546	Percent Solids:	92.8
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124611.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124620.D	40	12/23/15	DG	12/17/15	OP89820	G2G3563

	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2	15.8 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	34	11	ug/kg	
11104-28-2	Aroclor 1221	ND	34	20	ug/kg	
11141-16-5	Aroclor 1232	ND	34	11	ug/kg	
53469-21-9	Aroclor 1242	ND	34	15	ug/kg	
12672-29-6	Aroclor 1248	48300 [a]	1400	420	ug/kg	~~B~~
11097-69-1	Aroclor 1254	ND	34	15	ug/kg	
11096-82-5	Aroclor 1260	2930 [a]	1400	580	ug/kg	
11100-14-4	Aroclor 1268	ND	34	11	ug/kg	
37324-23-5	Aroclor 1262	ND	34	9.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%	86%	20-152%
877-09-8	Tetrachloro-m-xylene	66%	106%	20-152%
2051-24-3	Decachlorobiphenyl	60%	84%	12-157%
2051-24-3	Decachlorobiphenyl	230% [b]	238% [b]	12-157%

(a) Result is from Run# 2
(b) Outside control limits due to matrix interference.

E. Dick 1/22/16

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

4.7 4

Client Sample ID:	SB-034(36.5-37.0)		
Lab Sample ID:	JC10583-7	Date Sampled:	12/11/15
Matrix:	SO - Soil	Date Received:	12/14/15
Method:	SW846 8082A SW846 3546	Percent Solids:	92.2
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124612.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124589.D	10	12/23/15	KM	12/17/15	OP89820	G2G3562

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2	15.6 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	11	ug/kg	
11104-28-2	Aroclor 1221	ND	35	20	ug/kg	
11141-16-5	Aroclor 1232	ND	35	11	ug/kg	
53469-21-9	Aroclor 1242	ND	35	16	ug/kg	
12672-29-6	Aroclor 1248	10300 [a]	350	110	ug/kg	~~B~~ J
11097-69-1	Aroclor 1254	9220 [a]	350	150	ug/kg	J
11096-82-5	Aroclor 1260	2010 [a]	350	150	ug/kg	J
11100-14-4	Aroclor 1268	ND	35	11	ug/kg	
37324-23-5	Aroclor 1262	ND	35	9.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	52%	46%	20-152%
877-09-8	Tetrachloro-m-xylene	58%	42%	20-152%
2051-24-3	Decachlorobiphenyl	135%	200% [b]	12-157%
2051-24-3	Decachlorobiphenyl	2681% [b]	1554% [b]	12-157%

(a) Result is from Run# 2
(b) Outside control limits due to matrix interference.

E. Dr 1/22/16

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-031(25.0-25.5)		
Lab Sample ID:	JC10583-8	Date Sampled:	12/11/15
Matrix:	SO - Soil	Date Received:	12/14/15
Method:	SW846 8082A SW846 3546	Percent Solids:	88.3
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124613.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124621.D	200	12/23/15	DG	12/17/15	OP89820	G2G3563

	Initial Weight	Final Volume
Run #1	16.2 g	10.0 ml
Run #2	16.2 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	11	ug/kg	
11104-28-2	Aroclor 1221	ND	35	21	ug/kg	
11141-16-5	Aroclor 1232	ND	35	12	ug/kg	
53469-21-9	Aroclor 1242	ND	35	16	ug/kg	
12672-29-6	Aroclor 1248	138000 [a]	7000	2100	ug/kg	~~B~~
11097-69-1	Aroclor 1254	ND	35	16	ug/kg	
11096-82-5	Aroclor 1260	7490 [a]	7000	3000	ug/kg	
11100-14-4	Aroclor 1268	ND	35	11	ug/kg	
37324-23-5	Aroclor 1262	ND	35	9.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%	0% [b]	20-152%
877-09-8	Tetrachloro-m-xylene	68%	0% [b]	20-152%
2051-24-3	Decachlorobiphenyl	992% [c]	0% [b]	12-157%
2051-24-3	Decachlorobiphenyl	179% [c]	0% [b]	12-157%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.
(c) Outside control limits due to matrix interference.

E. Dr[illegible] 1/22/16

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-032(25.0-25.5)		
Lab Sample ID:	JC10583-10	Date Sampled:	12/11/15
Matrix:	SO - Soil	Date Received:	12/14/15
Method:	SW846 8082A SW846 3546	Percent Solids:	88.7
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124614.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124622.D	200	12/23/15	DG	12/17/15	OP89820	G2G3563

	Initial Weight	Final Volume
Run #1	17.0 g	10.0 ml
Run #2	17.0 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	11	ug/kg	
11104-28-2	Aroclor 1221	ND	33	19	ug/kg	
11141-16-5	Aroclor 1232	ND	33	11	ug/kg	
53469-21-9	Aroclor 1242	ND	33	15	ug/kg	
12672-29-6	Aroclor 1248	162000 [a]	6600	2000	ug/kg	~~B~~
11097-69-1	Aroclor 1254	ND	33	15	ug/kg	
11096-82-5	Aroclor 1260	9190 [a]	6600	2800	ug/kg	
11100-14-4	Aroclor 1268	ND	33	10	ug/kg	
37324-23-5	Aroclor 1262	ND	33	9.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%	0% [b]	20-152%
877-09-8	Tetrachloro-m-xylene	67%	0% [b]	20-152%
2051-24-3	Decachlorobiphenyl	102%	0% [b]	12-157%
2051-24-3	Decachlorobiphenyl	242% [c]	0% [b]	12-157%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.
(c) Outside control limits due to matrix interference.

E. Dick 1/22/16

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-035(11.0-11.5)		
Lab Sample ID:	JC10583-11	Date Sampled:	12/11/15
Matrix:	SO - Soil	Date Received:	12/14/15
Method:	SW846 8082A SW846 3546	Percent Solids:	91.4
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124617.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124592.D	40	12/23/15	KM	12/17/15	OP89820	G2G3562
Run #3	2G124623.D	200	12/23/15	DG	12/17/15	OP89820	G2G3563

	Initial Weight	Final Volume
Run #1	15.0 g	10.0 ml
Run #2	15.0 g	10.0 ml
Run #3	15.0 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	12	ug/kg	
11104-28-2	Aroclor 1221	ND	36	21	ug/kg	
11141-16-5	Aroclor 1232	ND	36	12	ug/kg	
53469-21-9	Aroclor 1242	ND	36	16	ug/kg	
12672-29-6	Aroclor 1248	165000 [a]	7300	2200	ug/kg	~~B~~
11097-69-1	Aroclor 1254	ND	36	16	ug/kg	
11096-82-5	Aroclor 1260 [b]	8430 [c]	1500	620	ug/kg	
11100-14-4	Aroclor 1268	ND	36	11	ug/kg	
37324-23-5	Aroclor 1262	ND	36	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
877-09-8	Tetrachloro-m-xylene	80%	116%	0% [d]	20-152%
877-09-8	Tetrachloro-m-xylene	61%	103%	0% [d]	20-152%
2051-24-3	Decachlorobiphenyl	85%	115%	0% [d]	12-157%
2051-24-3	Decachlorobiphenyl	250% [e]	201% [e]	0% [d]	12-157%

(a) Result is from Run# 3
(b) Reported from 1st signal. %D of check on 2nd signal excess method criteria (20 %) so using for confirmation only.
(c) Result is from Run# 2
(d) Outside control limits due to dilution.
(e) Outside control limits due to matrix interference.

E. Dre 1/22/16

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	SB-033(36.5-37.0)		
Lab Sample ID:	JC10583-12	Date Sampled:	12/11/15
Matrix:	SO - Soil	Date Received:	12/14/15
Method:	SW846 8082A SW846 3546	Percent Solids:	76.0
Project:	Alcoa, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G124618.D	1	12/23/15	DG	12/17/15	OP89820	G2G3563
Run #2	2G124593.D	200	12/23/15	KM	12/17/15	OP89820	G2G3562

	Initial Weight	Final Volume
Run #1	16.5 g	10.0 ml
Run #2	16.5 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	40	13	ug/kg	
11104-28-2	Aroclor 1221	ND	40	23	ug/kg	
11141-16-5	Aroclor 1232	ND	40	13	ug/kg	
53469-21-9	Aroclor 1242	ND	40	18	ug/kg	
12672-29-6	Aroclor 1248	99600 [a]	8000	2400	ug/kg	~~B~~
11097-69-1	Aroclor 1254	ND	40	18	ug/kg	
11096-82-5	Aroclor 1260	ND	40	17	ug/kg	
11100-14-4	Aroclor 1268	ND	40	12	ug/kg	
37324-23-5	Aroclor 1262	ND	40	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%	0% [b]	20-152%
877-09-8	Tetrachloro-m-xylene	68%	0% [b]	20-152%
2051-24-3	Decachlorobiphenyl	113%	0% [b]	12-157%
2051-24-3	Decachlorobiphenyl	173% [c]	0% [b]	12-157%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.
(c) Outside control limits due to matrix interference.

E. Dre 1/22/16

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

APPENDIX E

CONCRETE CHIP LABORATORY DATA DELIVERABLES
J114699

ANALYTICAL REPORT

Job Number: 460-114699-1

Job Description: Alcoa

For:
Appalachia Hydrologic and Env Consulting
678 US Hwy 202/206 North
Building 5, Unit 4
Bridgewater, NJ 08807

Attention: Mr. James Llewellyn

Melissa Haas

Approved for release.
Melissa Haas
Project Manager I
6/22/2016 3:58 PM

Melissa Haas, Project Manager I
777 New Durham Road, Edison, NJ, 08817
(203)944-1310
melissa.haas@testamericainc.com
06/22/2016

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

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CASE NARRATIVE

Client: Appalachia Hydrologic and Env Consulting

Project: Alcoa

Report Number: 460-114699-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 6/1/2016 1:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.0º C and 5.0º C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

POLYCHLORINATED BIPHENYLS
Samples Manhole 1-1 (460-114699-1), Manhole 1-2 (460-114699-2), Manhole 2-2 (460-114699-3) and Manhole 2-1 (460-114699-4) were analyzed for polychlorinated biphenyls in accordance with EPA SW-846 Method 8082A. The samples were prepared on 06/10/2016 and analyzed on 06/11/2016.

The following sample was diluted to bring the concentration of target analytes within the calibration range: Manhole 2-2 (460-114699-3) at 2.0 and 2.0. Elevated reporting limits (RLs) are provided.

No other difficulties were encountered during the PCBs analysis.

All quality control parameters were within the acceptance limits.

PERCENT SOLIDS/PERCENT MOISTURE
Samples Manhole 1-1 (460-114699-1), Manhole 1-2 (460-114699-2), Manhole 2-2 (460-114699-3) and Manhole 2-1 (460-114699-4) were analyzed for percent solids/percent moisture in accordance with EPA Method CLPISM01.2 (Exhibit D) Modified. The samples were analyzed on 06/06/2016.

No difficulties were encountered during the %solids/moisture analysis.

All quality control parameters were within the acceptance limits.

Sample Summary

Client: Appalachia Hydrologic and Env Consulting
Project/Site: Alcoa

TestAmerica Job ID: 460-114699-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-114699-1	Manhole 1-1	Solid	05/31/16 08:40	06/01/16 13:20
460-114699-2	Manhole 1-2	Solid	05/31/16 08:30	06/01/16 13:20
460-114699-3	Manhole 2-2	Solid	05/31/16 12:05	06/01/16 13:20
460-114699-4	Manhole 2-1	Solid	05/31/16 10:55	06/01/16 13:20

Detection Summary

Client: Appalachia Hydrologic and Env Consulting
Project/Site: Alcoa

TestAmerica Job ID: 460-114699-1

Client Sample ID: Manhole 1-1 — Lab Sample ID: 460-114699-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor 1248	0.22		0.073	0.0097	mg/Kg	1	☼	8082A	Total/NA
Aroclor 1260	0.099		0.073	0.010	mg/Kg	1	☼	8082A	Total/NA

Client Sample ID: Manhole 1-2 — Lab Sample ID: 460-114699-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor 1248	0.076	J	0.086	0.011	mg/Kg	1	☼	8082A	Total/NA

Client Sample ID: Manhole 2-2 — Lab Sample ID: 460-114699-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor 1248 - DL	2.3	D	0.16	0.022	mg/Kg	2	☼	8082A	Total/NA
Aroclor 1260 - DL	1.0	D	0.16	0.022	mg/Kg	2	☼	8082A	Total/NA

Client Sample ID: Manhole 2-1 — Lab Sample ID: 460-114699-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor 1248	0.50		0.081	0.011	mg/Kg	1	☼	8082A	Total/NA
Aroclor 1260	0.12		0.081	0.011	mg/Kg	1	☼	8082A	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Appalachia Hydrologic and Env Consulting
Project/Site: Alcoa

TestAmerica Job ID: 460-114699-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL EDI
Moisture	Percent Moisture	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Client Sample ID: Manhole 1-1

Lab Sample ID: 460-114699-1
Date Collected: 05/31/16 08:40
Matrix: Solid
Date Received: 06/01/16 13:20
Percent Solids: 91.7

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.0097	U	0.073	0.0097	mg/Kg	☼	06/10/16 02:05	06/11/16 15:00	1
Aroclor 1221	0.0097	U	0.073	0.0097	mg/Kg	☼	06/10/16 02:05	06/11/16 15:00	1
Aroclor 1232	0.0097	U	0.073	0.0097	mg/Kg	☼	06/10/16 02:05	06/11/16 15:00	1
Aroclor 1242	0.0097	U	0.073	0.0097	mg/Kg	☼	06/10/16 02:05	06/11/16 15:00	1
Aroclor 1248	**0.22**		0.073	0.0097	mg/Kg	☼	06/10/16 02:05	06/11/16 15:00	1
Aroclor 1254	0.010	U	0.073	0.010	mg/Kg	☼	06/10/16 02:05	06/11/16 15:00	1
Aroclor 1260	**0.099**		0.073	0.010	mg/Kg	☼	06/10/16 02:05	06/11/16 15:00	1
Aroclor 1262	0.010	U	0.073	0.010	mg/Kg	☼	06/10/16 02:05	06/11/16 15:00	1
Aroclor 1268	0.010	U	0.073	0.010	mg/Kg	☼	06/10/16 02:05	06/11/16 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*127*		*47 - 150*	*06/10/16 02:05*	*06/11/16 15:00*	*1*
DCB Decachlorobiphenyl	*111*		*47 - 150*	*06/10/16 02:05*	*06/11/16 15:00*	*1*

Client Sample ID: Manhole 1-2

Lab Sample ID: 460-114699-2
Date Collected: 05/31/16 08:30
Matrix: Solid
Date Received: 06/01/16 13:20
Percent Solids: 77.6

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.011	U	0.086	0.011	mg/Kg	☼	06/10/16 02:05	06/11/16 15:18	1
Aroclor 1221	0.011	U	0.086	0.011	mg/Kg	☼	06/10/16 02:05	06/11/16 15:18	1
Aroclor 1232	0.011	U	0.086	0.011	mg/Kg	☼	06/10/16 02:05	06/11/16 15:18	1
Aroclor 1242	0.011	U	0.086	0.011	mg/Kg	☼	06/10/16 02:05	06/11/16 15:18	1
Aroclor 1248	**0.076**	**J**	0.086	0.011	mg/Kg	☼	06/10/16 02:05	06/11/16 15:18	1
Aroclor 1254	0.012	U	0.086	0.012	mg/Kg	☼	06/10/16 02:05	06/11/16 15:18	1
Aroclor 1260	0.012	U	0.086	0.012	mg/Kg	☼	06/10/16 02:05	06/11/16 15:18	1
Aroclor 1262	0.012	U	0.086	0.012	mg/Kg	☼	06/10/16 02:05	06/11/16 15:18	1
Aroclor 1268	0.012	U	0.086	0.012	mg/Kg	☼	06/10/16 02:05	06/11/16 15:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*122*		*47 - 150*	*06/10/16 02:05*	*06/11/16 15:18*	*1*
DCB Decachlorobiphenyl	*108*		*47 - 150*	*06/10/16 02:05*	*06/11/16 15:18*	*1*

Client Sample ID: Manhole 2-2

Lab Sample ID: 460-114699-3
Date Collected: 05/31/16 12:05
Matrix: Solid
Date Received: 06/01/16 13:20
Percent Solids: 82.4

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.022	U	0.16	0.022	mg/Kg	☼	06/10/16 02:05	06/11/16 15:36	2
Aroclor 1221	0.022	U	0.16	0.022	mg/Kg	☼	06/10/16 02:05	06/11/16 15:36	2
Aroclor 1232	0.022	U	0.16	0.022	mg/Kg	☼	06/10/16 02:05	06/11/16 15:36	2
Aroclor 1242	0.022	U	0.16	0.022	mg/Kg	☼	06/10/16 02:05	06/11/16 15:36	2
Aroclor 1248	**2.3**	**D**	0.16	0.022	mg/Kg	☼	06/10/16 02:05	06/11/16 15:36	2
Aroclor 1254	0.022	U	0.16	0.022	mg/Kg	☼	06/10/16 02:05	06/11/16 15:36	2
Aroclor 1260	**1.0**	**D**	0.16	0.022	mg/Kg	☼	06/10/16 02:05	06/11/16 15:36	2
Aroclor 1262	0.022	U	0.16	0.022	mg/Kg	☼	06/10/16 02:05	06/11/16 15:36	2
Aroclor 1268	0.022	U	0.16	0.022	mg/Kg	☼	06/10/16 02:05	06/11/16 15:36	2

Client Sample ID: Manhole 2-2

Lab Sample ID: 460-114699-3

Date Collected: 05/31/16 12:05
Date Received: 06/01/16 13:20

Matrix: Solid
Percent Solids: 82.4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*144*	*D*	*47 - 150*	*06/10/16 02:05*	*06/11/16 15:36*	*2*
DCB Decachlorobiphenyl	*137*	*D*	*47 - 150*	*06/10/16 02:05*	*06/11/16 15:36*	*2*

Client Sample ID: Manhole 2-1

Lab Sample ID: 460-114699-4

Date Collected: 05/31/16 10:55
Date Received: 06/01/16 13:20

Matrix: Solid
Percent Solids: 82.4

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	0.011	U	0.081	0.011	mg/Kg	☼	06/10/16 02:05	06/11/16 15:54	1
Aroclor 1221	0.011	U	0.081	0.011	mg/Kg	☼	06/10/16 02:05	06/11/16 15:54	1
Aroclor 1232	0.011	U	0.081	0.011	mg/Kg	☼	06/10/16 02:05	06/11/16 15:54	1
Aroclor 1242	0.011	U	0.081	0.011	mg/Kg	☼	06/10/16 02:05	06/11/16 15:54	1
Aroclor 1248	**0.50**		0.081	0.011	mg/Kg	☼	06/10/16 02:05	06/11/16 15:54	1
Aroclor 1254	0.011	U	0.081	0.011	mg/Kg	☼	06/10/16 02:05	06/11/16 15:54	1
Aroclor 1260	**0.12**		0.081	0.011	mg/Kg	☼	06/10/16 02:05	06/11/16 15:54	1
Aroclor 1262	0.011	U	0.081	0.011	mg/Kg	☼	06/10/16 02:05	06/11/16 15:54	1
Aroclor 1268	0.011	U	0.081	0.011	mg/Kg	☼	06/10/16 02:05	06/11/16 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*128*		*47 - 150*	*06/10/16 02:05*	*06/11/16 15:54*	*1*
DCB Decachlorobiphenyl	*105*		*47 - 150*	*06/10/16 02:05*	*06/11/16 15:54*	*1*

Surrogate Summary

Client: Appalachia Hydrologic and Env Consulting
Project/Site: Alcoa

TestAmerica Job ID: 460-114699-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	**Client Sample ID**	**DCB1 (47-150)**	**DCB2 (47-150)**								
460-114699-1	Manhole 1-1	127	111								
460-114699-2	Manhole 1-2	122	108								
460-114699-3 - DL	Manhole 2-2	144 D	137 D								
460-114699-4	Manhole 2-1	128	105								

Surrogate Legend

DCB = DCB Decachlorobiphenyl

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Appalachia Hydrologic and Env Consulting
Project/Site: Alcoa

TestAmerica Job ID: 460-114699-1

GC Semi VOA

Prep Batch: 372775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-114699-1	Manhole 1-1	Total/NA	Solid	3546	
460-114699-2	Manhole 1-2	Total/NA	Solid	3546	
460-114699-3 - DL	Manhole 2-2	Total/NA	Solid	3546	
460-114699-4	Manhole 2-1	Total/NA	Solid	3546	

Analysis Batch: 373069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-114699-1	Manhole 1-1	Total/NA	Solid	8082A	372775
460-114699-2	Manhole 1-2	Total/NA	Solid	8082A	372775
460-114699-3 - DL	Manhole 2-2	Total/NA	Solid	8082A	372775
460-114699-4	Manhole 2-1	Total/NA	Solid	8082A	372775

General Chemistry

Analysis Batch: 371910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-114486-C-10 DU	Duplicate	Total/NA	Solid	Moisture	
460-114699-1	Manhole 1-1	Total/NA	Solid	Moisture	
460-114699-2	Manhole 1-2	Total/NA	Solid	Moisture	
460-114699-3	Manhole 2-2	Total/NA	Solid	Moisture	
460-114699-4	Manhole 2-1	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Appalachia Hydrologic and Env Consulting
Project/Site: Alcoa

TestAmerica Job ID: 460-114699-1

Client Sample ID: Manhole 1-1 — Lab Sample ID: 460-114699-1

Date Collected: 05/31/16 08:40 — **Matrix: Solid**
Date Received: 06/01/16 13:20 — **Percent Solids: 91.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			372775	06/10/16 02:05	ARA	TAL EDI
Total/NA	Analysis	8082A		1	373069	06/11/16 15:00	JHP	TAL EDI
Total/NA	Analysis	Moisture		1	371910	06/06/16 13:45	GTSV	TAL EDI

Client Sample ID: Manhole 1-2 — Lab Sample ID: 460-114699-2

Date Collected: 05/31/16 08:30 — **Matrix: Solid**
Date Received: 06/01/16 13:20 — **Percent Solids: 77.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			372775	06/10/16 02:05	ARA	TAL EDI
Total/NA	Analysis	8082A		1	373069	06/11/16 15:18	JHP	TAL EDI
Total/NA	Analysis	Moisture		1	371910	06/06/16 13:45	GTSV	TAL EDI

Client Sample ID: Manhole 2-2 — Lab Sample ID: 460-114699-3

Date Collected: 05/31/16 12:05 — **Matrix: Solid**
Date Received: 06/01/16 13:20 — **Percent Solids: 82.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546	DL		372775	06/10/16 02:05	ARA	TAL EDI
Total/NA	Analysis	8082A	DL	2	373069	06/11/16 15:36	JHP	TAL EDI
Total/NA	Analysis	Moisture		1	371910	06/06/16 13:45	GTSV	TAL EDI

Client Sample ID: Manhole 2-1 — Lab Sample ID: 460-114699-4

Date Collected: 05/31/16 10:55 — **Matrix: Solid**
Date Received: 06/01/16 13:20 — **Percent Solids: 82.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			372775	06/10/16 02:05	ARA	TAL EDI
Total/NA	Analysis	8082A		1	373069	06/11/16 15:54	JHP	TAL EDI
Total/NA	Analysis	Moisture		1	371910	06/06/16 13:45	GTSV	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Certification Summary

Client: Appalachia Hydrologic and Env Consulting
Project/Site: Alcoa

TestAmerica Job ID: 460-114699-1

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Jersey	NELAP	2	12028	06-30-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

8082A

Polychlorinated Biphenyls (PCBs) by Gas Chromatography

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): CLP-1 ID: 0.53(mm) GC Column (2): CLP-2 ID: 0.53(mm)

Client Sample ID	Lab Sample ID	DCB1 #	DCB2 #
Manhole 1-1	460-114699-1	111	127
Manhole 1-2	460-114699-2	108	122
Manhole 2-2 DL	460-114699-3 DL	137 D	144 D
Manhole 2-1	460-114699-4	105	128

	QC LIMITS
DCB = DCB Decachlorobiphenyl	47-150

Column to be used to flag recovery values

FORM II 8082A

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Sample No.: CCVIS 460-373069/3 Date Analyzed: 06/11/2016 13:42

Instrument ID: CPESTGC9 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): 9F023732.D Heated Purge: (Y/N) N

Calibration ID: 55736

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2395213	1.62				
UPPER LIMIT		4790426	1.69				
LOWER LIMIT		1197607	1.55				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 460-373069/4		2673351	1.62				
460-114699-1	Manhole 1-1	2879357	1.62				
460-114699-2	Manhole 1-2	2855866	1.62				
460-114699-3 DL	Manhole 2-2 DL	2772699	1.62				
460-114699-4	Manhole 2-1	2750089	1.62				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.07 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Sample No.: CCVIS 460-373069/3 Date Analyzed: 06/11/2016 13:42

Instrument ID: CPESTGC9 GC Column: CLP-1 ID: 0.53(mm)

Lab File ID (Standard): 9F023732.D Heated Purge: (Y/N) N

Calibration ID: 55737

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		3322584	1.40				
UPPER LIMIT		6645168	1.47				
LOWER LIMIT		1661292	1.33				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 460-373069/4		3394038	1.40				
460-114699-1	Manhole 1-1	3368404	1.41				
460-114699-2	Manhole 1-2	3502319	1.41				
460-114699-3 DL	Manhole 2-2 DL	3094153	1.41				
460-114699-4	Manhole 2-1	3443702	1.41				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.07 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Client Sample ID: Manhole 1-1 Lab Sample ID: 460-114699-1

Instrument ID (1): CPESTGC9 Instrument ID (2): CPESTGC9

Date Analyzed (1): 06/11/2016 15:00 Date Analyzed (2): 06/11/2016 15:00

GC Column (1): CLP-1 ID: 0.53(mm) GC Column (2): CLP-2 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Aroclor 1248	1	1	2.86	2.79	2.93	0.128	0.18	19.9
		2	3.38	3.31	3.45	0.112		
		3	3.76	3.69	3.83	0.175		
		4	4.11	4.04	4.18	0.0883		
		5	4.53	4.44	4.58	0.189		
		6	4.77	4.70	4.84	0.233		
		7	5.23	5.16	5.30	0.292		
		8	5.92	5.85	5.99	0.204		
	2	1	3.71	3.68	3.74	0.148	0.22	
		2	4.28	4.21	4.35	0.146		
		3	4.71	4.64	4.78	0.234		
		4	4.76	4.69	4.83	0.254		
		5	5.19	5.12	5.26	0.162		
		6	5.52	5.45	5.59	0.189		
		7	5.58	5.51	5.65	0.300		
		8	6.87	6.81	6.95	0.302		
Aroclor 1260	1	1	5.46	5.38	5.52	0.131	0.080	21.0
		2	6.19	6.12	6.26	0.117		
		3	6.36	6.29	6.43	0.0862		
		4	6.74	6.66	6.80	0.0695		
		5	7.26	7.19	7.33	0.0549		
		6	7.80	7.73	7.87	0.0582		
		8	8.74	8.67	8.81	0.0461		
	2	1	6.56	6.53	6.59	0.130	0.099	
		2	6.82	6.75	6.89	0.170		
		3	7.19	7.12	7.26	0.125		
		4	8.08	8.01	8.15	0.0967		
		5	8.52	8.45	8.59	0.0808		
		6	8.83	8.76	8.90	0.0724		
		7	9.20	9.13	9.27	0.0652		
		8	9.70	9.64	9.78	0.0543		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Client Sample ID: Manhole 1-2 Lab Sample ID: 460-114699-2

Instrument ID (1): CPESTGC9 Instrument ID (2): CPESTGC9

Date Analyzed (1): 06/11/2016 15:18 Date Analyzed (2): 06/11/2016 15:18

GC Column (1): CLP-1 ID: 0.53(mm) GC Column (2): CLP-2 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Aroclor 1248	1	1	2.86	2.79	2.93	0.0624	0.057	27.5
		2	3.38	3.31	3.45	0.0676		
		3	3.76	3.69	3.83	0.0623		
		4	4.11	4.04	4.18	0.0464		
		5	4.53	4.44	4.58	0.0471		
		6	4.77	4.70	4.84	0.0676		
		7	5.23	5.16	5.30	0.0488		
	2	1	3.72	3.68	3.74	0.0813	0.076	
		2	4.28	4.21	4.35	0.0714		
		3	4.71	4.64	4.78	0.0829		
		4	4.76	4.69	4.83	0.0902		
		5	5.19	5.12	5.26	0.0707		
		6	5.52	5.45	5.59	0.0516		
		7	5.58	5.51	5.65	0.0824		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Client Sample ID: Manhole 2-2 DL Lab Sample ID: 460-114699-3 DL

Instrument ID (1): CPESTGC9 Instrument ID (2): CPESTGC9

Date Analyzed (1): 06/11/2016 15:36 Date Analyzed (2): 06/11/2016 15:36

GC Column (1): CLP-1 ID: 0.53(mm) GC Column (2): CLP-2 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Aroclor 1248	1	1	2.86	2.79	2.93	2.00	2.0	11.0
		2	3.38	3.31	3.45	2.25		
		3	3.77	3.69	3.83	2.22		
		4	4.11	4.04	4.18	1.72		
		5	4.53	4.44	4.58	1.65		
		6	4.77	4.70	4.84	2.18		
		7	5.23	5.16	5.30	2.44		
		8	5.92	5.85	5.99	1.69		
	2	1	3.72	3.68	3.74	2.33	2.3	
		2	4.28	4.21	4.35	2.56		
		3	4.71	4.64	4.78	2.17		
		4	4.76	4.69	4.83	2.59		
		5	5.19	5.12	5.26	2.06		
		6	5.52	5.45	5.59	1.61		
		7	5.58	5.51	5.65	2.29		
		8	6.87	6.81	6.95	2.41		
Aroclor 1260	1	1	5.45	5.38	5.52	1.25	0.98	5.7
		2	6.19	6.12	6.26	1.19		
		3	6.36	6.29	6.43	1.08		
		4	6.73	6.66	6.80	0.917		
		5	7.26	7.19	7.33	0.868		
		6	7.80	7.73	7.87	0.957		
		7	7.99	7.92	8.06	0.829		
		8	8.73	8.67	8.81	0.774		
	2	1	6.56	6.53	6.59	1.12	1.0	
		2	6.82	6.75	6.89	1.35		
		3	7.19	7.12	7.26	1.12		
		4	8.08	8.01	8.15	1.07		
		5	8.52	8.45	8.59	1.04		
		6	8.83	8.76	8.90	0.929		
		7	9.19	9.13	9.27	0.891		
		8	9.69	9.64	9.78	0.800		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Client Sample ID: Manhole 2-1 Lab Sample ID: 460-114699-4

Instrument ID (1): CPESTGC9 Instrument ID (2): CPESTGC9

Date Analyzed (1): 06/11/2016 15:54 Date Analyzed (2): 06/11/2016 15:54

GC Column (1): CLP-1 ID: 0.53(mm) GC Column (2): CLP-2 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Aroclor 1248	1	1	2.86	2.79	2.93	0.411	0.39	24.7
		2	3.38	3.31	3.45	0.497		
		3	3.78	3.69	3.83	0.522		
		4	4.11	4.04	4.18	0.340		
		5	4.54	4.44	4.58	0.340		
		6	4.77	4.70	4.84	0.354		
		7	5.23	5.16	5.30	0.439		
		8	5.92	5.85	5.99	0.242		
	2	1	3.72	3.68	3.74	0.488	0.50	
		2	4.28	4.21	4.35	0.600		
		3	4.71	4.64	4.78	0.534		
		4	4.76	4.69	4.83	0.673		
		5	5.19	5.12	5.26	0.479		
		6	5.52	5.45	5.59	0.316		
		7	5.58	5.51	5.65	0.465		
		8	6.87	6.81	6.95	0.477		
Aroclor 1260	1	1	5.46	5.38	5.52	0.129	0.088	33.8
		2	6.19	6.12	6.26	0.134		
		3	6.37	6.29	6.43	0.0906		
		4	6.74	6.66	6.80	0.0802		
		5	7.27	7.19	7.33	0.0734		
		6	7.80	7.73	7.87	0.0758		
		7	7.99	7.92	8.06	0.0530		
		8	8.73	8.67	8.81	0.0687		
	2	1	6.55	6.53	6.59	0.137	0.12	
		2	6.82	6.75	6.89	0.203		
		3	7.19	7.12	7.26	0.149		
		4	8.08	8.01	8.15	0.120		
		5	8.52	8.45	8.59	0.0974		
		6	8.83	8.76	8.90	0.106		
		7	9.19	9.13	9.27	0.0915		
		8	9.69	9.64	9.78	0.0883		

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison
Job No.: 460-114699-1
SDG No.:
Client Sample ID: Manhole 1-1
Lab Sample ID: 460-114699-1
Matrix: Solid
Lab File ID: 9F023736.D
Analysis Method: 8082A
Date Collected: 05/31/2016 08:40
Extraction Method: 3546
Date Extracted: 06/10/2016 02:05
Sample wt/vol: 15.0215(g)
Date Analyzed: 06/11/2016 15:00
Con. Extract Vol.: 10(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: CLP-2 ID: 0.53(mm)
% Moisture: 8.3
GPC Cleanup:(Y/N) N
Analysis Batch No.: 373069
Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12672-29-6	Aroclor 1248	0.22		0.073	0.0097
11096-82-5	Aroclor 1260	0.099		0.073	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	127		47-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023736.D
Lims ID: 460-114699-A-1-A
Client ID: Manhole 1-1
Sample Type: Client
Inject. Date: 11-Jun-2016 15:00:08 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0042042-007
Operator ID: Instrument ID: CPESTGC9

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 13-Jun-2016 08:53:27 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: patelji Date: 13-Jun-2016 07:48:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene						M
1	1.618	1.618	0.000	2879357	20.0	M
2	1.405	1.403	0.002	3368404	20.0	
					RPD = 0.00	
6 PCB-1248						M
1	3.714	3.714	0.000	491679	203.9	M
1	4.284	4.281	0.003	1014952	201.2	M
1	4.712	4.714	-0.002	1017297	321.7	M
1	4.762	4.764	-0.002	1086513	349.8	M
1	5.191	5.194	-0.003	1013019	223.7	
1	5.522	5.524	-0.002	1142435	260.2	
1	5.575	5.579	-0.004	2148128	413.5	
1	6.871	6.875	-0.004	904255	415.3	
		Average of Peak Amounts =			298.6	
2	2.859	2.857	0.002	430349	175.8	
2	3.382	3.375	0.007	955004	154.2	M
2	3.760	3.759	0.001	1617212	241.6	M
2	4.105	4.106	-0.001	465550	121.6	
2	4.532	4.509	0.023	2812377	260.2	
2	4.768	4.765	0.003	1584753	320.9	M
2	5.232	5.233	-0.001	1351997	402.4	M
2	5.920	5.923	-0.003	599574	280.7	M
		Average of Peak Amounts =			244.7	
					RPD = 19.86	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
8 PCB-1260						M
1	6.555	6.561	-0.006	607638	178.9	
1	6.815	6.818	-0.003	1628173	233.9	
1	7.186	7.188	-0.002	1440548	172.9	
1	8.082	8.083	-0.001	824326	133.3	
1	8.520	8.523	-0.003	677710	111.4	M
1	8.831	8.834	-0.003	1218845	99.7	M
1	9.197	9.202	-0.005	805409	89.8	M
1	9.704	9.710	-0.006	274352	74.7	M
		Average of Peak Amounts =			136.8	
2	5.455	5.453	0.002	1312109	180.3	M
2	6.190	6.188	0.002	2068285	161.7	M
2	6.364	6.363	0.001	931330	118.8	M
2	6.735	6.733	0.002	757734	95.7	M
2	7.263	7.261	0.002	1456000	75.6	M
2	7.800	7.797	0.003	725439	80.1	M
2	0.000	7.985	-7.985	0	0	
2	8.736	8.738	-0.002	343340	63.5	
		Average of Peak Amounts =			110.8	
					RPD = 20.98	
$ 11 DCB Decachlorobiphenyl						M
1	10.151	10.157	-0.006	6534769	63.6	M
2	9.204	9.207	-0.003	7815090	55.7	
					RPD = 13.22	

QC Flag Legend

Review Flags

M - Manually Integrated

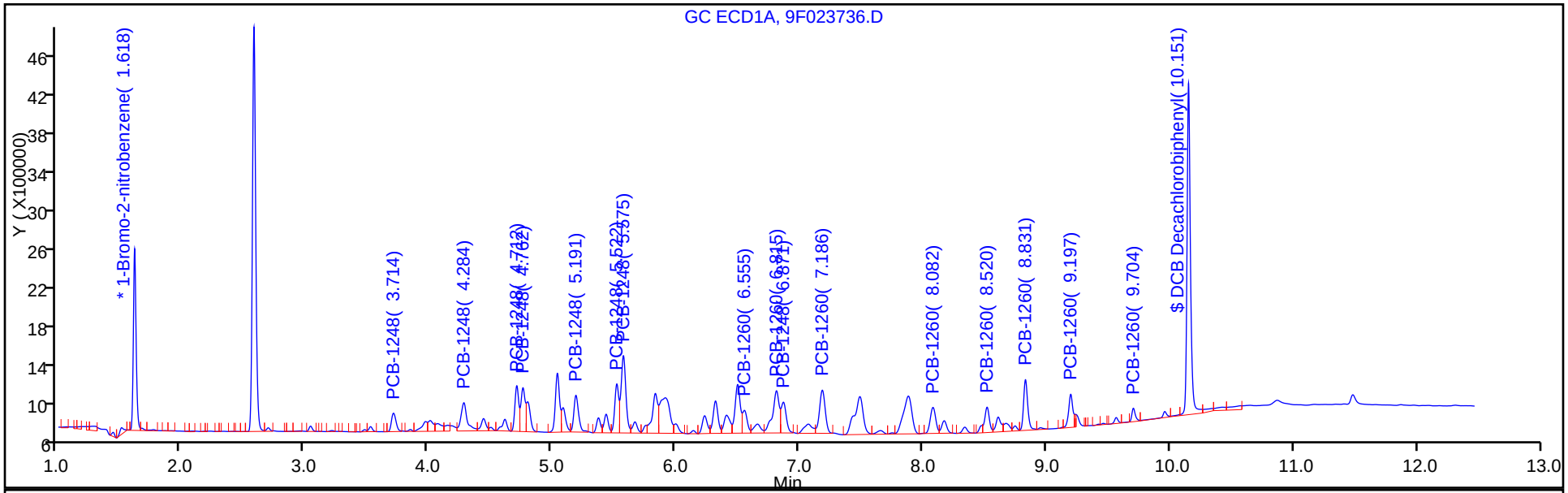
Reagents:

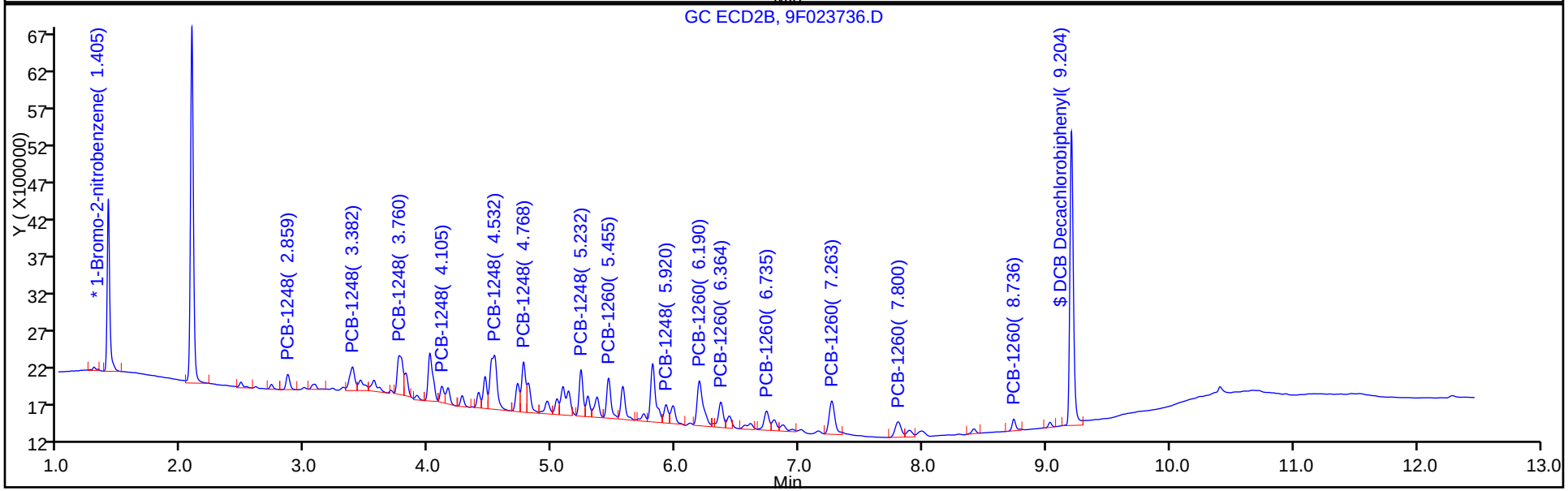
SGPCBISTD_00006 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 13-Jun-2016 08:53:31 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023736.D				
Injection Date:	11-Jun-2016 15:00:08	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	460-114699-A-1-A	Lab Sample ID:	460-114699-1	Worklist Smp#:	7
Client ID:	Manhole 1-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		



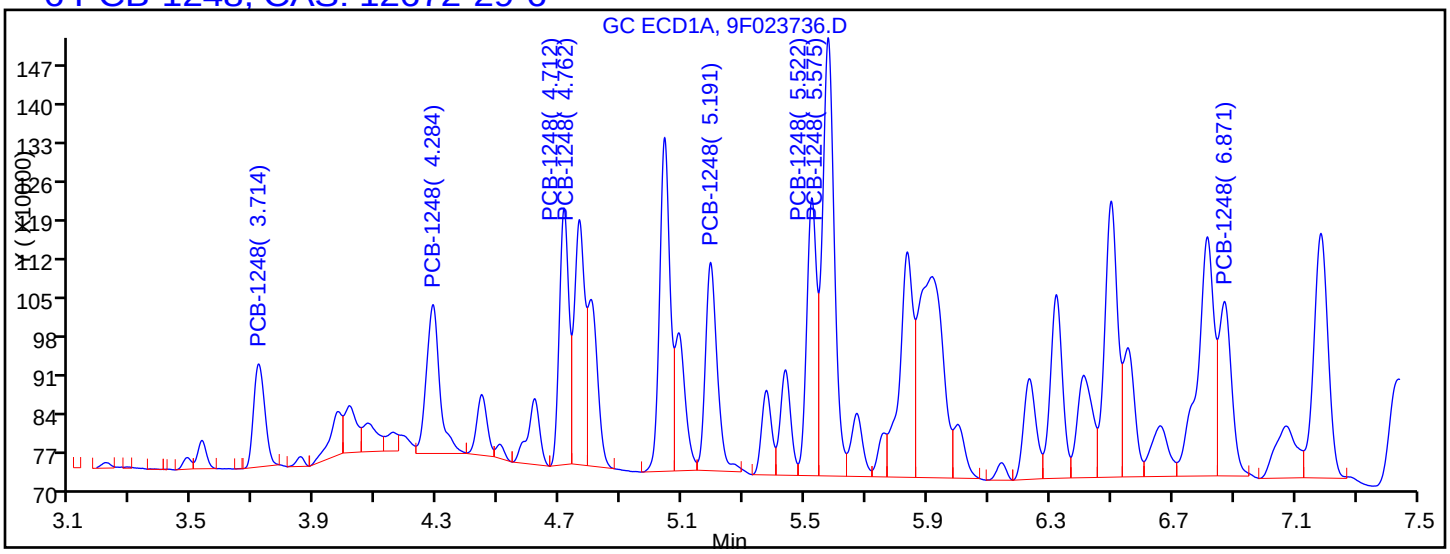


Report Date: 13-Jun-2016 08:53:31 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

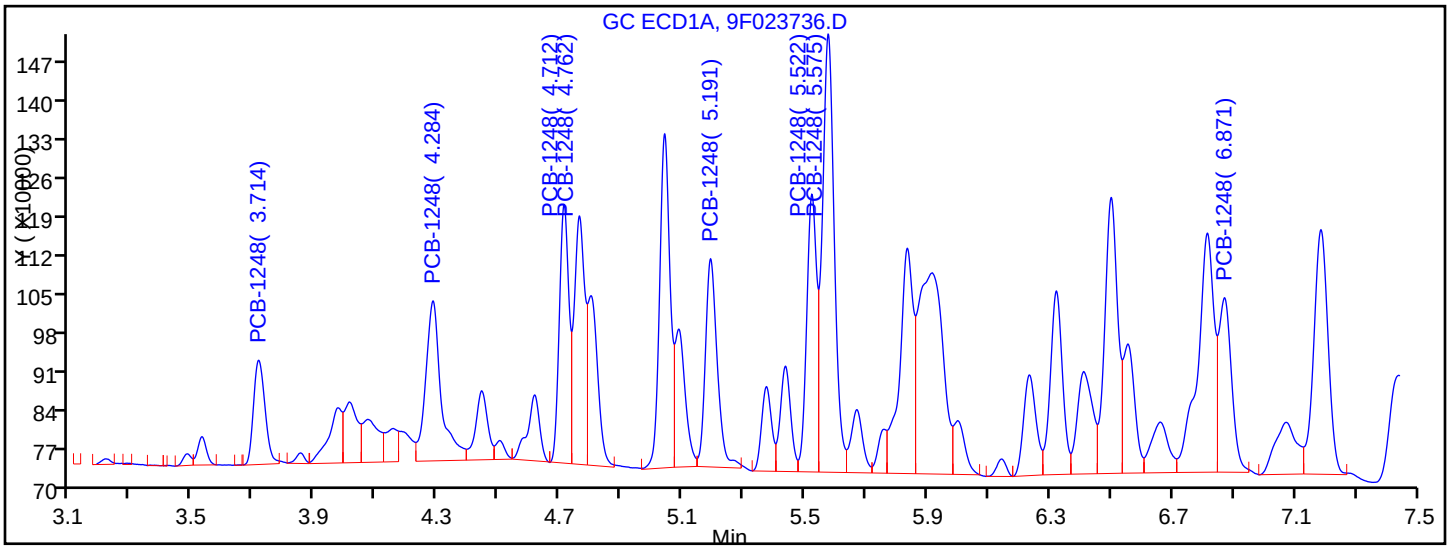
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023736.D				
Injection Date:	11-Jun-2016 15:00:08	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-1-A	Lab Sample ID:	460-114699-1		
Client ID:	Manhole 1-1				
Operator ID:		ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

6 PCB-1248, CAS: 12672-29-6



Processing Integration Results

RT = 3.714	Response = 473255	M
RT = 4.284	Response = 819268	M
RT = 4.712	Response = 1005404	M
RT = 4.762	Response = 1067720	M
RT = 5.191	Response = 1013019	
RT = 5.522	Response = 1142435	
RT = 5.575	Response = 2148128	
RT = 6.871	Response = 904255	



Manual Integration Results

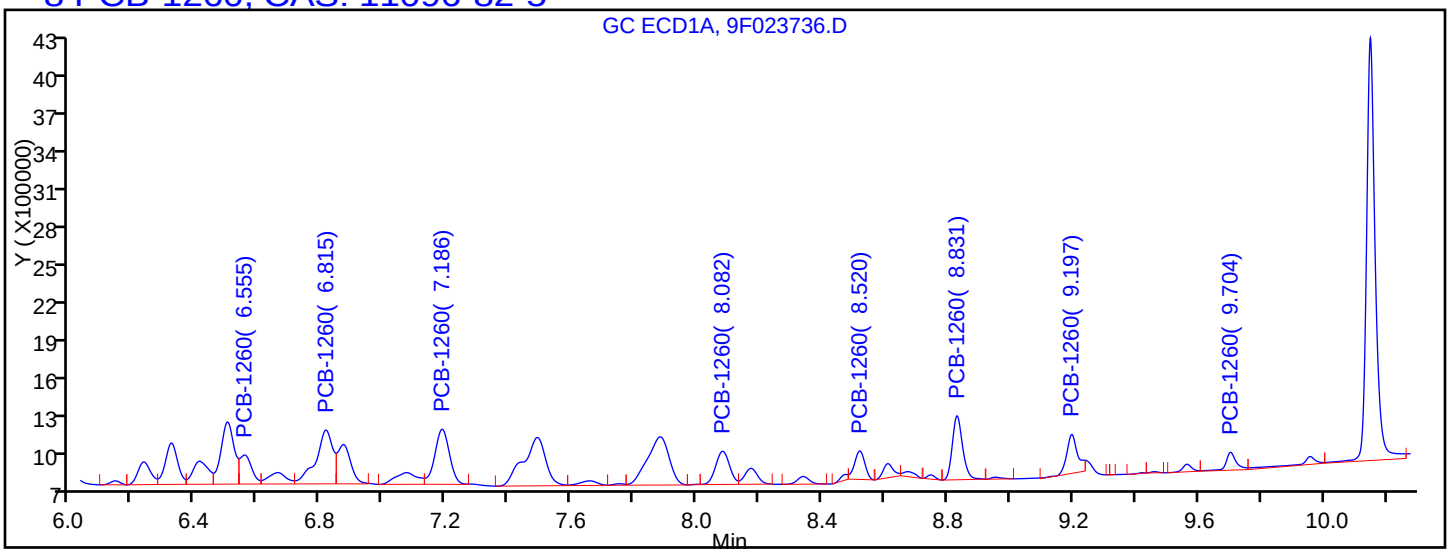
RT = 3.714	Response = 491679	M
RT = 4.284	Response = 1014952	M
RT = 4.712	Response = 1017297	M
RT = 4.762	Response = 1086513	M
RT = 5.191	Response = 1013019	
RT = 5.522	Response = 1142435	

Report Date: 13-Jun-2016 08:53:32 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

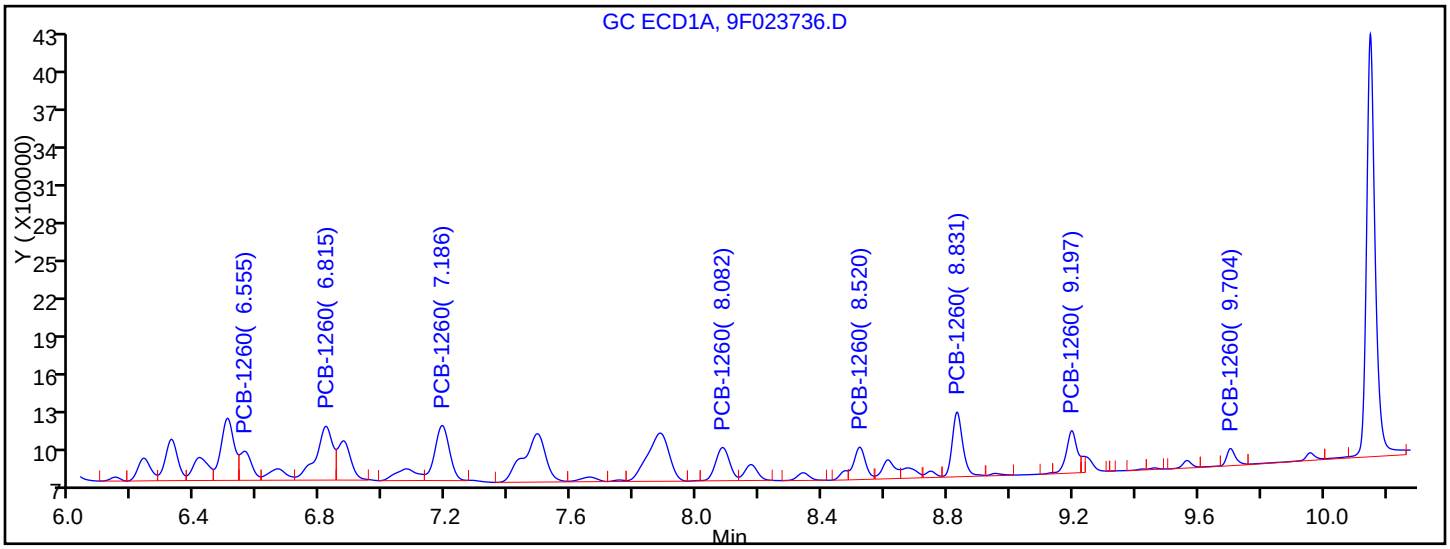
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023736.D				
Injection Date:	11-Jun-2016 15:00:08	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-1-A	Lab Sample ID:	460-114699-1		
Client ID:	Manhole 1-1				
Operator ID:		ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

8 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 6.555	Response = 607638	
RT = 6.815	Response = 1628173	
RT = 7.186	Response = 1440548	
RT = 8.082	Response = 824326	
RT = 8.520	Response = 527443	M
RT = 8.831	Response = 1172447	M
RT = 9.197	Response = 763900	M
RT = 9.704	Response = 325414	M



Manual Integration Results

RT = 6.555	Response = 607638	
RT = 6.815	Response = 1628173	
RT = 7.186	Response = 1440548	
RT = 8.082	Response = 824326	
RT = 8.520	Response = 677710	M
RT = 8.831	Response = 1218845	M

Manual Integration/User Assign Peak Report

TestAmerica Edison

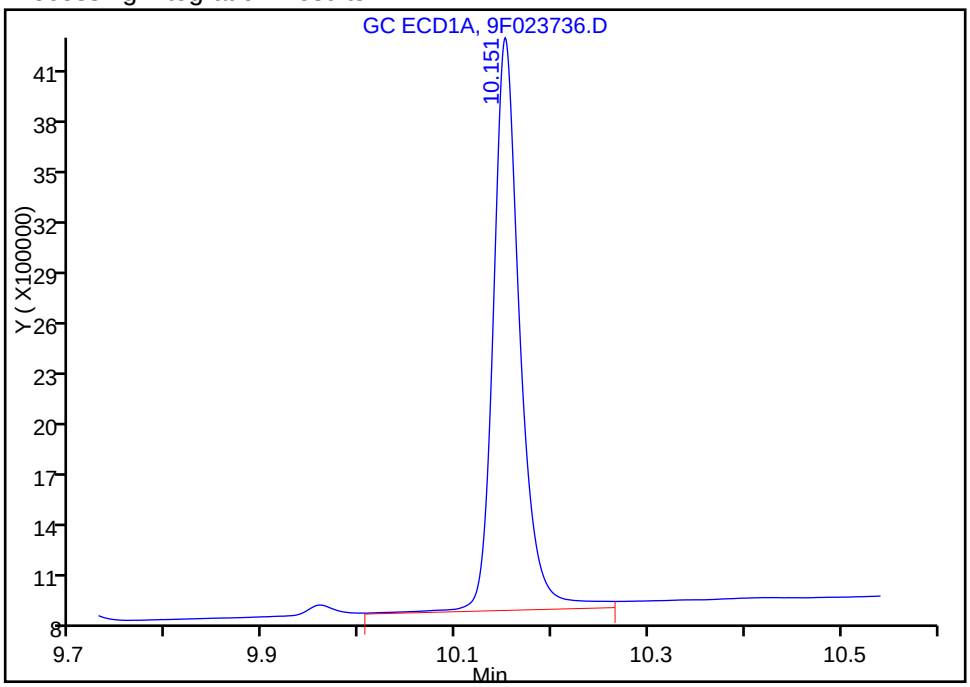
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023736.D				
Injection Date:	11-Jun-2016 15:00:08	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-1-A	Lab Sample ID:	460-114699-1		
Client ID:	Manhole 1-1				
Operator ID:		ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

$ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

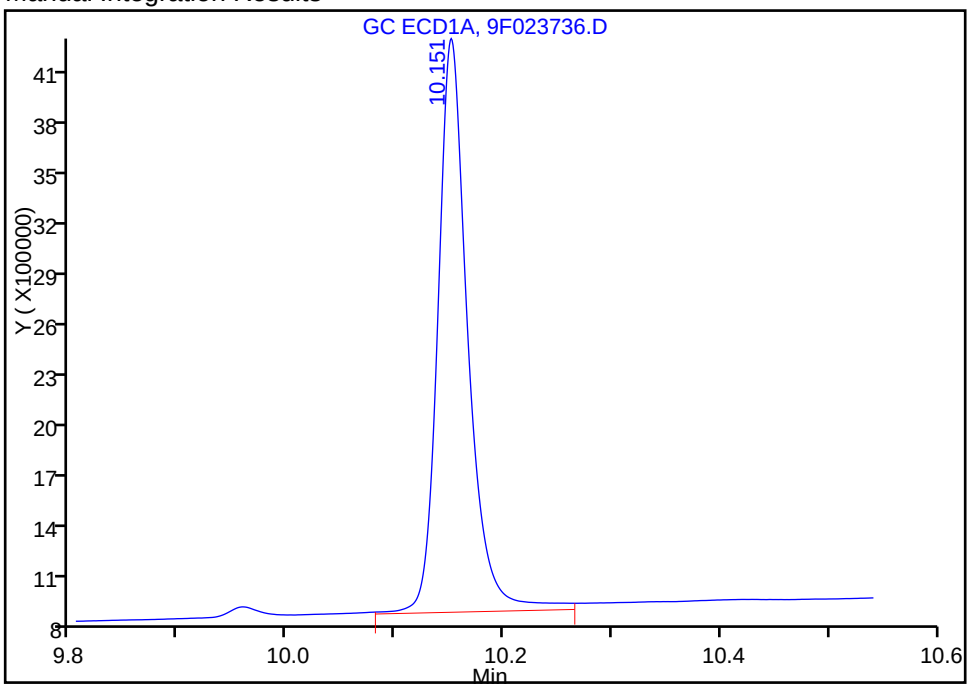
Processing Integration Results

RT: 10.15
Area: 6568007
Amount: 63.875426
Amount Units: ug/l



Manual Integration Results

RT: 10.15
Area: 6534769
Amount: 63.552179
Amount Units: ug/l



Reviewer: patelji, 13-Jun-2016 07:48:07

Audit Action: Split an Integrated Peak Audit Reason: Peak not integrated

TestAmerica Edison

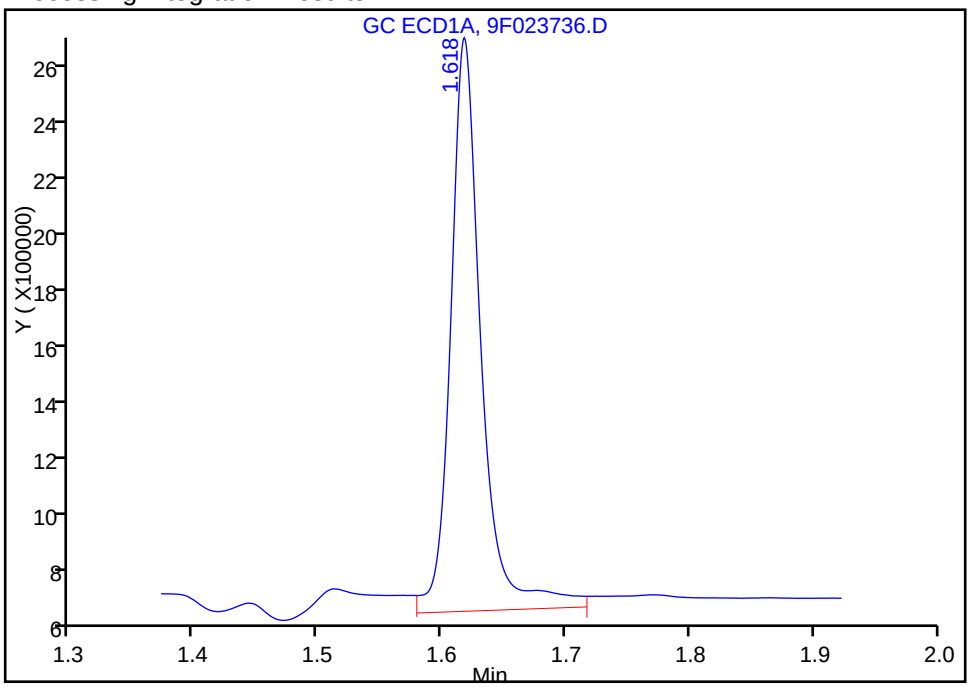
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023736.D				
Injection Date:	11-Jun-2016 15:00:08	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-1-A	Lab Sample ID:	460-114699-1		
Client ID:	Manhole 1-1				
Operator ID:		ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 1

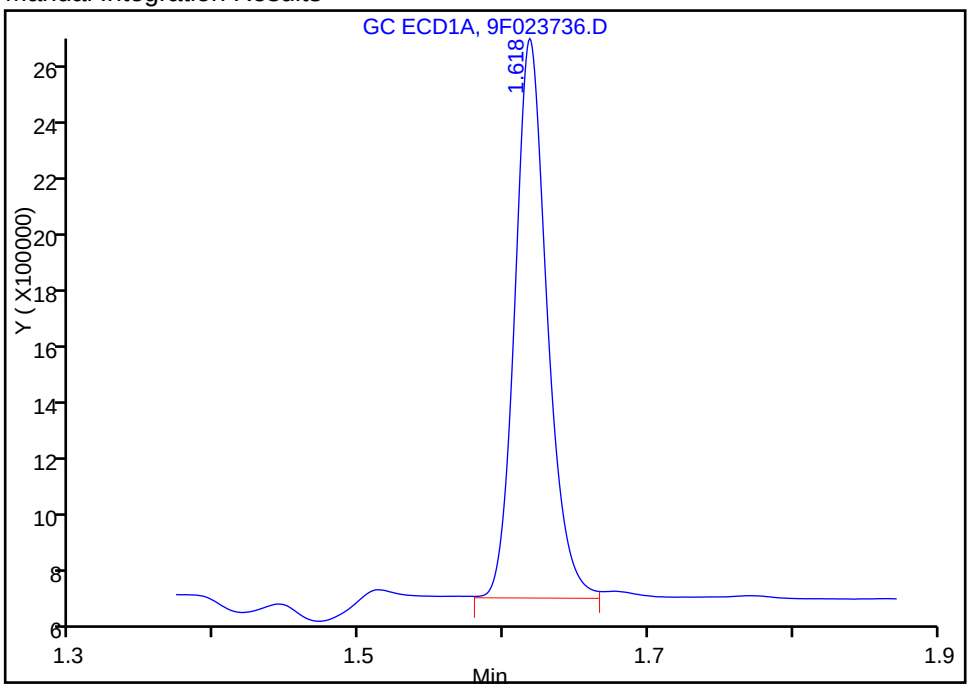
Processing Integration Results

RT: 1.62
Area: 3267884
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.62
Area: 2879357
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 13-Jun-2016 07:48:07
Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison
Job No.: 460-114699-1
SDG No.:
Client Sample ID: Manhole 1-1
Lab Sample ID: 460-114699-1
Matrix: Solid
Lab File ID: 9F023736.D
Analysis Method: 8082A
Date Collected: 05/31/2016 08:40
Extraction Method: 3546
Date Extracted: 06/10/2016 02:05
Sample wt/vol: 15.0215(g)
Date Analyzed: 06/11/2016 15:00
Con. Extract Vol.: 10(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: CLP-1 ID: 0.53(mm)
% Moisture: 8.3
GPC Cleanup:(Y/N) N
Analysis Batch No.: 373069
Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor 1016	0.0097	U	0.073	0.0097
11104-28-2	Aroclor 1221	0.0097	U	0.073	0.0097
11141-16-5	Aroclor 1232	0.0097	U	0.073	0.0097
53469-21-9	Aroclor 1242	0.0097	U	0.073	0.0097
11097-69-1	Aroclor 1254	0.010	U	0.073	0.010
37324-23-5	Aroclor 1262	0.010	U	0.073	0.010
11100-14-4	Aroclor 1268	0.010	U	0.073	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	111		47-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023736.D
Lims ID: 460-114699-A-1-A
Client ID: Manhole 1-1
Sample Type: Client
Inject. Date: 11-Jun-2016 15:00:08 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0042042-007
Operator ID: Instrument ID: CPESTGC9

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 13-Jun-2016 08:53:27 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: patelji Date: 13-Jun-2016 07:48:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene						M
1	1.618	1.618	0.000	2879357	20.0	M
2	1.405	1.403	0.002	3368404	20.0	
					RPD = 0.00	
6 PCB-1248						M
1	3.714	3.714	0.000	491679	203.9	M
1	4.284	4.281	0.003	1014952	201.2	M
1	4.712	4.714	-0.002	1017297	321.7	M
1	4.762	4.764	-0.002	1086513	349.8	M
1	5.191	5.194	-0.003	1013019	223.7	
1	5.522	5.524	-0.002	1142435	260.2	
1	5.575	5.579	-0.004	2148128	413.5	
1	6.871	6.875	-0.004	904255	415.3	
		Average of Peak Amounts =			298.6	
2	2.859	2.857	0.002	430349	175.8	
2	3.382	3.375	0.007	955004	154.2	M
2	3.760	3.759	0.001	1617212	241.6	M
2	4.105	4.106	-0.001	465550	121.6	
2	4.532	4.509	0.023	2812377	260.2	
2	4.768	4.765	0.003	1584753	320.9	M
2	5.232	5.233	-0.001	1351997	402.4	M
2	5.920	5.923	-0.003	599574	280.7	M
		Average of Peak Amounts =			244.7	
					RPD = 19.86	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
8 PCB-1260						M
1	6.555	6.561	-0.006	607638	178.9	
1	6.815	6.818	-0.003	1628173	233.9	
1	7.186	7.188	-0.002	1440548	172.9	
1	8.082	8.083	-0.001	824326	133.3	
1	8.520	8.523	-0.003	677710	111.4	M
1	8.831	8.834	-0.003	1218845	99.7	M
1	9.197	9.202	-0.005	805409	89.8	M
1	9.704	9.710	-0.006	274352	74.7	M
		Average of Peak Amounts =			136.8	
2	5.455	5.453	0.002	1312109	180.3	M
2	6.190	6.188	0.002	2068285	161.7	M
2	6.364	6.363	0.001	931330	118.8	M
2	6.735	6.733	0.002	757734	95.7	M
2	7.263	7.261	0.002	1456000	75.6	M
2	7.800	7.797	0.003	725439	80.1	M
2	0.000	7.985	-7.985	0	0	
2	8.736	8.738	-0.002	343340	63.5	
		Average of Peak Amounts =			110.8	
					RPD = 20.98	
$ 11 DCB Decachlorobiphenyl						M
1	10.151	10.157	-0.006	6534769	63.6	M
2	9.204	9.207	-0.003	7815090	55.7	
					RPD = 13.22	

QC Flag Legend

Review Flags

M - Manually Integrated

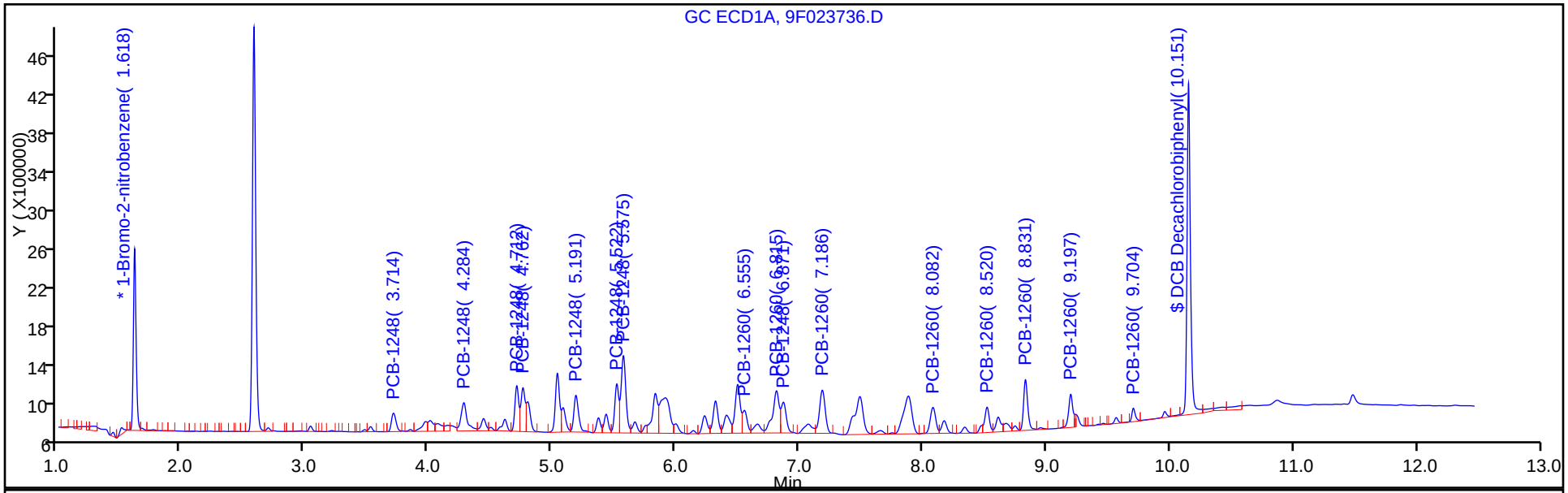
Reagents:

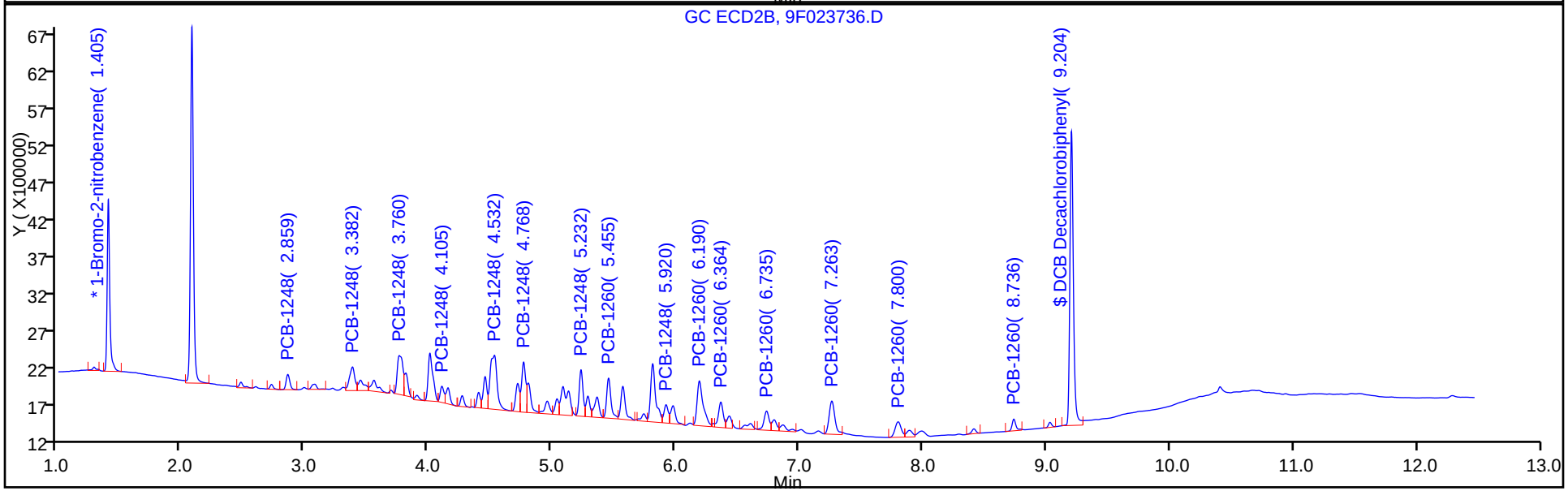
SGPCBISTD_00006 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 13-Jun-2016 08:53:32 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023736.D				
Injection Date:	11-Jun-2016 15:00:08	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	460-114699-A-1-A	Lab Sample ID:	460-114699-1	Worklist Smp#:	7
Client ID:	Manhole 1-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		



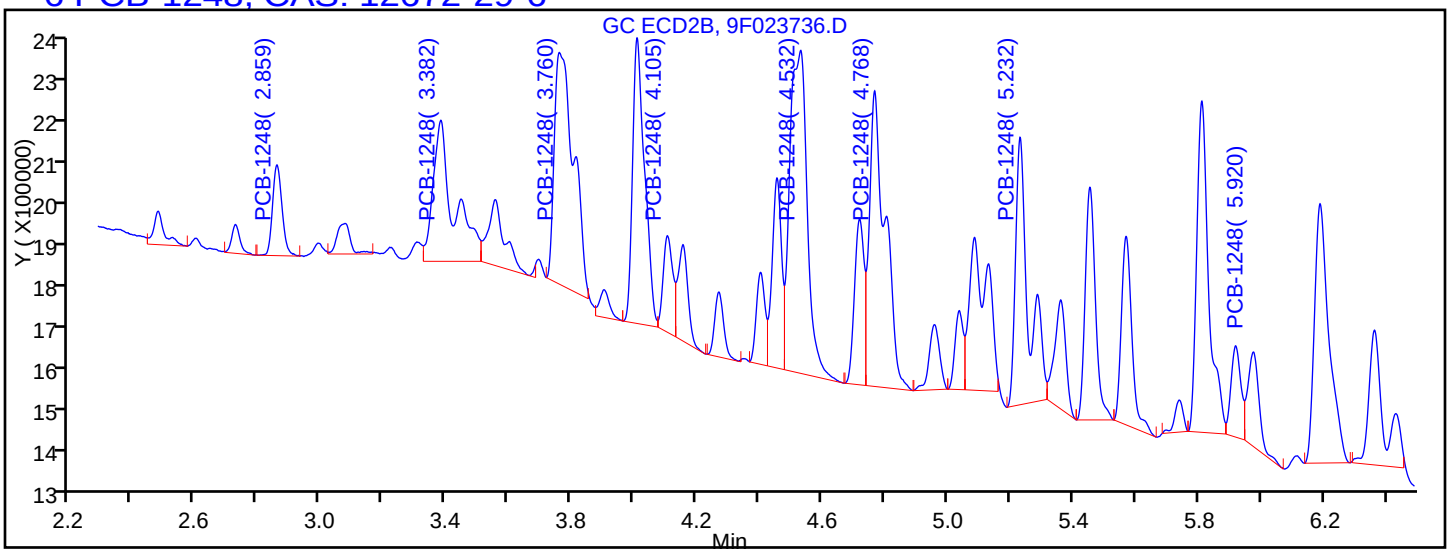


Report Date: 13-Jun-2016 08:53:32 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

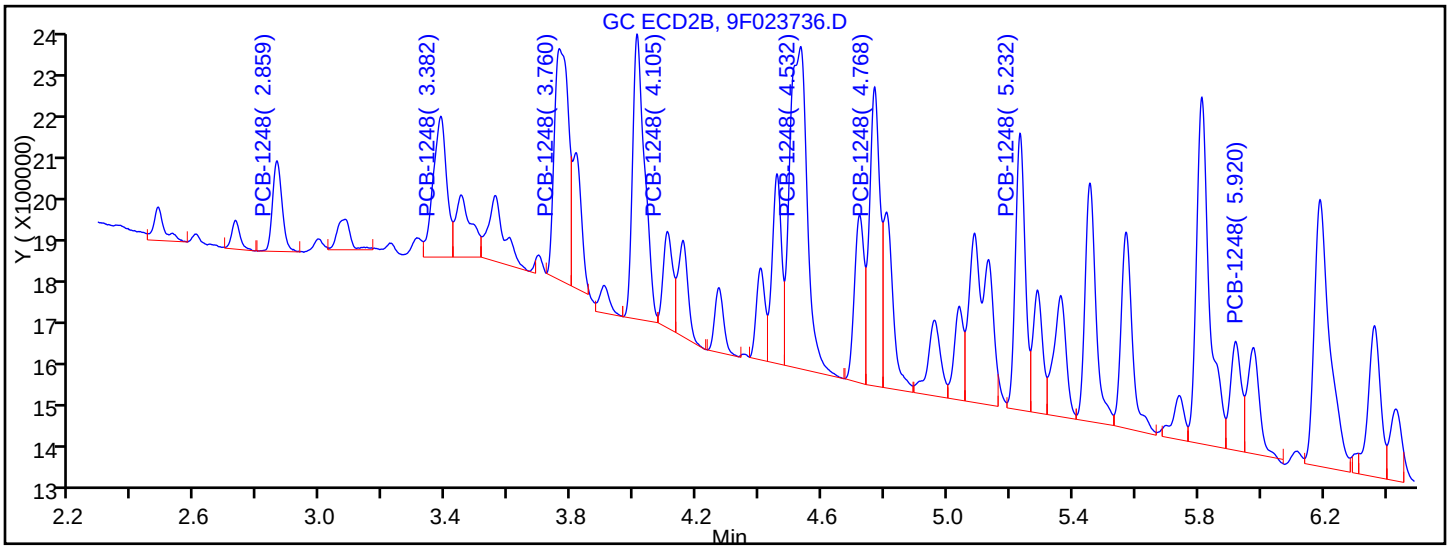
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023736.D				
Injection Date:	11-Jun-2016 15:00:08	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-1-A	Lab Sample ID:	460-114699-1		
Client ID:	Manhole 1-1				
Operator ID:		ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

6 PCB-1248, CAS: 12672-29-6



Processing Integration Results

RT = 2.859	Response = 430349	
RT = 3.382	Response = 1439346	M
RT = 3.760	Response = 2245321	M
RT = 4.105	Response = 465550	
RT = 4.532	Response = 2812377	
RT = 4.768	Response = 2333960	M
RT = 5.232	Response = 1728762	M
RT = 5.920	Response = 454467	M



Manual Integration Results

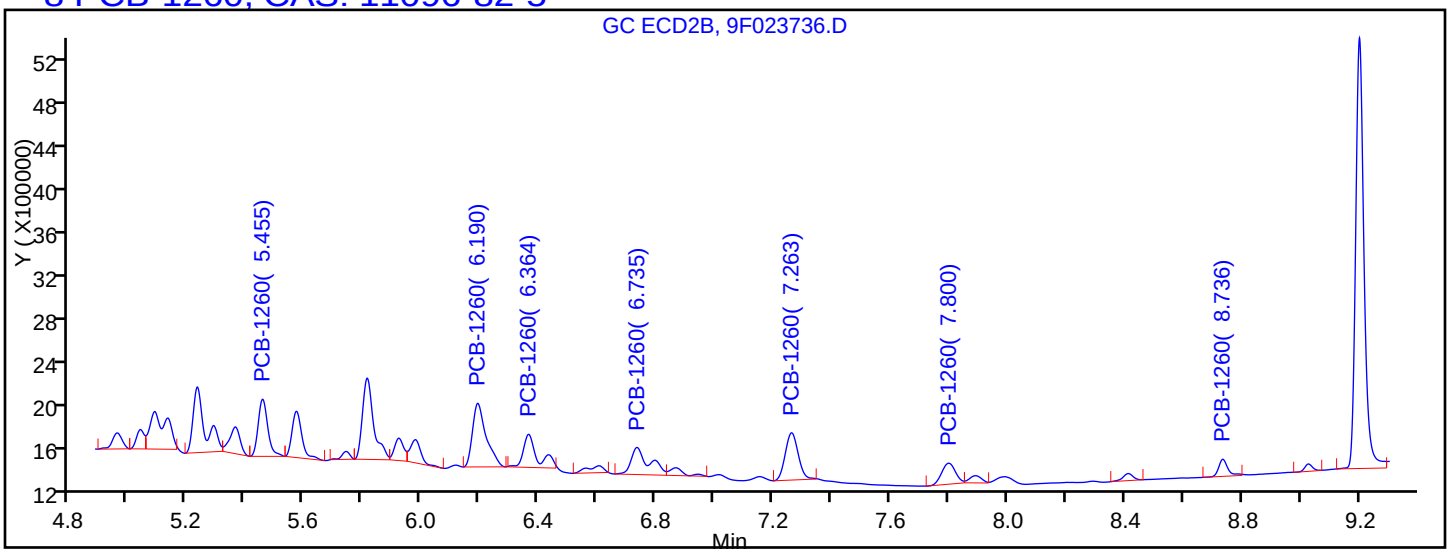
RT = 2.859	Response = 430349	
RT = 3.382	Response = 955004	M
RT = 3.760	Response = 1617212	M
RT = 4.105	Response = 465550	
RT = 4.532	Response = 2812377	
RT = 4.768	Response = 1584753	M

Report Date: 13-Jun-2016 08:53:33 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

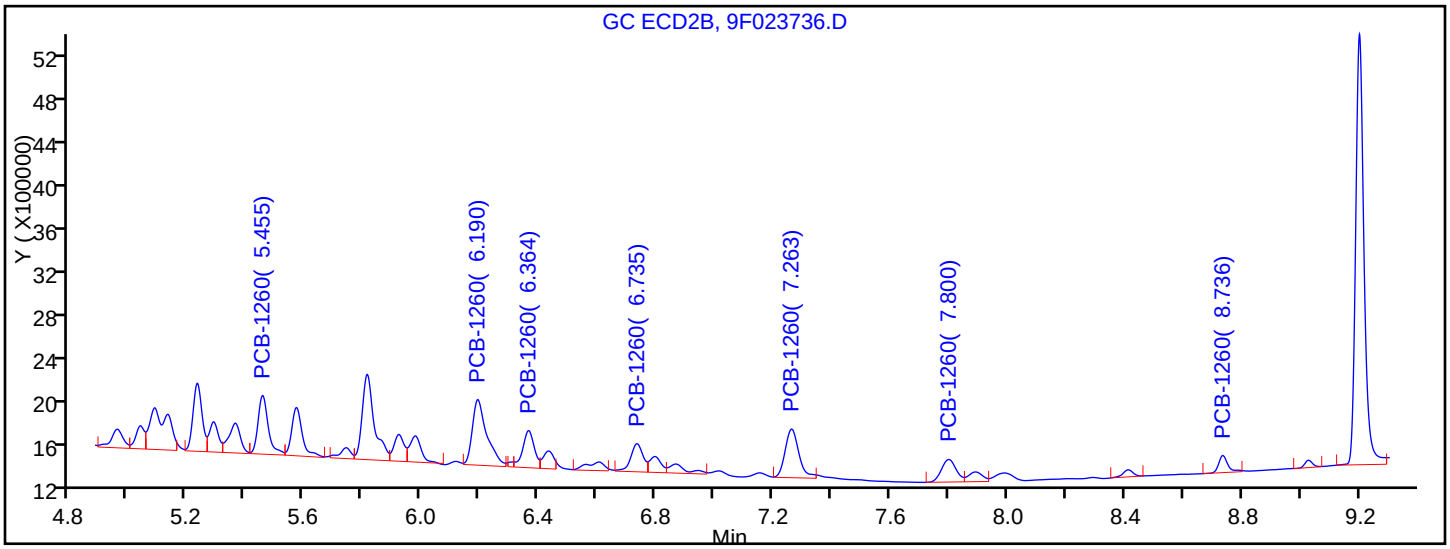
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023736.D				
Injection Date:	11-Jun-2016 15:00:08	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-1-A	Lab Sample ID:	460-114699-1		
Client ID:	Manhole 1-1				
Operator ID:		ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

8 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 5.455	Response = 1197543	M
RT = 6.190	Response = 1880143	M
RT = 6.364	Response = 1006088	M
RT = 6.735	Response = 1050485	M
RT = 7.263	Response = 1329028	M
RT = 7.800	Response = 629159	M
RT = 0.000	Response = 0	
RT = 8.736	Response = 343340	



Manual Integration Results

RT = 5.455	Response = 1312109	M
RT = 6.190	Response = 2068285	M
RT = 6.364	Response = 931330	M
RT = 6.735	Response = 757734	M
RT = 7.263	Response = 1456000	M
RT = 7.800	Response = 725439	M

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison
Job No.: 460-114699-1
SDG No.:
Client Sample ID: Manhole 1-2
Lab Sample ID: 460-114699-2
Matrix: Solid
Lab File ID: 9F023737.D
Analysis Method: 8082A
Date Collected: 05/31/2016 08:30
Extraction Method: 3546
Date Extracted: 06/10/2016 02:05
Sample wt/vol: 15.0117(g)
Date Analyzed: 06/11/2016 15:18
Con. Extract Vol.: 10(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: CLP-2 ID: 0.53(mm)
% Moisture: 22.4
GPC Cleanup:(Y/N) N
Analysis Batch No.: 373069
Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12672-29-6	Aroclor 1248	0.076	J	0.086	0.011

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	122		47-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023737.D
Lims ID: 460-114699-A-2-A
Client ID: Manhole 1-2
Sample Type: Client
Inject. Date: 11-Jun-2016 15:18:09 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0042042-008
Operator ID: Instrument ID: CPESTGC9

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 13-Jun-2016 08:53:27 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: patelji Date: 13-Jun-2016 07:49:43

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene						M
1	1.619	1.618	0.001	2855866	20.0	M
2	1.405	1.403	0.002	3502319	20.0	
					RPD = 0.00	
6 PCB-1248						M
1	3.715	3.714	0.001	226643	94.7	M
1	4.284	4.281	0.003	415966	83.1	M
1	4.713	4.714	-0.001	302935	96.6	
1	4.763	4.764	-0.001	323557	105.0	M
1	5.192	5.194	-0.002	369655	82.3	
1	5.523	5.524	-0.001	261673	60.1	
1	5.576	5.579	-0.003	494762	96.0	
1	0.000	6.875	-6.875	0	0	
		Average of Peak Amounts =			88.3	
2	2.859	2.857	0.002	184938	72.7	
2	3.382	3.375	0.007	507377	78.8	M
2	3.760	3.759	0.001	504773	72.5	M
2	4.108	4.106	0.002	215014	54.0	M
2	4.534	4.509	0.025	616670	54.9	M
2	4.769	4.765	0.004	404197	78.7	M
2	5.234	5.233	0.001	198420	56.8	M
2	0.000	5.923	-5.923	0	0	
		Average of Peak Amounts =			66.9	
					RPD = 27.52	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 11 DCB Decachlorobiphenyl						M
1	10.139	10.157	-0.018	6204980	60.8	M
2	9.200	9.207	-0.007	7856140	53.8	
					RPD = 12.24	

QC Flag Legend

Review Flags

M - Manually Integrated

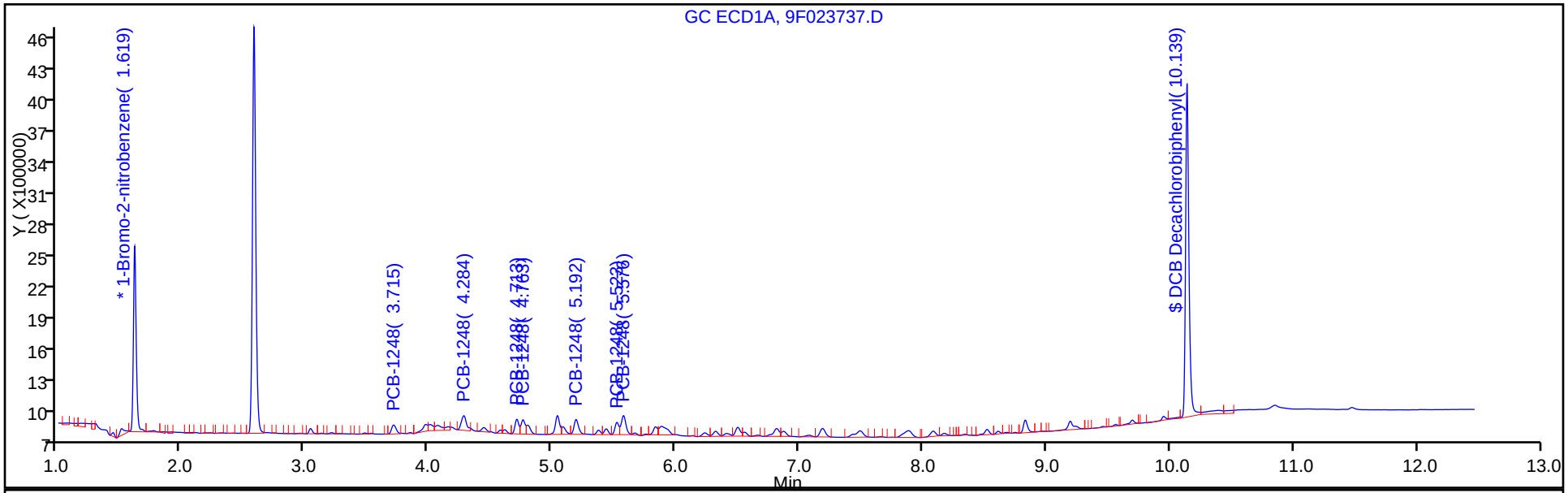
Reagents:

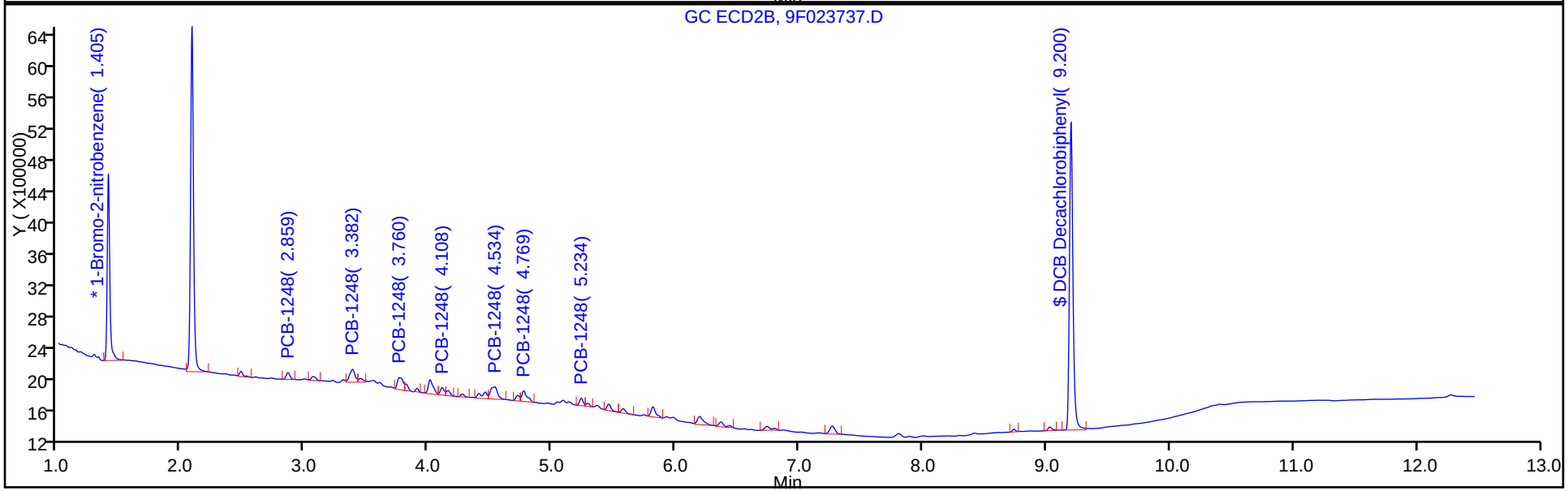
SGPCBISTD_00006 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 13-Jun-2016 08:53:34 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023737.D				
Injection Date:	11-Jun-2016 15:18:09	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	460-114699-A-2-A	Lab Sample ID:	460-114699-2	Worklist Smp#:	8
Client ID:	Manhole 1-2				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		



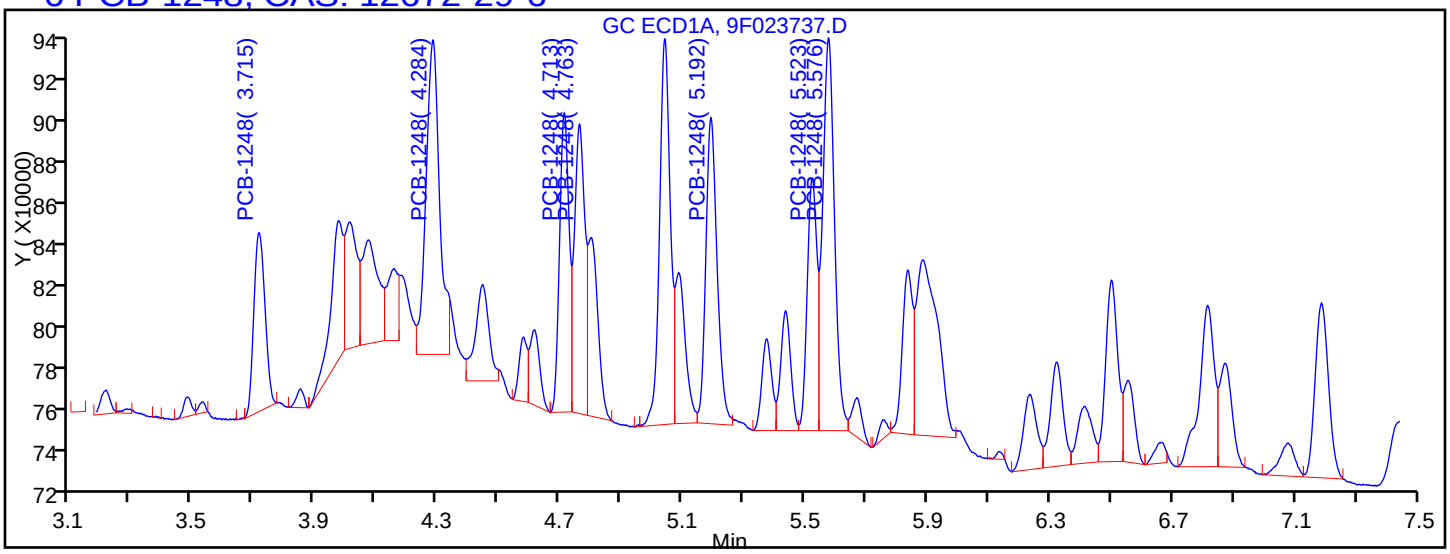


Report Date: 13-Jun-2016 08:53:35 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

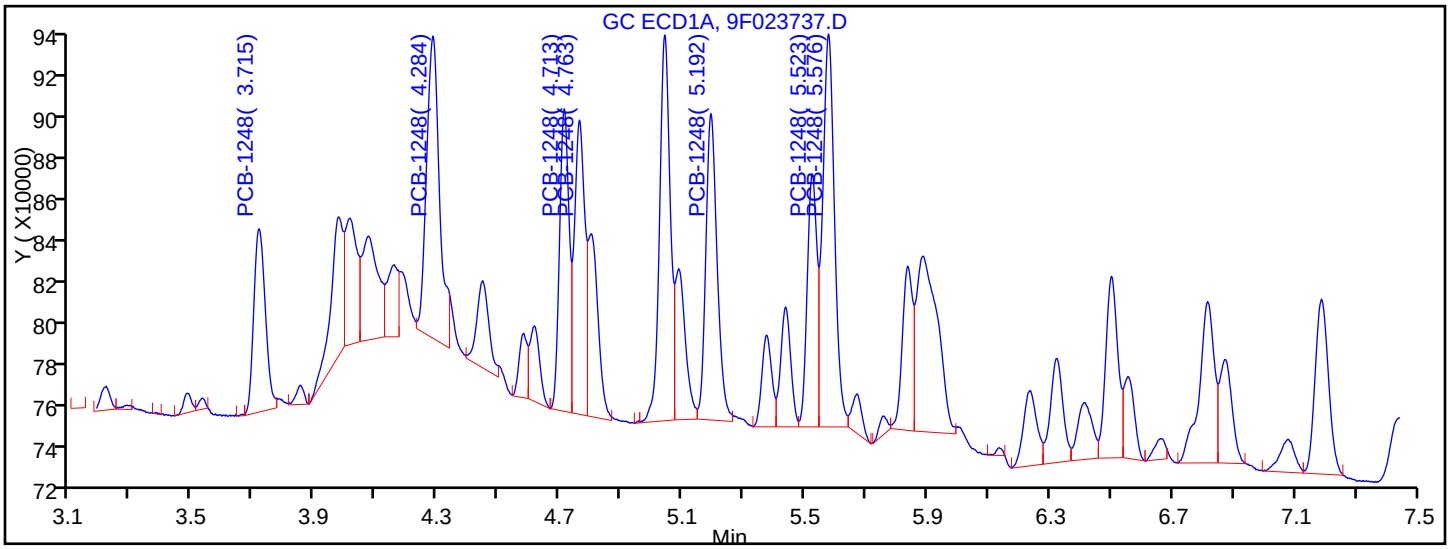
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023737.D				
Injection Date:	11-Jun-2016 15:18:09	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-2-A	Lab Sample ID:	460-114699-2		
Client ID:	Manhole 1-2				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

6 PCB-1248, CAS: 12672-29-6



Processing Integration Results

RT = 3.715	Response = 212872	M
RT = 4.284	Response = 453562	M
RT = 4.713	Response = 302935	
RT = 4.763	Response = 317199	M
RT = 5.192	Response = 369655	
RT = 5.523	Response = 261673	
RT = 5.576	Response = 494762	
RT = 6.872	Response = 136800	



Manual Integration Results

RT = 3.715	Response = 226643	M
RT = 4.284	Response = 415966	M
RT = 4.713	Response = 302935	
RT = 4.763	Response = 323557	M
RT = 5.192	Response = 369655	
RT = 5.523	Response = 261673	

TestAmerica Edison

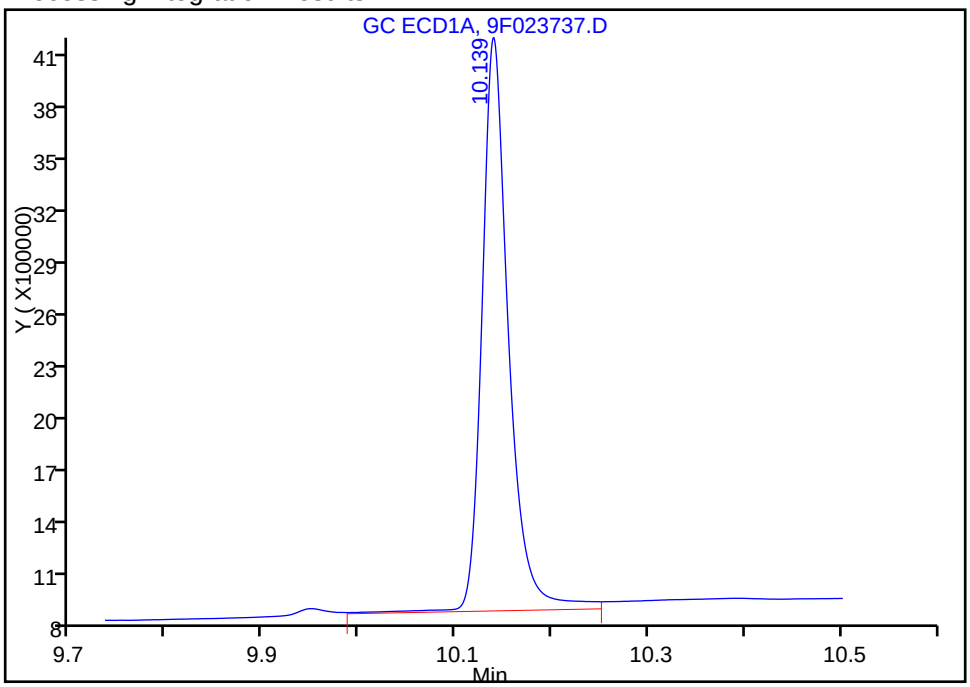
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023737.D				
Injection Date:	11-Jun-2016 15:18:09	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-2-A	Lab Sample ID:	460-114699-2		
Client ID:	Manhole 1-2				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

$ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

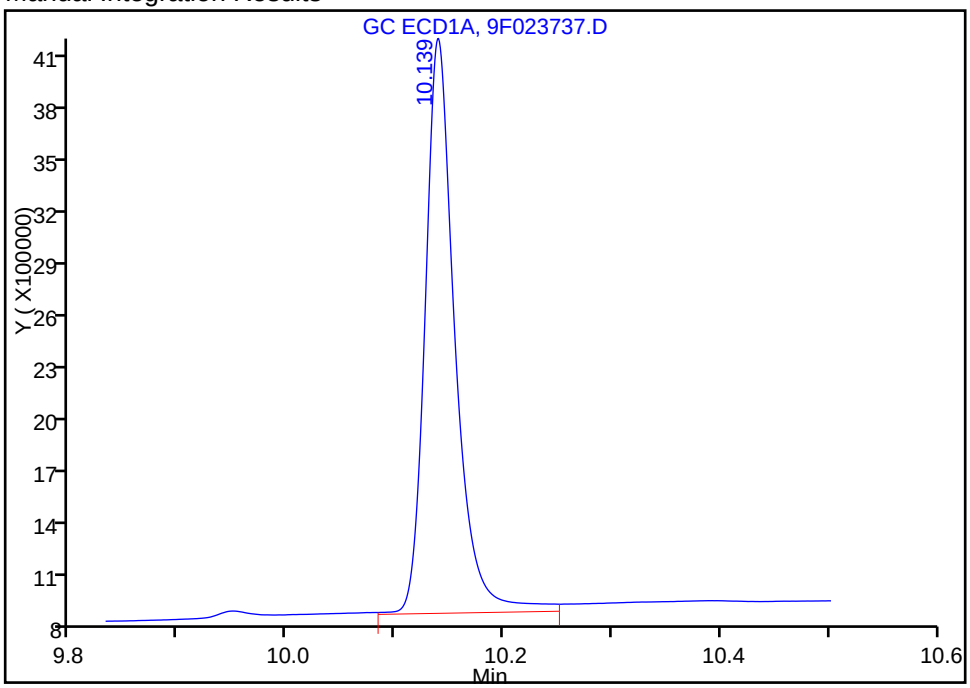
Processing Integration Results

RT: 10.14
Area: 6254572
Amount: 55.620585
Amount Units: ug/l



Manual Integration Results

RT: 10.14
Area: 6204980
Amount: 60.841271
Amount Units: ug/l



Reviewer: patelji, 13-Jun-2016 07:49:43
Audit Action: Split an Integrated Peak Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

TestAmerica Edison

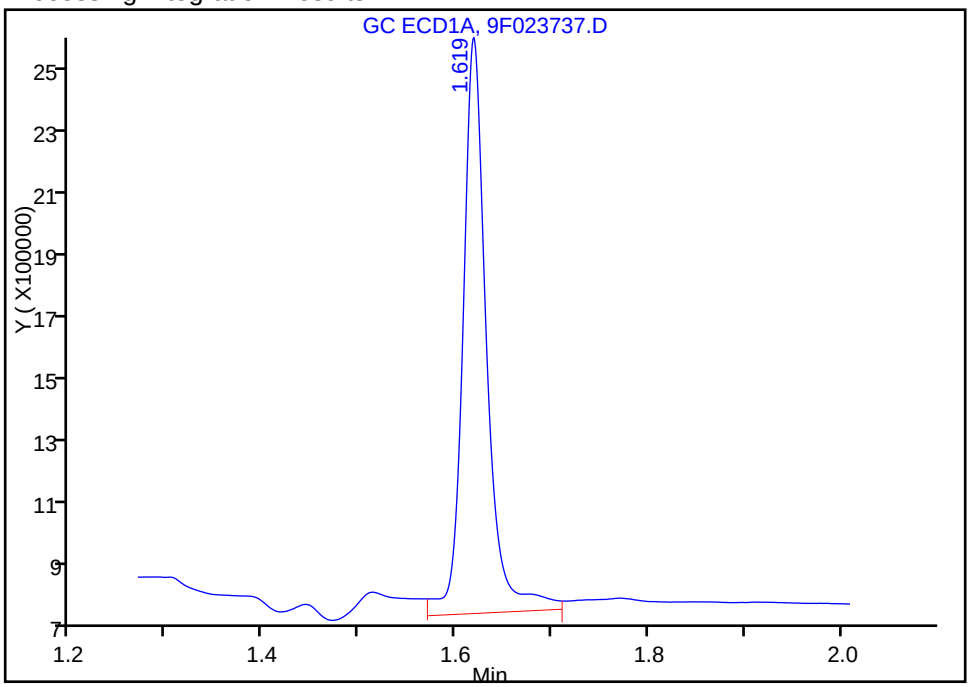
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023737.D				
Injection Date:	11-Jun-2016 15:18:09	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-2-A	Lab Sample ID:	460-114699-2		
Client ID:	Manhole 1-2				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 1

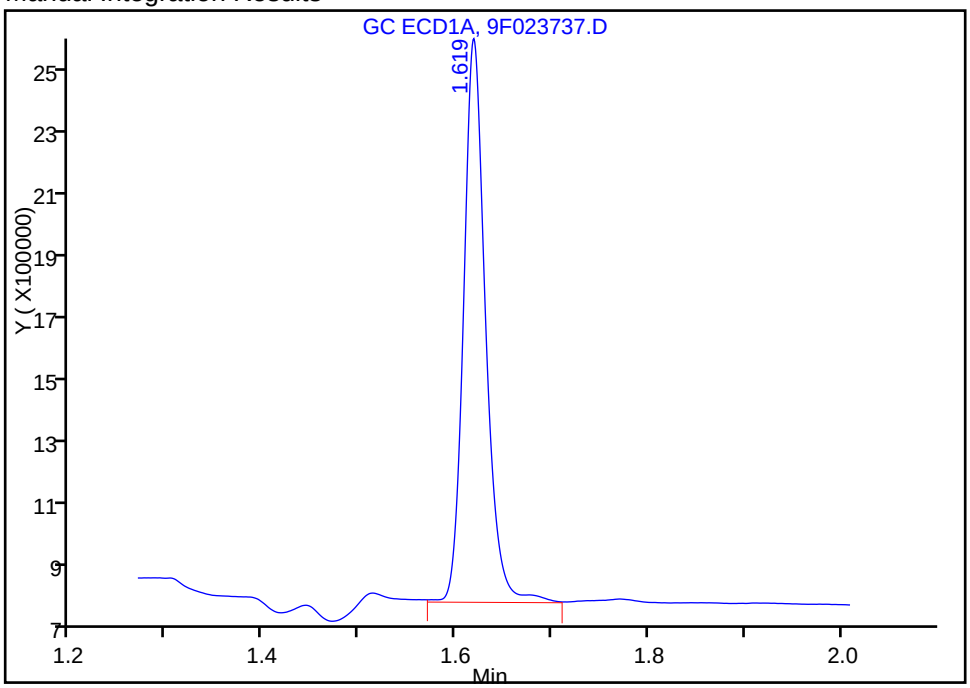
Processing Integration Results

RT: 1.62
Area: 3148892
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.62
Area: 2855866
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 13-Jun-2016 07:49:43
Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison
Job No.: 460-114699-1
SDG No.:
Client Sample ID: Manhole 1-2
Lab Sample ID: 460-114699-2
Matrix: Solid
Lab File ID: 9F023737.D
Analysis Method: 8082A
Date Collected: 05/31/2016 08:30
Extraction Method: 3546
Date Extracted: 06/10/2016 02:05
Sample wt/vol: 15.0117(g)
Date Analyzed: 06/11/2016 15:18
Con. Extract Vol.: 10(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: CLP-1 ID: 0.53(mm)
% Moisture: 22.4
GPC Cleanup:(Y/N) N
Analysis Batch No.: 373069
Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor 1016	0.011	U	0.086	0.011
11104-28-2	Aroclor 1221	0.011	U	0.086	0.011
11141-16-5	Aroclor 1232	0.011	U	0.086	0.011
53469-21-9	Aroclor 1242	0.011	U	0.086	0.011
11097-69-1	Aroclor 1254	0.012	U	0.086	0.012
11096-82-5	Aroclor 1260	0.012	U	0.086	0.012
37324-23-5	Aroclor 1262	0.012	U	0.086	0.012
11100-14-4	Aroclor 1268	0.012	U	0.086	0.012

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	108		47-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023737.D
Lims ID: 460-114699-A-2-A
Client ID: Manhole 1-2
Sample Type: Client
Inject. Date: 11-Jun-2016 15:18:09 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0042042-008
Operator ID: Instrument ID: CPESTGC9

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 13-Jun-2016 08:53:27 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: patelji Date: 13-Jun-2016 07:49:43

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene						M
1	1.619	1.618	0.001	2855866	20.0	M
2	1.405	1.403	0.002	3502319	20.0	
					RPD = 0.00	
6 PCB-1248						M
1	3.715	3.714	0.001	226643	94.7	M
1	4.284	4.281	0.003	415966	83.1	M
1	4.713	4.714	-0.001	302935	96.6	
1	4.763	4.764	-0.001	323557	105.0	M
1	5.192	5.194	-0.002	369655	82.3	
1	5.523	5.524	-0.001	261673	60.1	
1	5.576	5.579	-0.003	494762	96.0	
1	0.000	6.875	-6.875	0	0	
		Average of Peak Amounts =			88.3	
2	2.859	2.857	0.002	184938	72.7	
2	3.382	3.375	0.007	507377	78.8	M
2	3.760	3.759	0.001	504773	72.5	M
2	4.108	4.106	0.002	215014	54.0	M
2	4.534	4.509	0.025	616670	54.9	M
2	4.769	4.765	0.004	404197	78.7	M
2	5.234	5.233	0.001	198420	56.8	M
2	0.000	5.923	-5.923	0	0	
		Average of Peak Amounts =			66.9	
					RPD = 27.52	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 11 DCB Decachlorobiphenyl						M
1	10.139	10.157	-0.018	6204980	60.8	M
2	9.200	9.207	-0.007	7856140	53.8	
					RPD = 12.24	

QC Flag Legend

Review Flags

M - Manually Integrated

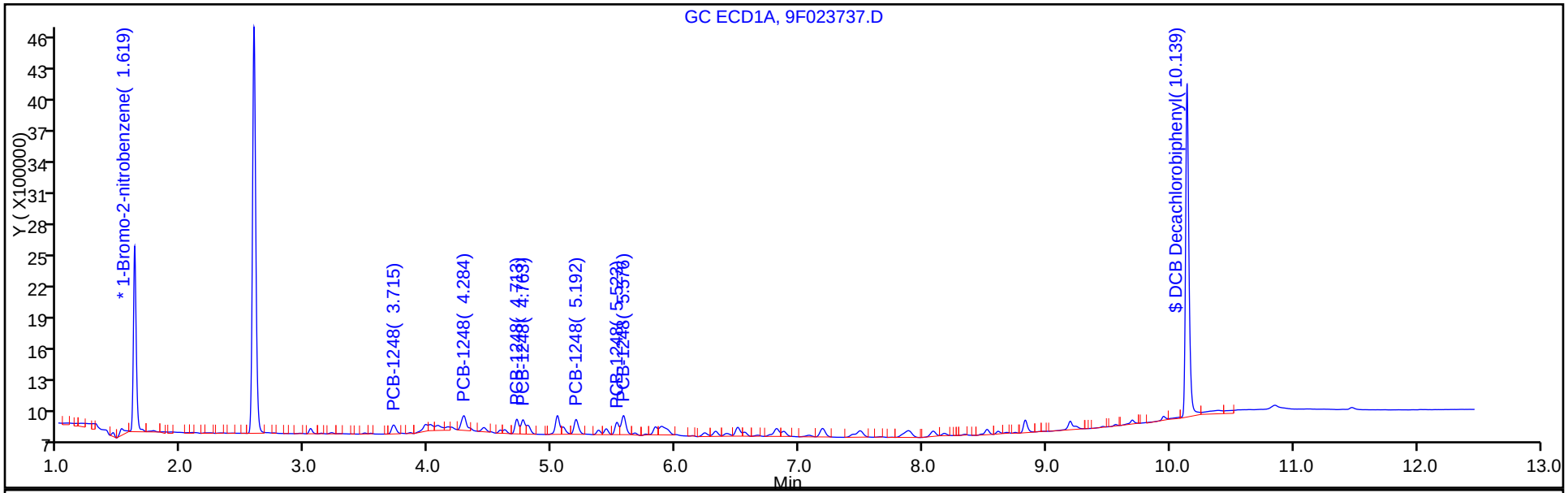
Reagents:

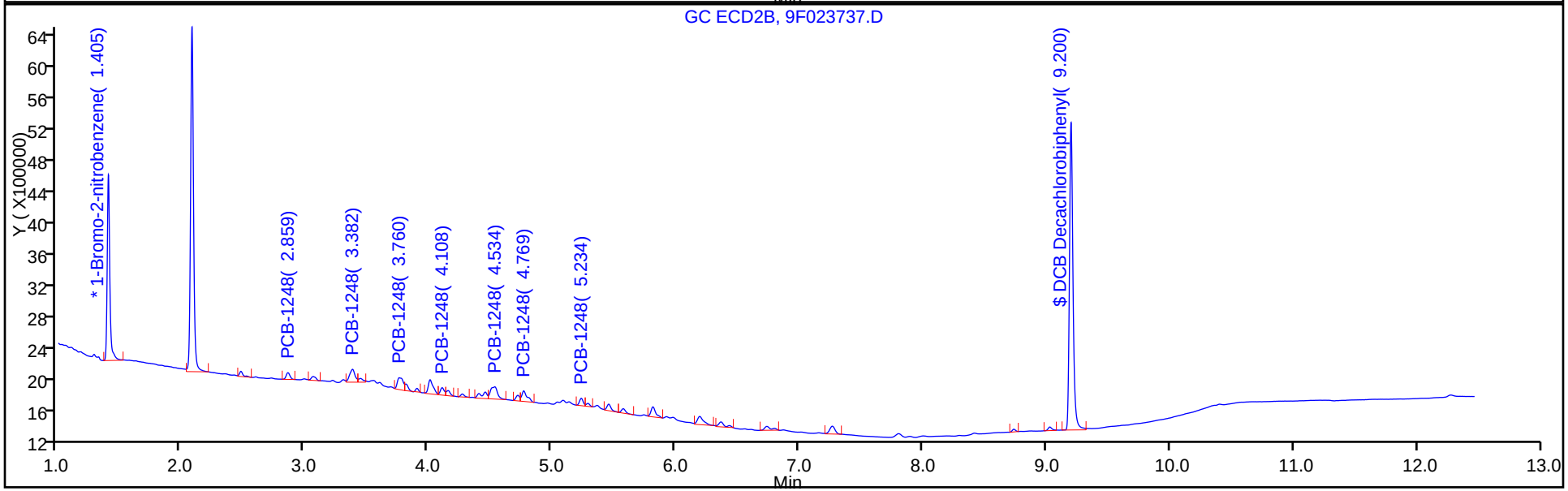
SGPCBISTD_00006 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 13-Jun-2016 08:53:35 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023737.D				
Injection Date:	11-Jun-2016 15:18:09	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	460-114699-A-2-A	Lab Sample ID:	460-114699-2	Worklist Smp#:	8
Client ID:	Manhole 1-2				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		



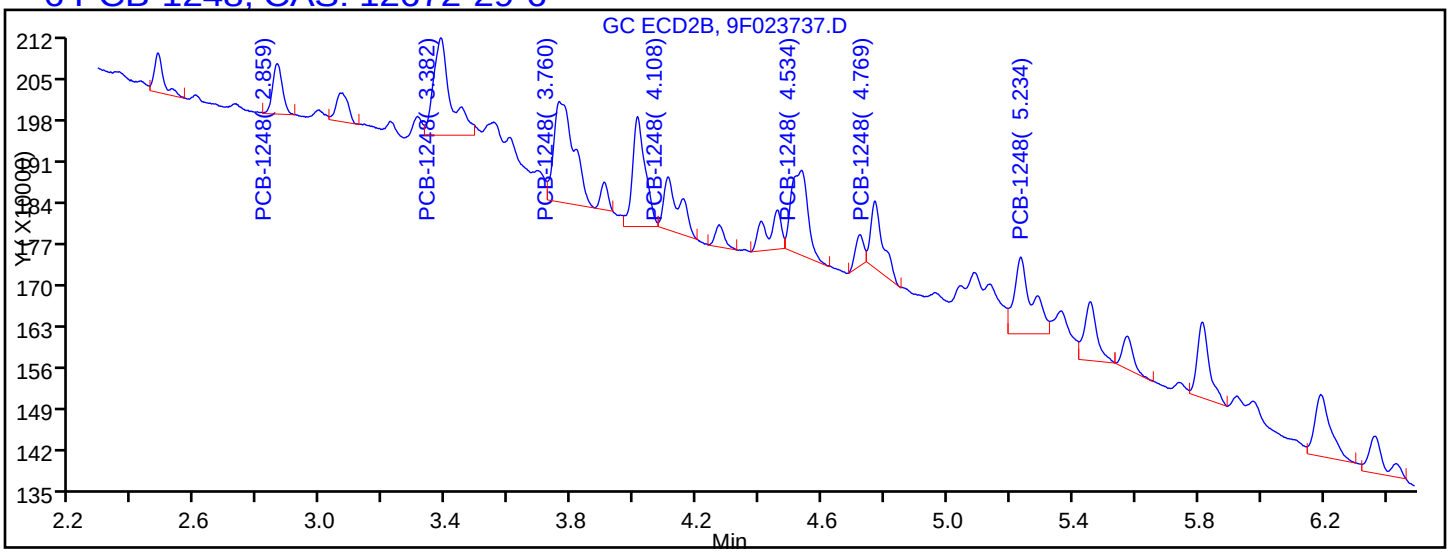


Report Date: 13-Jun-2016 08:53:35 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

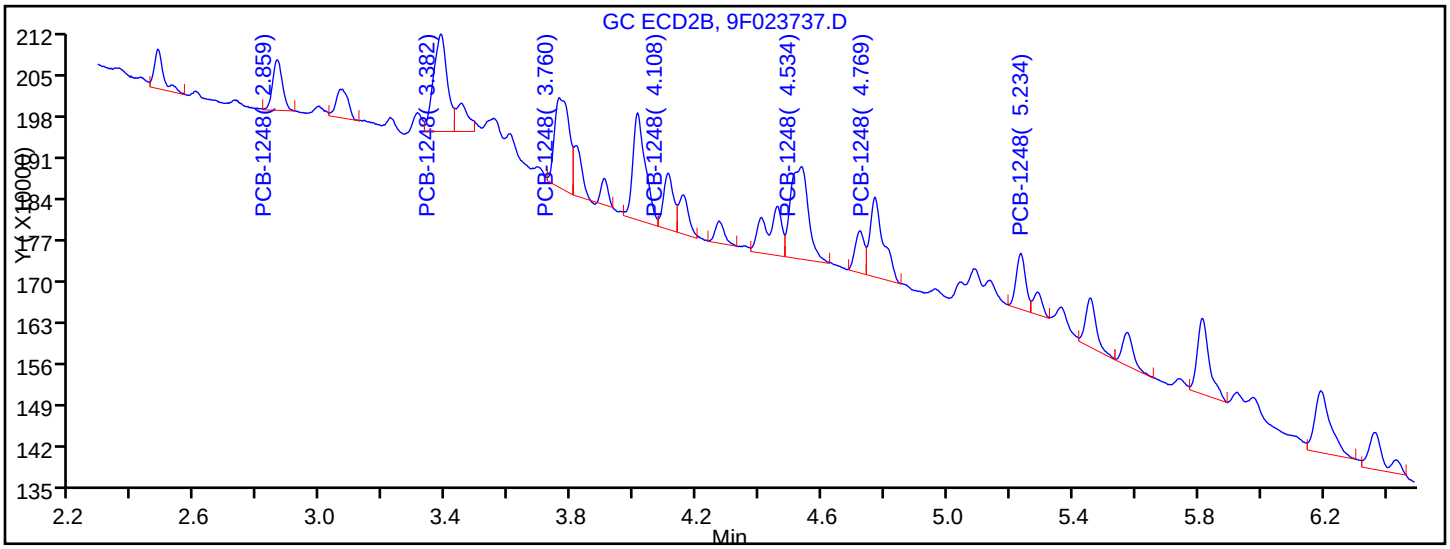
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023737.D				
Injection Date:	11-Jun-2016 15:18:09	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-2-A	Lab Sample ID:	460-114699-2		
Client ID:	Manhole 1-2				
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

6 PCB-1248, CAS: 12672-29-6



Processing Integration Results

RT = 2.859	Response = 184938	
RT = 3.382	Response = 638015	M
RT = 3.760	Response = 851365	M
RT = 4.108	Response = 321682	M
RT = 4.534	Response = 527669	M
RT = 4.769	Response = 311931	M
RT = 5.234	Response = 520394	M
RT = 0.000	Response = 0	



Manual Integration Results

RT = 2.859	Response = 184938	
RT = 3.382	Response = 507377	M
RT = 3.760	Response = 504773	M
RT = 4.108	Response = 215014	M
RT = 4.534	Response = 616670	M
RT = 4.769	Response = 404197	M

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison
Job No.: 460-114699-1
SDG No.:
Client Sample ID: Manhole 2-2 DL
Lab Sample ID: 460-114699-3 DL
Matrix: Solid
Lab File ID: 9F023738.D
Analysis Method: 8082A
Date Collected: 05/31/2016 12:05
Extraction Method: 3546
Date Extracted: 06/10/2016 02:05
Sample wt/vol: 15.0183(g)
Date Analyzed: 06/11/2016 15:36
Con. Extract Vol.: 10(mL)
Dilution Factor: 2
Injection Volume: 1(uL)
GC Column: CLP-2 ID: 0.53(mm)
% Moisture: 17.6
GPC Cleanup:(Y/N) N
Analysis Batch No.: 373069
Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12672-29-6	Aroclor 1248	2.3	D	0.16	0.022
11096-82-5	Aroclor 1260	1.0	D	0.16	0.022

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	144	D	47-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023738.D
Lims ID: 460-114699-A-3-A
Client ID: Manhole 2-2
Sample Type: Client
Inject. Date: 11-Jun-2016 15:36:11 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 2.0000
Sample Info: 460-0042042-009
Operator ID: Instrument ID: CPESTGC9

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 13-Jun-2016 08:53:27 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: patelji Date: 13-Jun-2016 07:02:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene						M
1	1.619	1.618	0.001	2772699	20.0	
2	1.405	1.403	0.002	3094153	20.0	M
					RPD = 0.00	
6 PCB-1248						M
1	3.715	3.714	0.001	3344120	1439.9	M
1	4.284	4.281	0.003	7689908	1582.9	M
1	4.712	4.714	-0.002	4099525	1346.2	M
1	4.763	4.764	-0.001	4793391	1602.5	M
1	5.192	5.194	-0.002	5552201	1273.0	
1	5.522	5.524	-0.002	4206805	994.8	
1	5.575	5.579	-0.004	7106510	1420.4	
1	6.870	6.875	-0.005	3133985	1494.8	
		Average of Peak Amounts =			1394.3	
2	2.859	2.857	0.002	2782168	1237.6	
2	3.382	3.375	0.007	7931142	1393.9	M
2	3.774	3.759	0.015	8465490	1376.6	M
2	4.106	4.106	0.000	3746059	1065.5	M
2	4.530	4.509	0.021	10111744	1018.3	
2	4.767	4.765	0.002	6111725	1347.4	M
2	5.232	5.233	-0.001	4657366	1509.2	M
2	5.920	5.923	-0.003	2055478	1047.6	
		Average of Peak Amounts =			1249.5	
					RPD = 10.95	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
8 PCB-1260						M
1	6.556	6.561	-0.005	2263035	691.8	
1	6.815	6.818	-0.003	5612339	837.2	
1	7.186	7.188	-0.002	5583683	695.8	
1	8.083	8.083	0.000	3929056	659.6	
1	8.519	8.523	-0.004	3771519	643.6	
1	8.827	8.834	-0.007	6767012	574.7	
1	9.190	9.202	-0.012	4766012	551.6	M
1	9.690	9.710	-0.020	1751063	495.4	M
		Average of Peak Amounts =			643.7	
2	5.454	5.453	0.001	5160474	772.0	M
2	6.190	6.188	0.002	8640515	735.5	M
2	6.364	6.363	0.001	4799997	666.4	M
2	6.734	6.733	0.001	4127668	567.5	
2	7.264	7.261	0.003	9499543	537.0	
2	7.799	7.797	0.002	4924977	592.1	
2	7.989	7.985	0.004	2946138	513.1	
2	8.734	8.738	-0.004	2377635	478.9	
		Average of Peak Amounts =			607.8	
					RPD = 5.73	
$ 11 DCB Decachlorobiphenyl						M
1	10.130	10.157	-0.027	3568738	36.0	M
2	9.195	9.207	-0.012	4424936	34.3	M
					RPD = 4.91	

QC Flag Legend

Review Flags

M - Manually Integrated

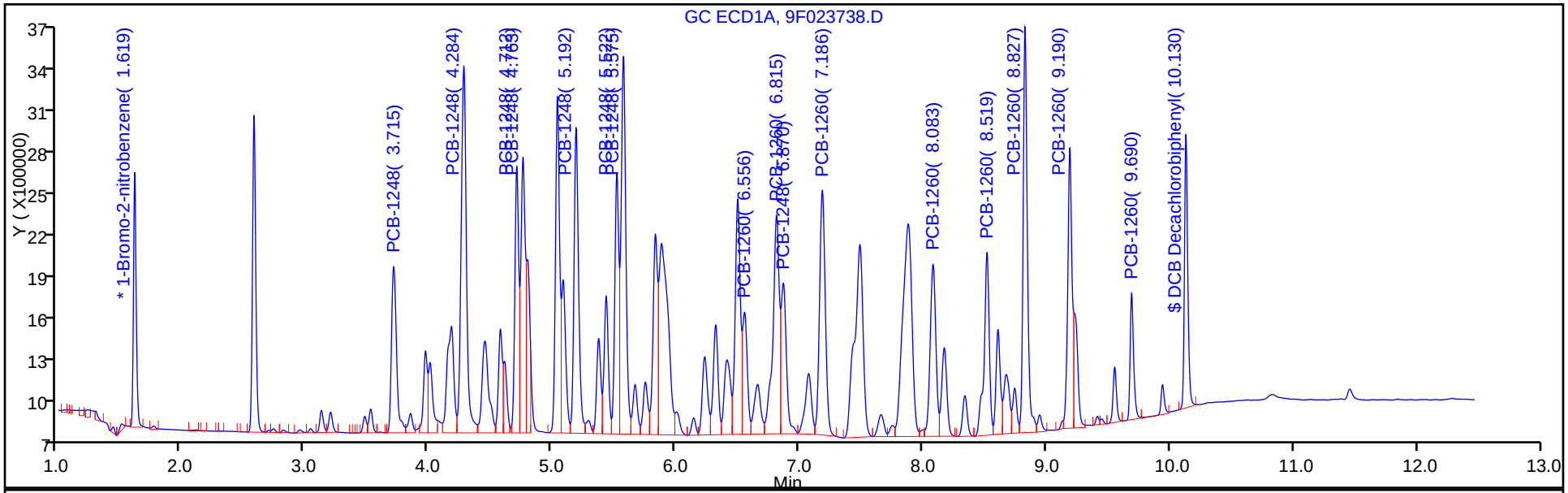
Reagents:

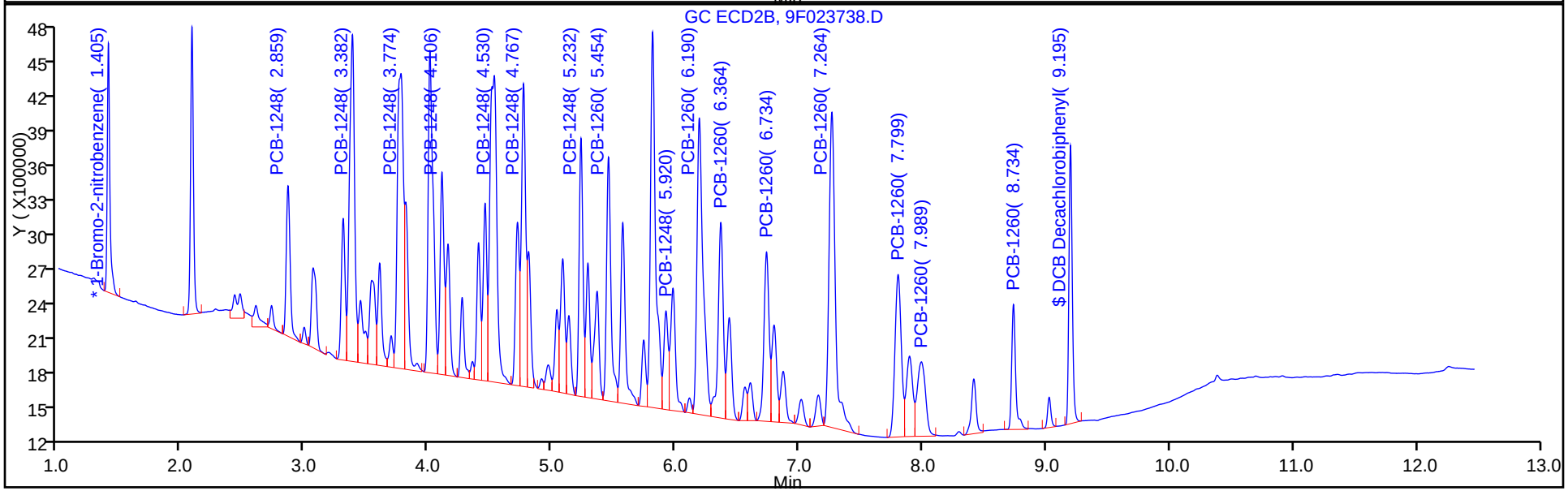
SGPCBISTD_00006 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 13-Jun-2016 08:53:37 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023738.D				
Injection Date:	11-Jun-2016 15:36:11	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	460-114699-A-3-A	Lab Sample ID:	460-114699-3	Worklist Smp#:	9
Client ID:	Manhole 2-2				
Injection Vol:	1.0 ul	Dil. Factor:	2.0000	ALS Bottle#:	9
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		



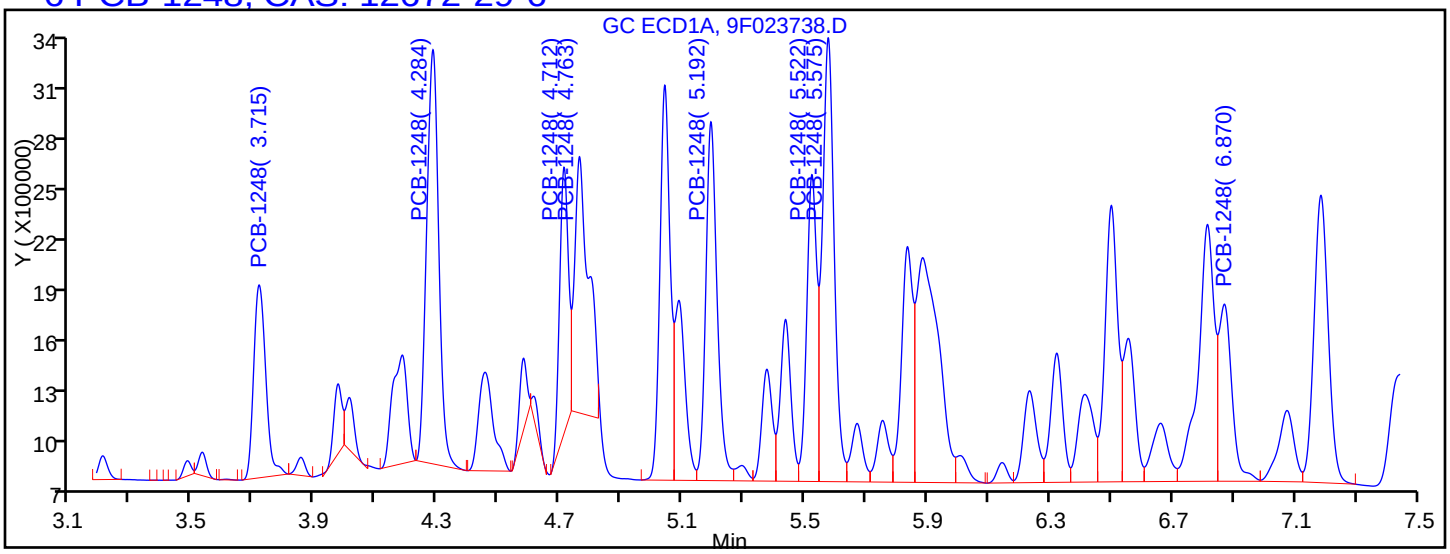


Report Date: 13-Jun-2016 08:53:37 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

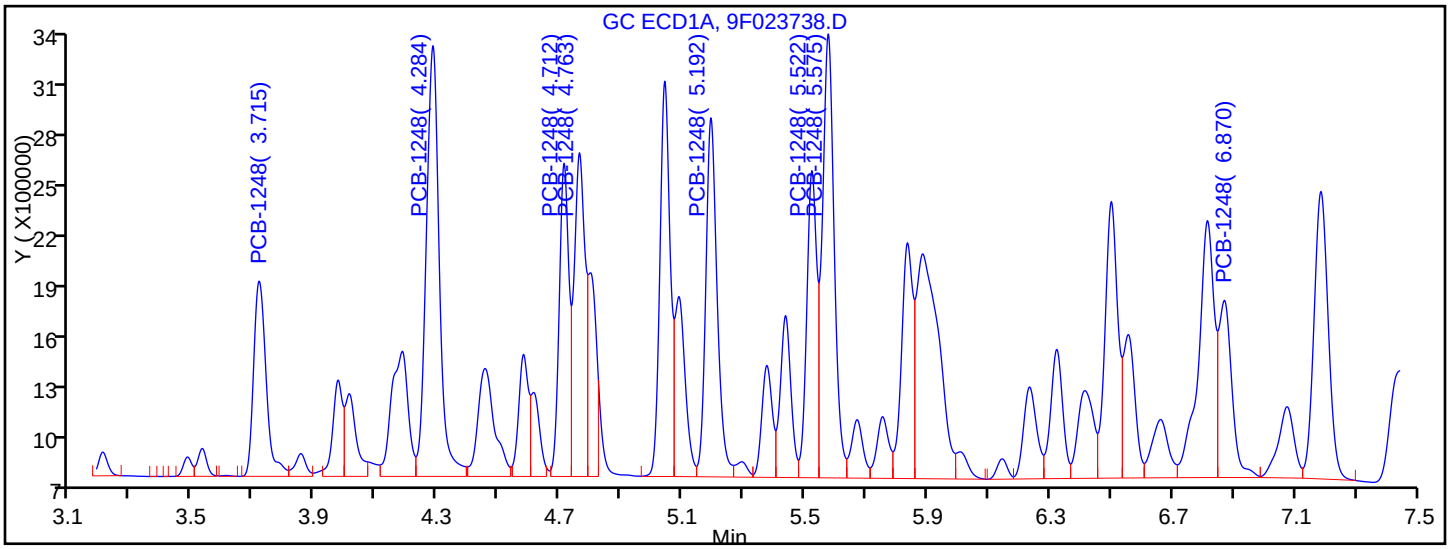
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023738.D				
Injection Date:	11-Jun-2016 15:36:11	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-3-A	Lab Sample ID:	460-114699-3		
Client ID:	Manhole 2-2				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

6 PCB-1248, CAS: 12672-29-6



Processing Integration Results

RT = 3.715	Response = 3176905	M
RT = 4.284	Response = 6825767	M
RT = 4.712	Response = 3193220	M
RT = 4.763	Response = 4900585	M
RT = 5.192	Response = 5552201	
RT = 5.522	Response = 4206805	
RT = 5.575	Response = 7106510	
RT = 6.870	Response = 3133985	



Manual Integration Results

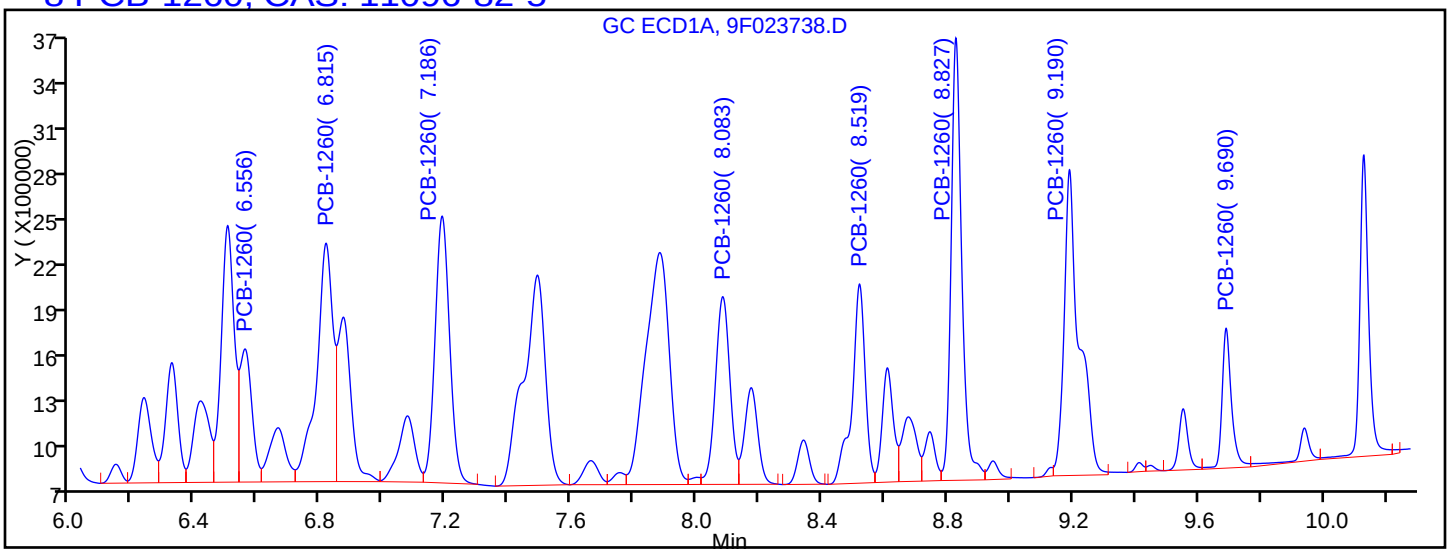
RT = 3.715	Response = 3344120	M
RT = 4.284	Response = 7689908	M
RT = 4.712	Response = 4099525	M
RT = 4.763	Response = 4793391	M
RT = 5.192	Response = 5552201	
RT = 5.522	Response = 4206805	

Report Date: 13-Jun-2016 08:53:38 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

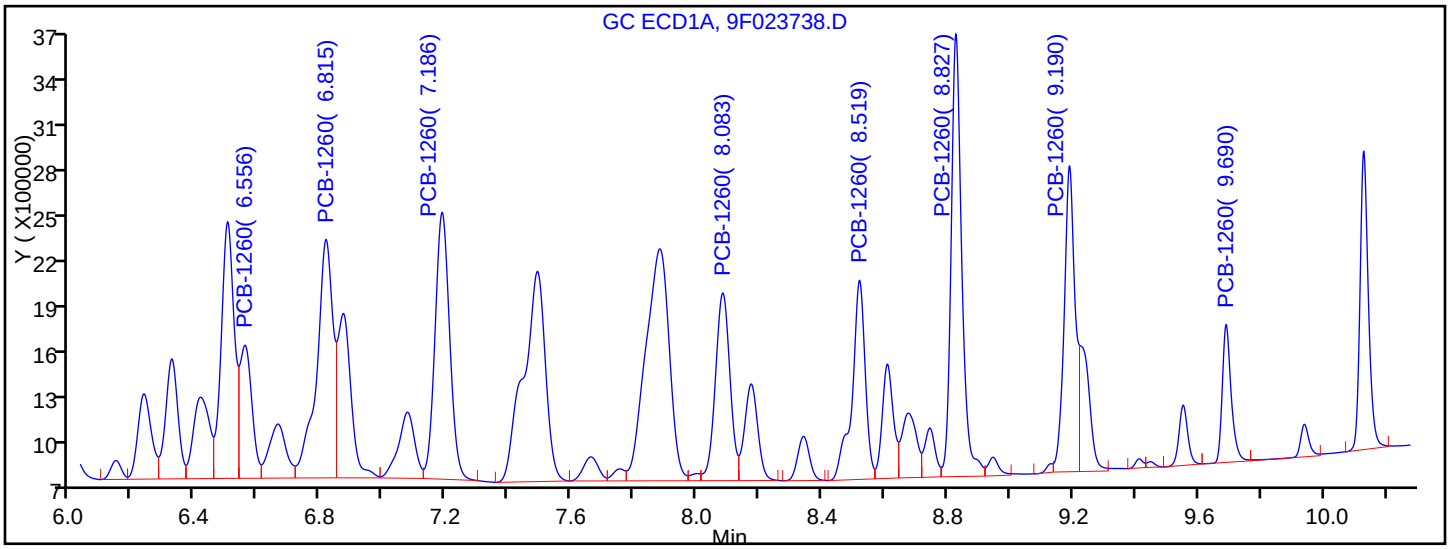
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023738.D				
Injection Date:	11-Jun-2016 15:36:11	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-3-A	Lab Sample ID:	460-114699-3		
Client ID:	Manhole 2-2				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

8 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 6.556	Response = 2263035	
RT = 6.815	Response = 5612339	
RT = 7.186	Response = 5583683	
RT = 8.083	Response = 3929056	
RT = 8.519	Response = 3771519	
RT = 8.827	Response = 6767012	
RT = 9.190	Response = 6547724	M
RT = 9.690	Response = 1869392	M



Manual Integration Results

RT = 6.556	Response = 2263035
RT = 6.815	Response = 5612339
RT = 7.186	Response = 5583683
RT = 8.083	Response = 3929056
RT = 8.519	Response = 3771519
RT = 8.827	Response = 6767012

Manual Integration/User Assign Peak Report

TestAmerica Edison

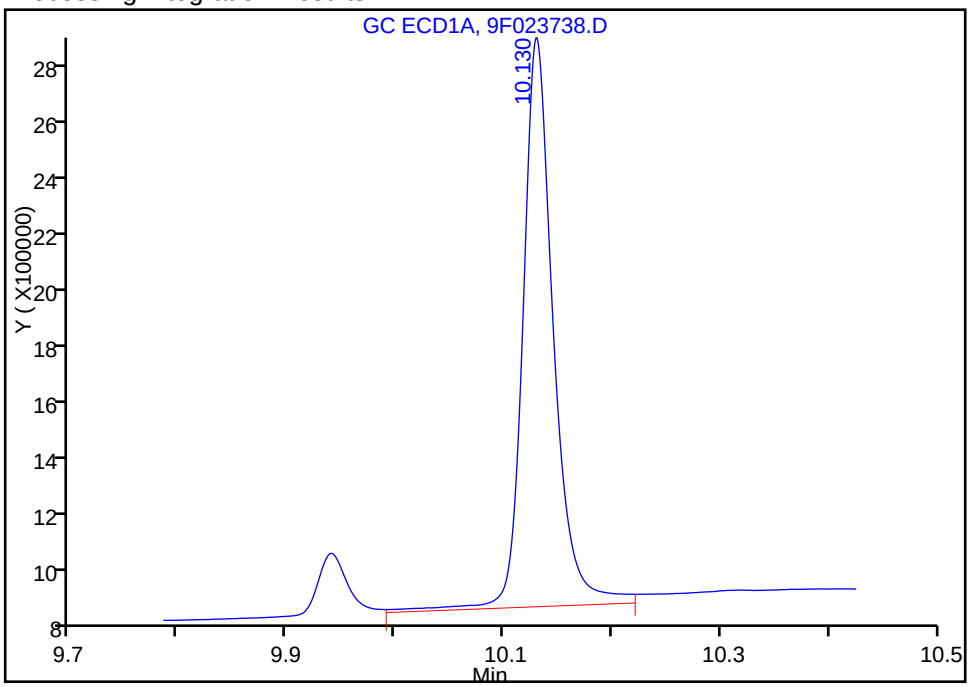
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023738.D				
Injection Date:	11-Jun-2016 15:36:11	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-3-A	Lab Sample ID:	460-114699-3		
Client ID:	Manhole 2-2				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

$ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

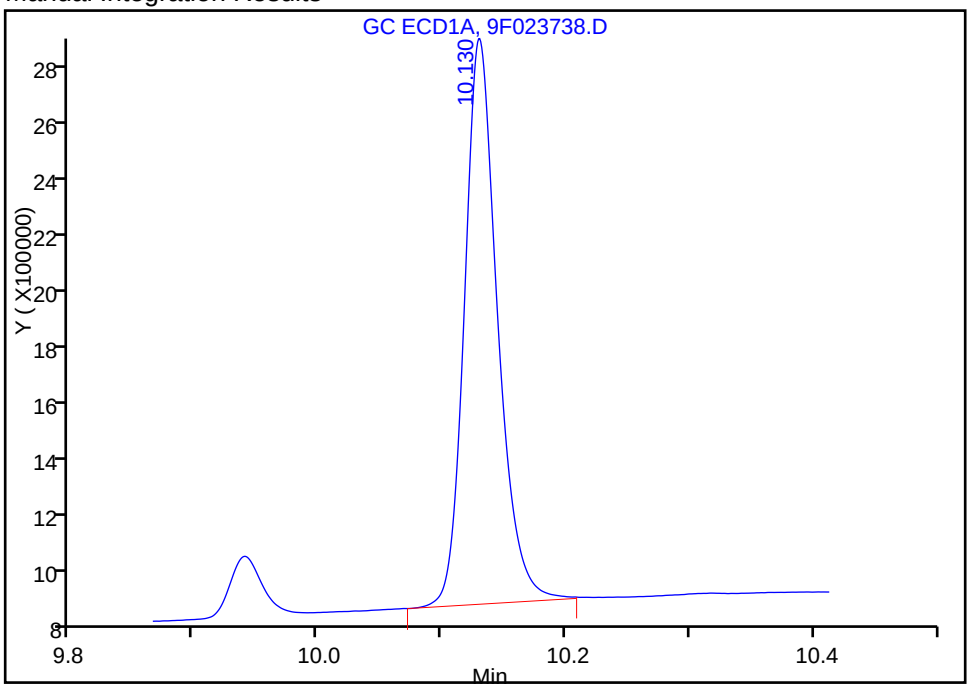
Processing Integration Results

RT: 10.13
Area: 3811280
Amount: 38.491413
Amount Units: ug/l



Manual Integration Results

RT: 10.13
Area: 3568738
Amount: 36.041898
Amount Units: ug/l



Reviewer: patelji, 13-Jun-2016 07:52:50

Audit Action: Manually Integrated Audit Reason: Sample matrix interference

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-114699-1

SDG No.:

Client Sample ID: Manhole 2-2 DL | Lab Sample ID: 460-114699-3 DL

Matrix: Solid | Lab File ID: 9F023738.D

Analysis Method: 8082A | Date Collected: 05/31/2016 12:05

Extraction Method: 3546 | Date Extracted: 06/10/2016 02:05

Sample wt/vol: 15.0183(g) | Date Analyzed: 06/11/2016 15:36

Con. Extract Vol.: 10(mL) | Dilution Factor: 2

Injection Volume: 1(uL) | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 17.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 373069 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor 1016	0.022	U	0.16	0.022
11104-28-2	Aroclor 1221	0.022	U	0.16	0.022
11141-16-5	Aroclor 1232	0.022	U	0.16	0.022
53469-21-9	Aroclor 1242	0.022	U	0.16	0.022
11097-69-1	Aroclor 1254	0.022	U	0.16	0.022
37324-23-5	Aroclor 1262	0.022	U	0.16	0.022
11100-14-4	Aroclor 1268	0.022	U	0.16	0.022

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	137	*D*	47-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023738.D
Lims ID: 460-114699-A-3-A
Client ID: Manhole 2-2
Sample Type: Client
Inject. Date: 11-Jun-2016 15:36:11 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 2.0000
Sample Info: 460-0042042-009
Operator ID: Instrument ID: CPESTGC9

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 13-Jun-2016 08:53:27 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: patelji Date: 13-Jun-2016 07:02:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene						M
1	1.619	1.618	0.001	2772699	20.0	
2	1.405	1.403	0.002	3094153	20.0	M
					RPD = 0.00	
6 PCB-1248						M
1	3.715	3.714	0.001	3344120	1439.9	M
1	4.284	4.281	0.003	7689908	1582.9	M
1	4.712	4.714	-0.002	4099525	1346.2	M
1	4.763	4.764	-0.001	4793391	1602.5	M
1	5.192	5.194	-0.002	5552201	1273.0	
1	5.522	5.524	-0.002	4206805	994.8	
1	5.575	5.579	-0.004	7106510	1420.4	
1	6.870	6.875	-0.005	3133985	1494.8	
		Average of Peak Amounts =			1394.3	
2	2.859	2.857	0.002	2782168	1237.6	
2	3.382	3.375	0.007	7931142	1393.9	M
2	3.774	3.759	0.015	8465490	1376.6	M
2	4.106	4.106	0.000	3746059	1065.5	M
2	4.530	4.509	0.021	10111744	1018.3	
2	4.767	4.765	0.002	6111725	1347.4	M
2	5.232	5.233	-0.001	4657366	1509.2	M
2	5.920	5.923	-0.003	2055478	1047.6	
		Average of Peak Amounts =			1249.5	
					RPD = 10.95	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
8 PCB-1260						M
1	6.556	6.561	-0.005	2263035	691.8	
1	6.815	6.818	-0.003	5612339	837.2	
1	7.186	7.188	-0.002	5583683	695.8	
1	8.083	8.083	0.000	3929056	659.6	
1	8.519	8.523	-0.004	3771519	643.6	
1	8.827	8.834	-0.007	6767012	574.7	
1	9.190	9.202	-0.012	4766012	551.6	M
1	9.690	9.710	-0.020	1751063	495.4	M
		Average of Peak Amounts =			643.7	
2	5.454	5.453	0.001	5160474	772.0	M
2	6.190	6.188	0.002	8640515	735.5	M
2	6.364	6.363	0.001	4799997	666.4	M
2	6.734	6.733	0.001	4127668	567.5	
2	7.264	7.261	0.003	9499543	537.0	
2	7.799	7.797	0.002	4924977	592.1	
2	7.989	7.985	0.004	2946138	513.1	
2	8.734	8.738	-0.004	2377635	478.9	
		Average of Peak Amounts =			607.8	
					RPD = 5.73	
$ 11 DCB Decachlorobiphenyl						M
1	10.130	10.157	-0.027	3568738	36.0	M
2	9.195	9.207	-0.012	4424936	34.3	M
					RPD = 4.91	

QC Flag Legend

Review Flags

M - Manually Integrated

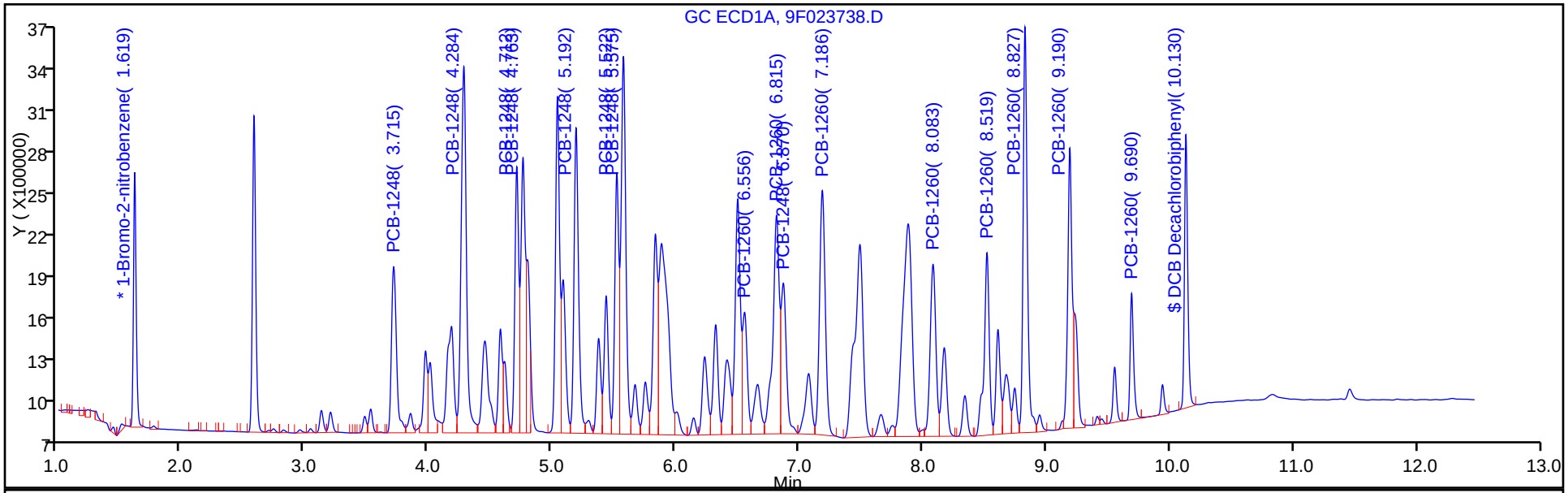
Reagents:

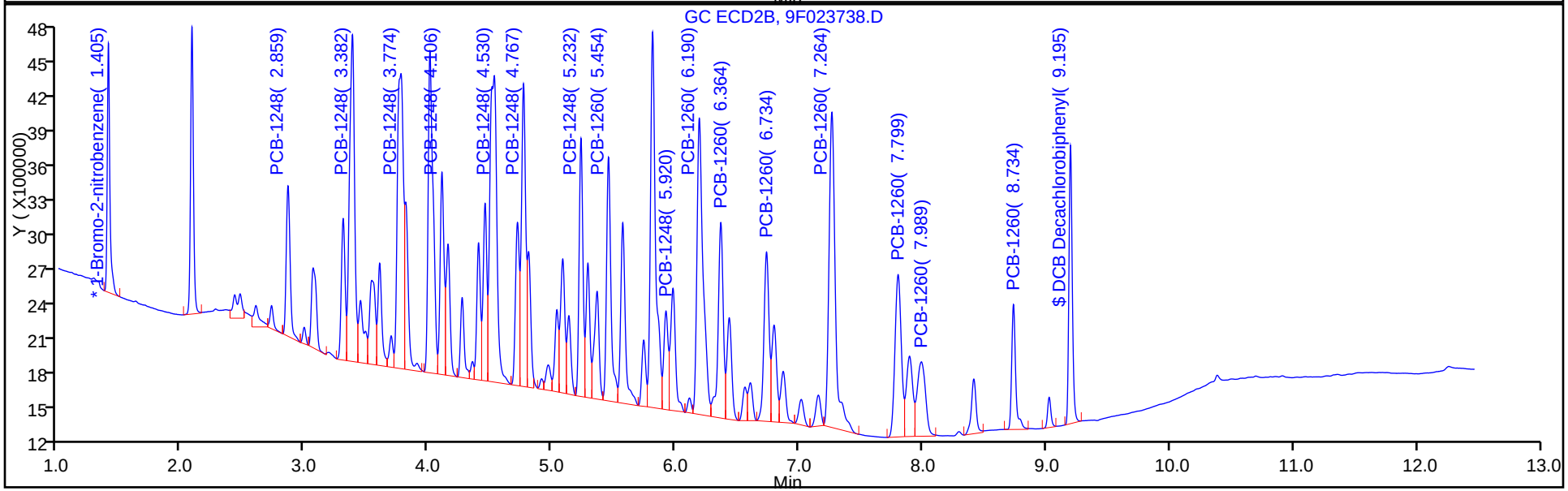
SGPCBISTD_00006 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 13-Jun-2016 08:53:38 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023738.D				
Injection Date:	11-Jun-2016 15:36:11	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	460-114699-A-3-A	Lab Sample ID:	460-114699-3	Worklist Smp#:	9
Client ID:	Manhole 2-2				
Injection Vol:	1.0 ul	Dil. Factor:	2.0000	ALS Bottle#:	9
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		



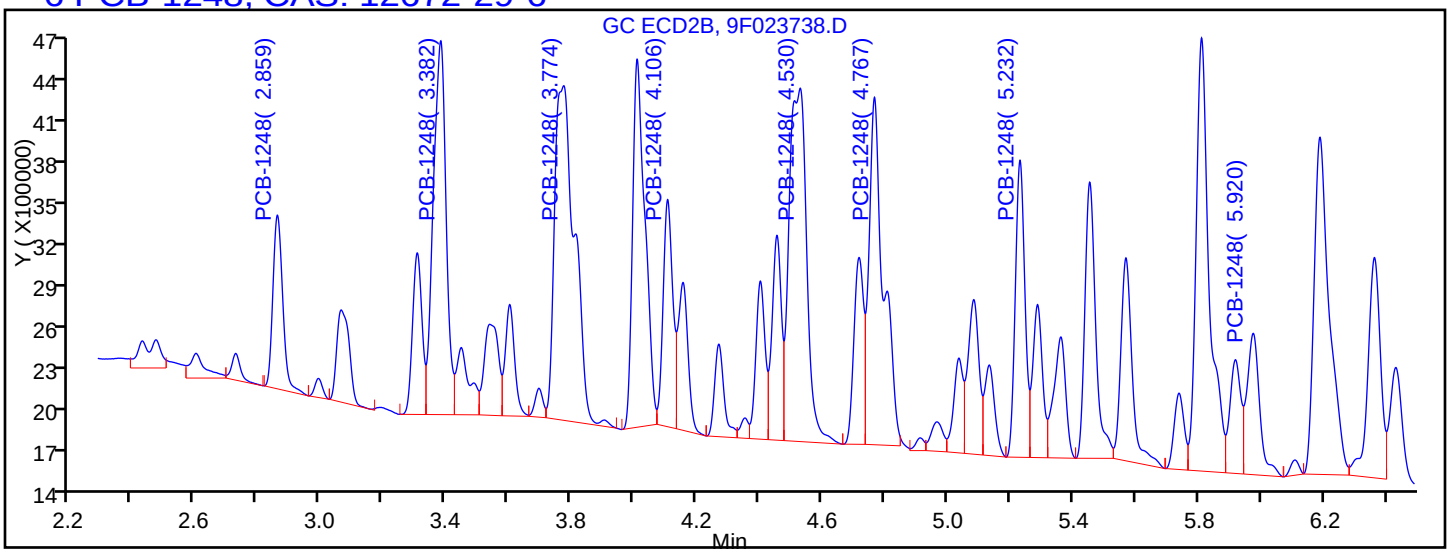


Report Date: 13-Jun-2016 08:53:38 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

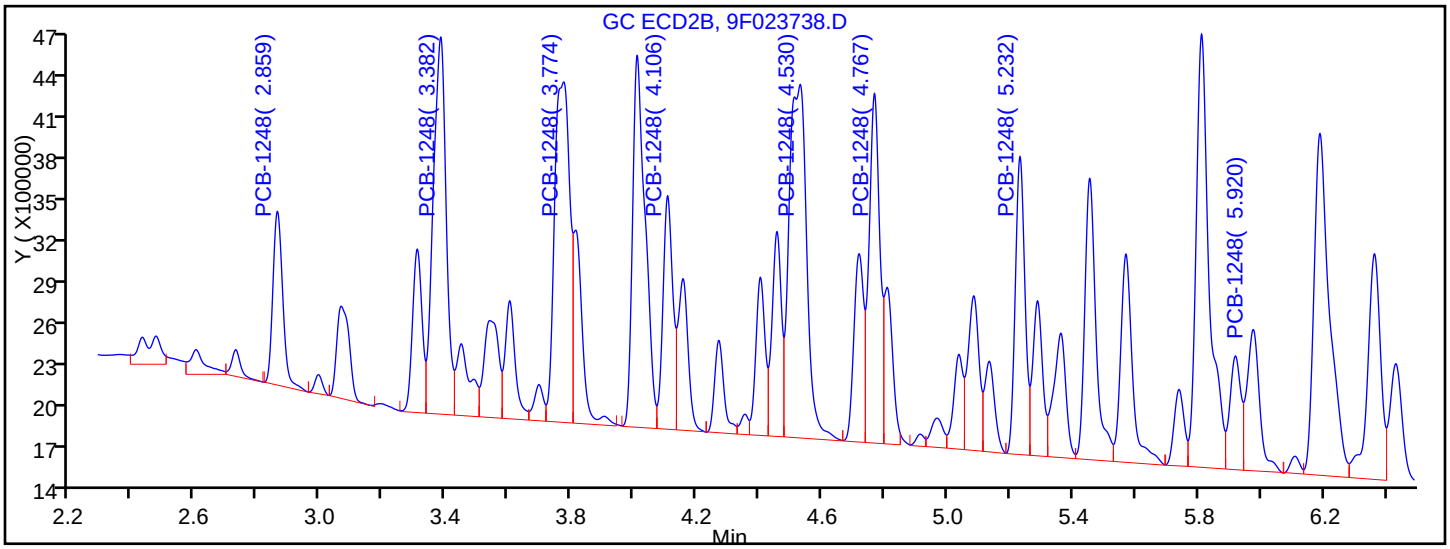
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023738.D				
Injection Date:	11-Jun-2016 15:36:11	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-3-A	Lab Sample ID:	460-114699-3		
Client ID:	Manhole 2-2				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

6 PCB-1248, CAS: 12672-29-6



Processing Integration Results

RT = 2.859	Response = 2782168	
RT = 3.382	Response = 7801233	M
RT = 3.774	Response = 10844255	M
RT = 4.106	Response = 3570633	M
RT = 4.530	Response = 10111744	
RT = 4.767	Response = 8134589	M
RT = 5.232	Response = 4626641	M
RT = 5.920	Response = 2055478	



Manual Integration Results

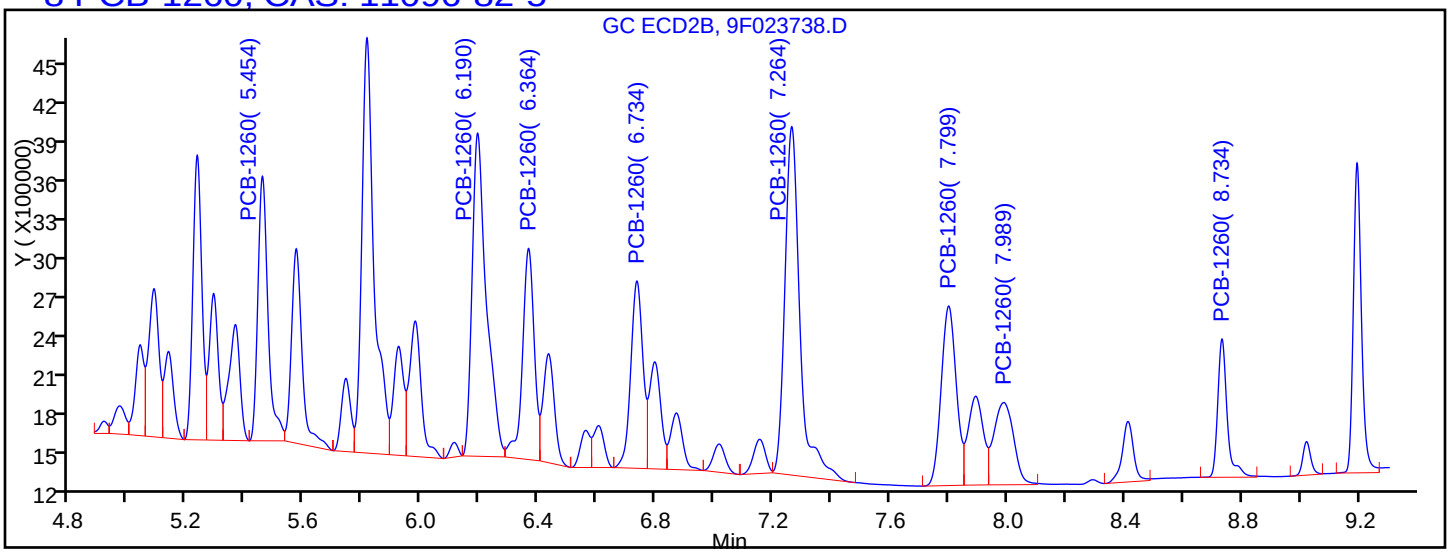
RT = 2.859	Response = 2782168	
RT = 3.382	Response = 7931142	M
RT = 3.774	Response = 8465490	M
RT = 4.106	Response = 3746059	M
RT = 4.530	Response = 10111744	
RT = 4.767	Response = 6111725	M

Report Date: 13-Jun-2016 08:53:39 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

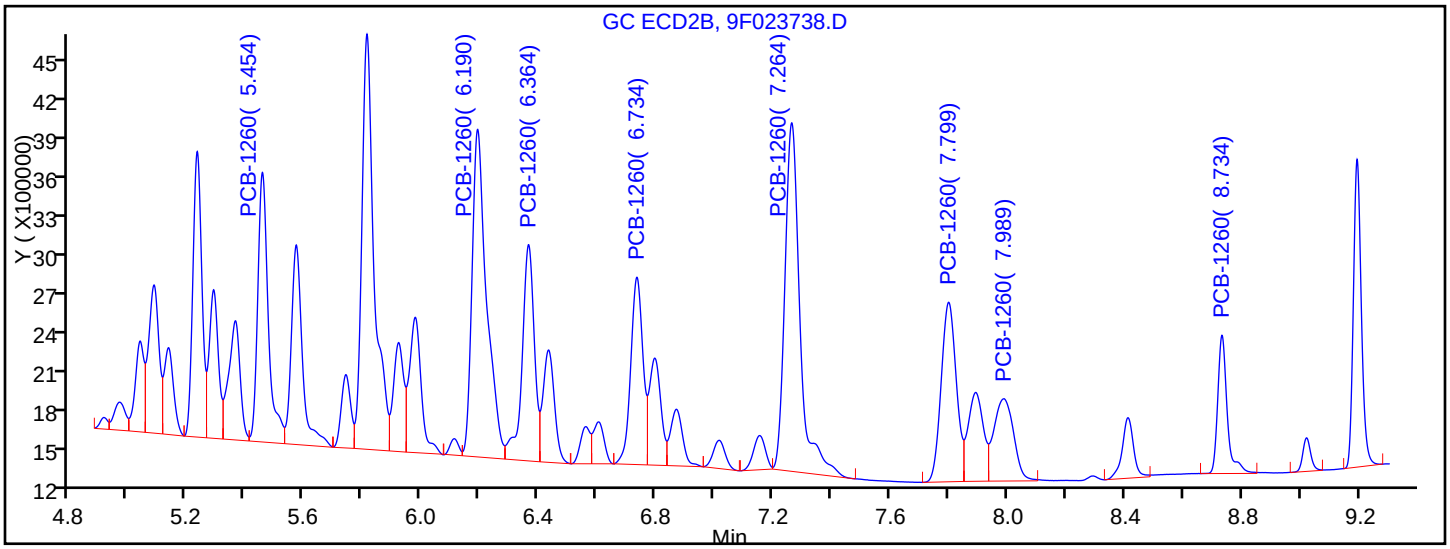
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023738.D				
Injection Date:	11-Jun-2016 15:36:11	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-3-A	Lab Sample ID:	460-114699-3		
Client ID:	Manhole 2-2				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

8 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 5.454	Response = 4870873	M
RT = 6.190	Response = 8324820	M
RT = 6.364	Response = 4511487	M
RT = 6.734	Response = 4127668	
RT = 7.264	Response = 9499543	
RT = 7.799	Response = 4924977	
RT = 7.989	Response = 2946138	
RT = 8.734	Response = 2377635	



Manual Integration Results

RT = 5.454	Response = 5160474	M
RT = 6.190	Response = 8640515	M
RT = 6.364	Response = 4799997	M
RT = 6.734	Response = 4127668	
RT = 7.264	Response = 9499543	
RT = 7.799	Response = 4924977	

TestAmerica Edison

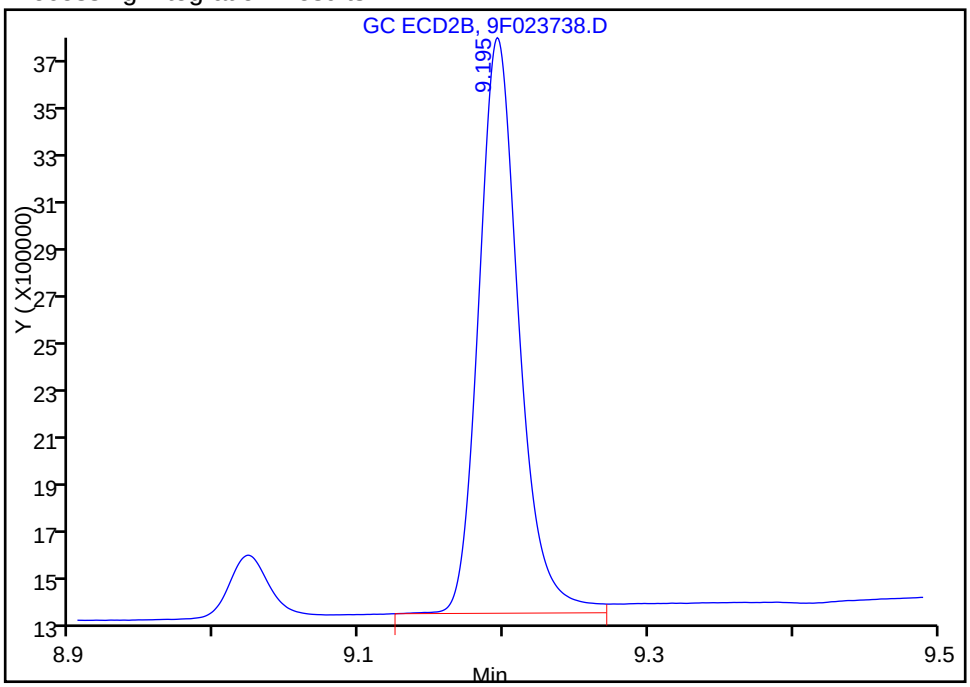
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023738.D				
Injection Date:	11-Jun-2016 15:36:11	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-3-A	Lab Sample ID:	460-114699-3		
Client ID:	Manhole 2-2				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

$ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 2

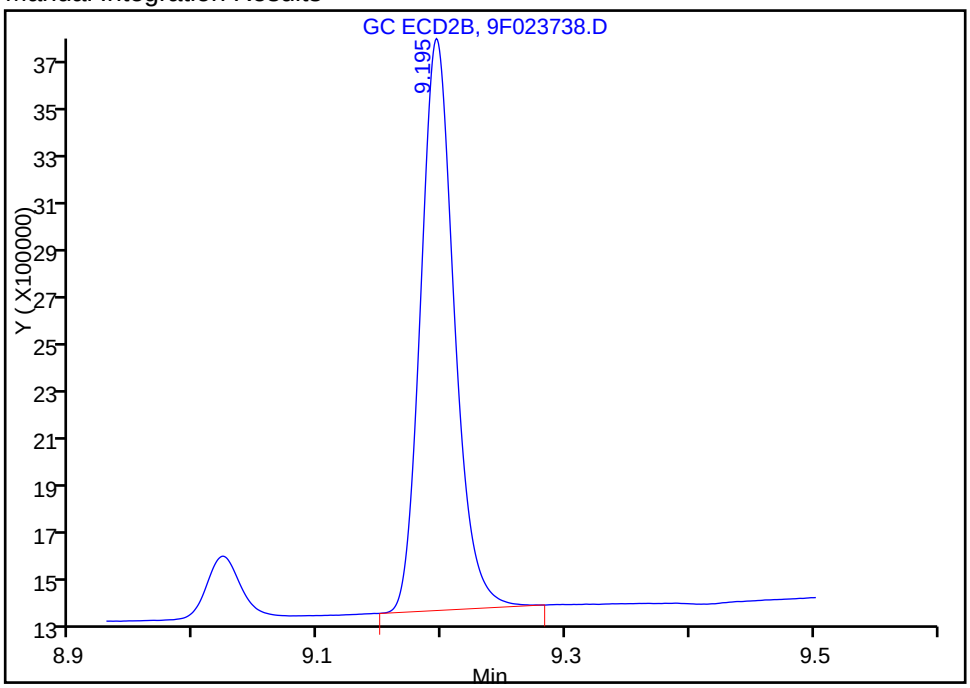
Processing Integration Results

RT: 9.20
Area: 4564555
Amount: 35.398540
Amount Units: ug/l



Manual Integration Results

RT: 9.20
Area: 4424936
Amount: 34.315782
Amount Units: ug/l



Reviewer: patelji, 13-Jun-2016 07:52:50
Audit Action: Manually Integrated Audit Reason: Sample matrix interference

TestAmerica Edison

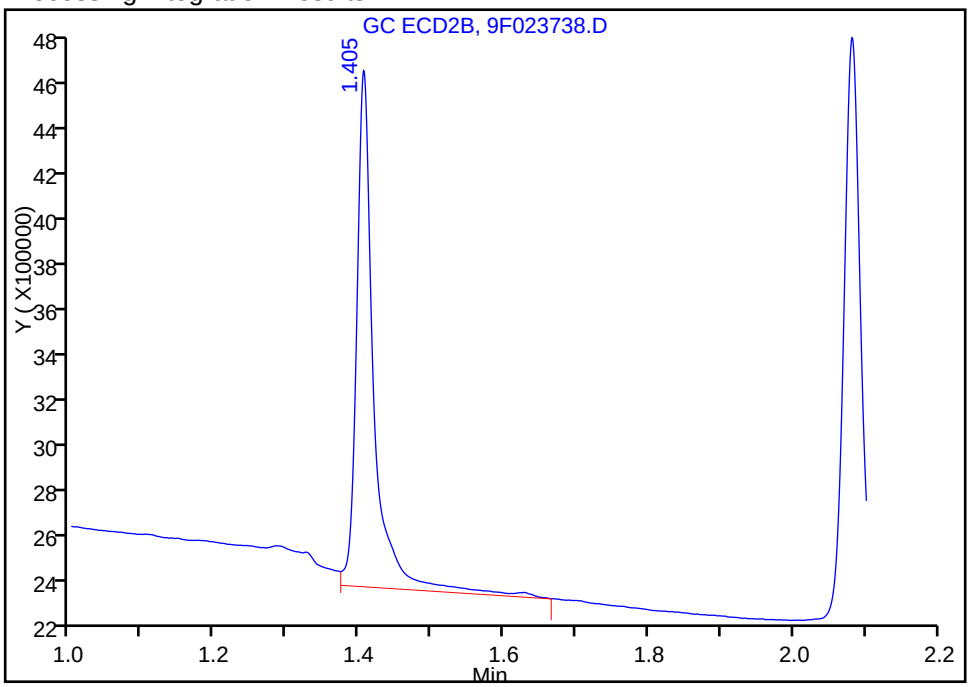
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023738.D				
Injection Date:	11-Jun-2016 15:36:11	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-3-A	Lab Sample ID:	460-114699-3		
Client ID:	Manhole 2-2				
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

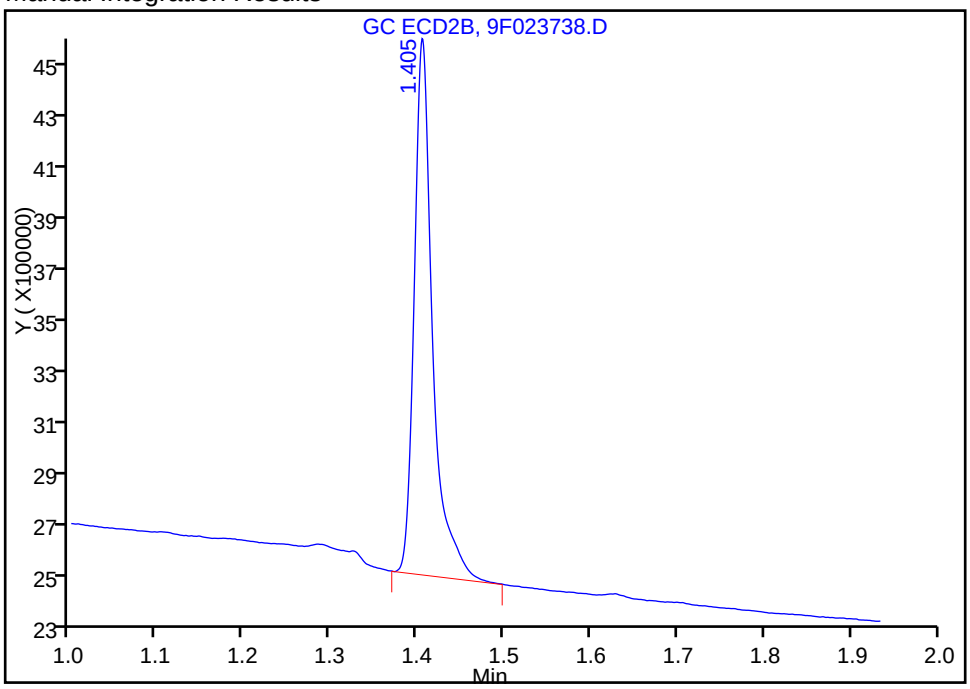
Processing Integration Results

RT: 1.41
Area: 3584846
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.41
Area: 3094153
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 13-Jun-2016 07:52:50
Audit Action: Manually Integrated Audit Reason: Sample matrix interference

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison
Job No.: 460-114699-1
SDG No.:
Client Sample ID: Manhole 2-1
Lab Sample ID: 460-114699-4
Matrix: Solid
Lab File ID: 9F023739.D
Analysis Method: 8082A
Date Collected: 05/31/2016 10:55
Extraction Method: 3546
Date Extracted: 06/10/2016 02:05
Sample wt/vol: 15.0033(g)
Date Analyzed: 06/11/2016 15:54
Con. Extract Vol.: 10(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: CLP-2 ID: 0.53(mm)
% Moisture: 17.6
GPC Cleanup:(Y/N) N
Analysis Batch No.: 373069
Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12672-29-6	Aroclor 1248	0.50		0.081	0.011
11096-82-5	Aroclor 1260	0.12		0.081	0.011

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	128		47-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023739.D
Lims ID: 460-114699-A-4-A
Client ID: Manhole 2-1
Sample Type: Client
Inject. Date: 11-Jun-2016 15:54:15 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0042042-010
Operator ID: Instrument ID: CPESTGC9

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 13-Jun-2016 08:53:27 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: patelji Date: 13-Jun-2016 07:54:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene						M
1	1.618	1.618	0.000	2750089	20.0	M
2	1.405	1.403	0.002	3443702	20.0	M
					RPD = 0.00	
6 PCB-1248						M
1	3.716	3.714	0.002	1389154	603.0	M
1	4.284	4.281	0.003	3574571	741.9	M
1	4.713	4.714	-0.001	1994685	660.4	M
1	4.763	4.764	-0.001	2469045	832.2	M
1	5.192	5.194	-0.002	2563799	592.7	M
1	5.523	5.524	-0.001	1640472	391.1	M
1	5.577	5.579	-0.002	2850364	574.4	M
1	6.873	6.875	-0.002	1225743	589.5	
		Average of Peak Amounts =			623.1	
2	2.860	2.857	0.003	1270543	507.8	M
2	3.382	3.375	0.007	3893209	614.8	M
2	3.777	3.759	0.018	4417083	645.3	M
2	4.107	4.106	0.001	1644558	420.3	M
2	4.536	4.509	0.027	4642904	420.1	M
2	4.767	4.765	0.002	2209339	437.6	M
2	5.233	5.233	0.000	1863284	542.5	M
2	5.922	5.923	-0.001	653599	299.3	M
		Average of Peak Amounts =			486.0	
					RPD = 24.73	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
8 PCB-1260						M
1	6.554	6.561	-0.007	549472	169.4	
1	6.816	6.818	-0.002	1670688	251.3	
1	7.187	7.188	-0.001	1468319	184.5	
1	8.083	8.083	0.000	874302	148.0	
1	8.518	8.523	-0.005	700447	120.5	
1	8.827	8.834	-0.007	1527544	130.8	
1	9.188	9.202	-0.014	969262	113.1	M
1	9.686	9.710	-0.024	382681	109.2	M
		Average of Peak Amounts =			153.3	
2	5.456	5.453	0.003	1189419	159.9	M
2	6.192	6.188	0.004	2171307	166.1	M
2	6.366	6.363	0.003	898134	112.0	M
2	6.737	6.733	0.004	802580	99.1	M
2	7.265	7.261	0.004	1787795	90.8	M
2	7.801	7.797	0.004	867704	93.7	M
2	7.992	7.985	0.007	419157	65.6	M
2	8.733	8.738	-0.005	469267	84.9	
		Average of Peak Amounts =			109.0	
					RPD = 33.78	
$ 11 DCB Decachlorobiphenyl						M
1	10.125	10.157	-0.032	6281306	64.0	M
2	9.193	9.207	-0.014	7556313	52.7	
					RPD = 19.39	

QC Flag Legend

Review Flags

M - Manually Integrated

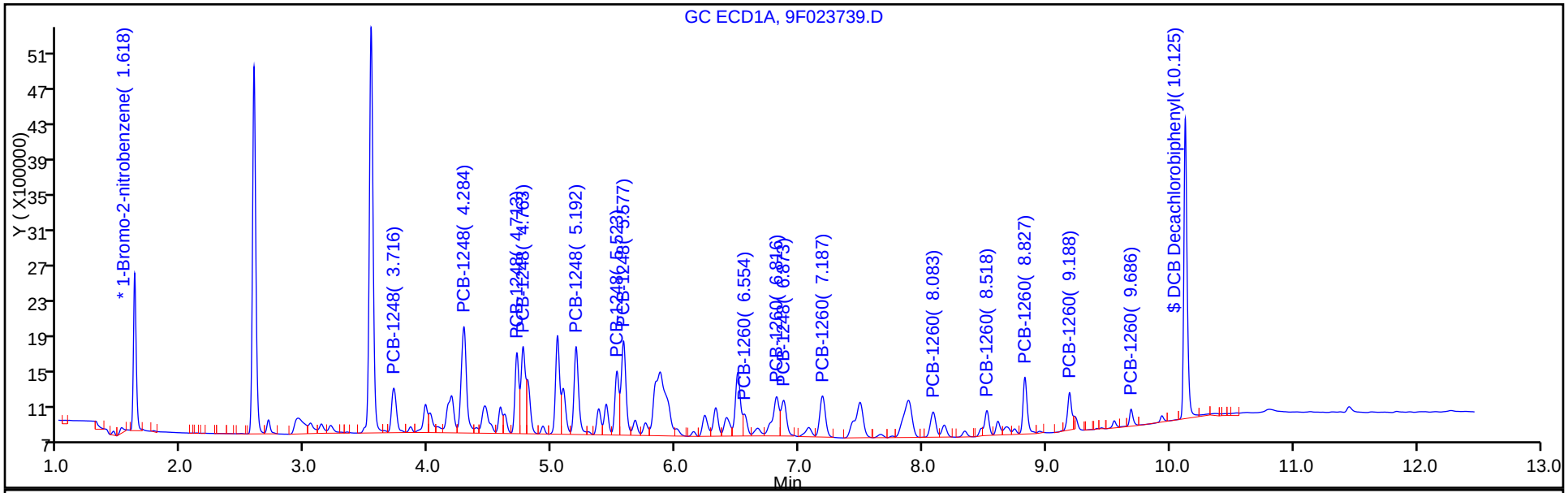
Reagents:

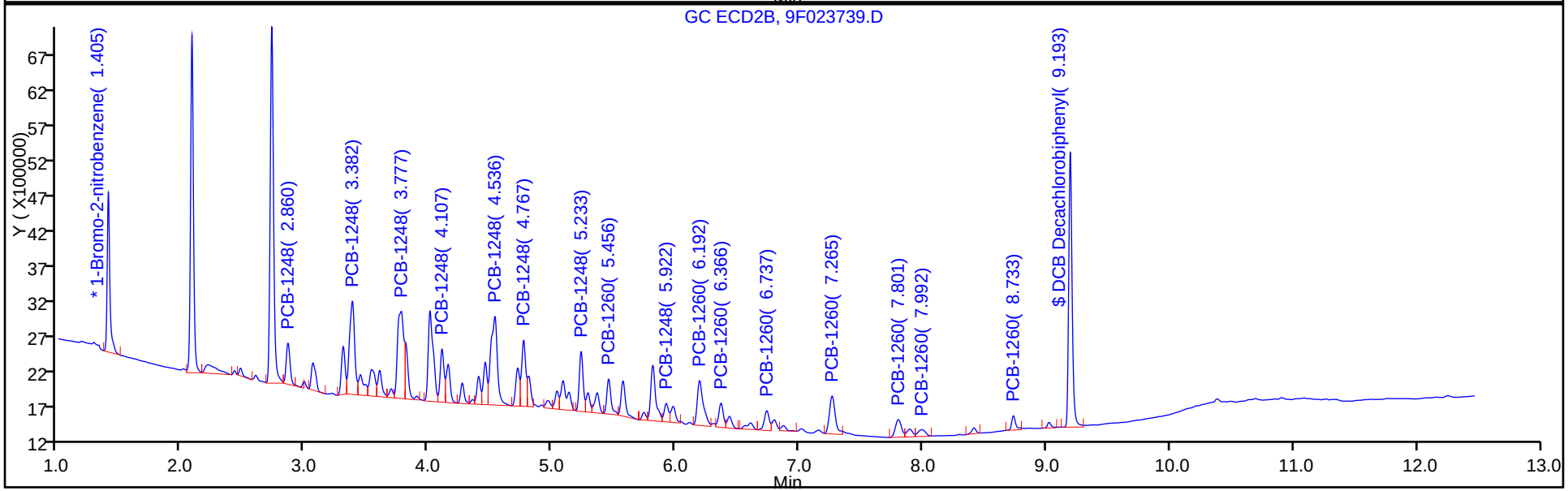
SGPCBISTD_00006 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 13-Jun-2016 08:53:40 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023739.D				
Injection Date:	11-Jun-2016 15:54:15	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	460-114699-A-4-A	Lab Sample ID:	460-114699-4	Worklist Smp#:	10
Client ID:	Manhole 2-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		



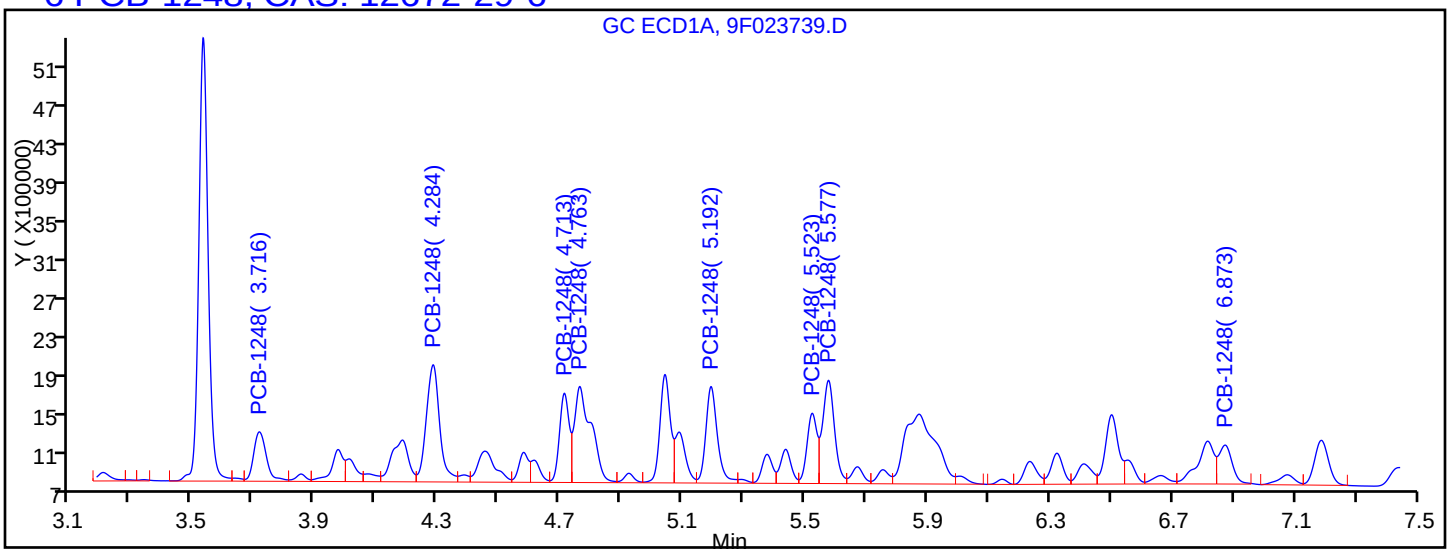


Report Date: 13-Jun-2016 08:53:40 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

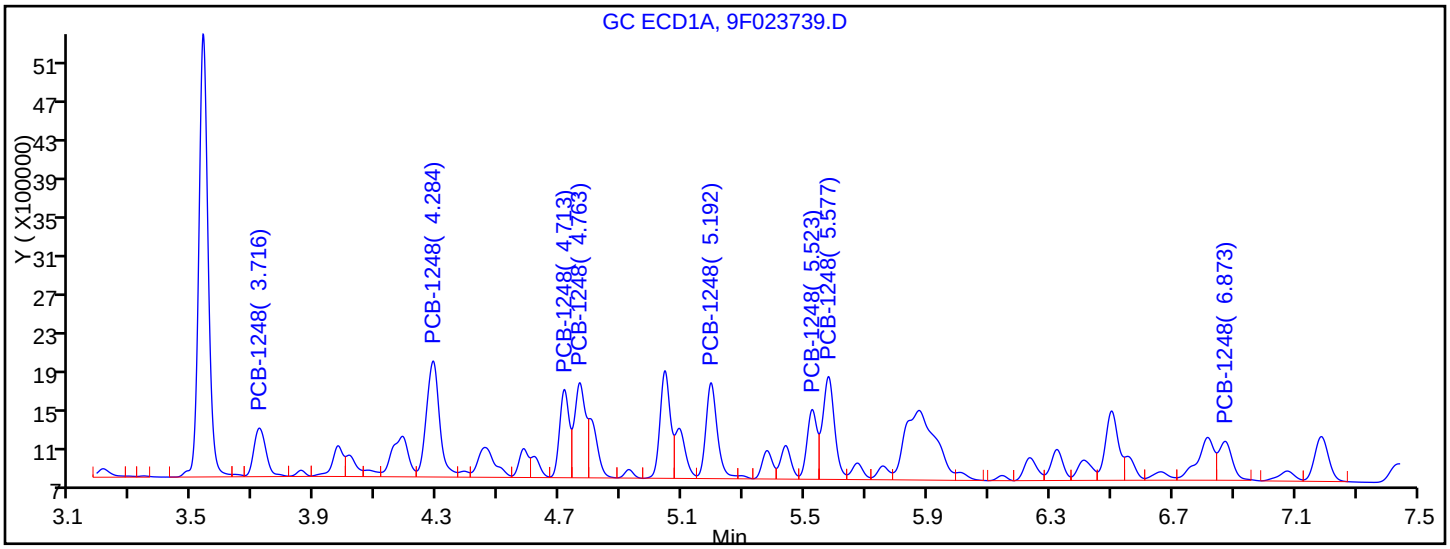
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023739.D				
Injection Date:	11-Jun-2016 15:54:15	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-4-A	Lab Sample ID:	460-114699-4		
Client ID:	Manhole 2-1				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

6 PCB-1248, CAS: 12672-29-6



Processing Integration Results

RT = 3.716	Response = 1468263	M
RT = 4.284	Response = 3672893	M
RT = 4.713	Response = 2039955	M
RT = 4.763	Response = 3735551	M
RT = 5.192	Response = 2621442	M
RT = 5.523	Response = 1659752	M
RT = 5.577	Response = 2873152	M
RT = 6.873	Response = 1225743	



Manual Integration Results

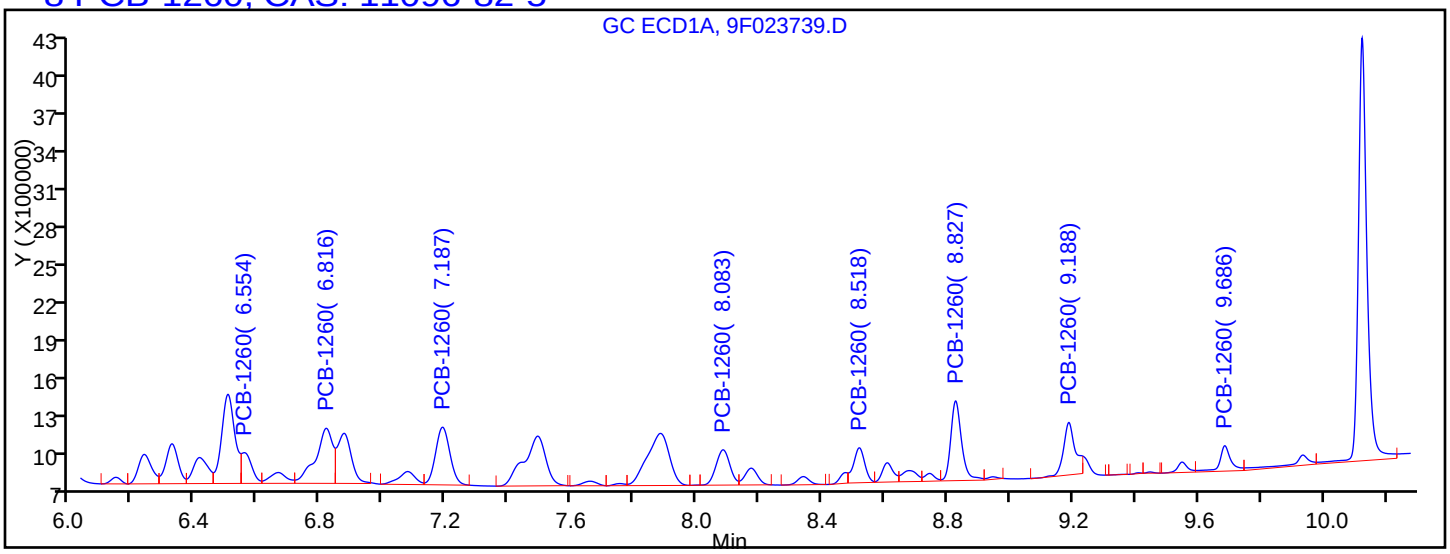
RT = 3.716	Response = 1389154	M
RT = 4.284	Response = 3574571	M
RT = 4.713	Response = 1994685	M
RT = 4.763	Response = 2469045	M
RT = 5.192	Response = 2563799	M
RT = 5.523	Response = 1640472	M

Report Date: 13-Jun-2016 08:53:41 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

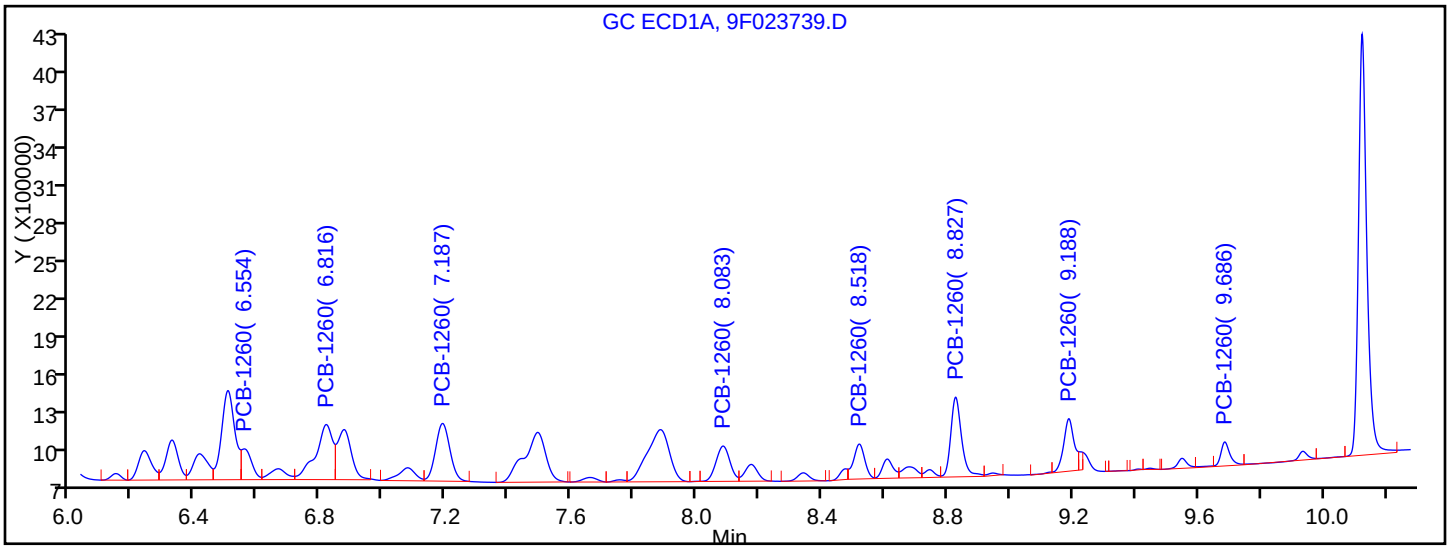
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023739.D				
Injection Date:	11-Jun-2016 15:54:15	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-4-A	Lab Sample ID:	460-114699-4		
Client ID:	Manhole 2-1				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

8 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 6.554	Response = 549472	
RT = 6.816	Response = 1670688	
RT = 7.187	Response = 1468319	
RT = 8.083	Response = 874302	
RT = 8.518	Response = 700447	
RT = 8.827	Response = 1527544	
RT = 9.188	Response = 1098083	M
RT = 9.686	Response = 499535	M



Manual Integration Results

RT = 6.554	Response = 549472
RT = 6.816	Response = 1670688
RT = 7.187	Response = 1468319
RT = 8.083	Response = 874302
RT = 8.518	Response = 700447
RT = 8.827	Response = 1527544

Manual Integration/User Assign Peak Report

TestAmerica Edison

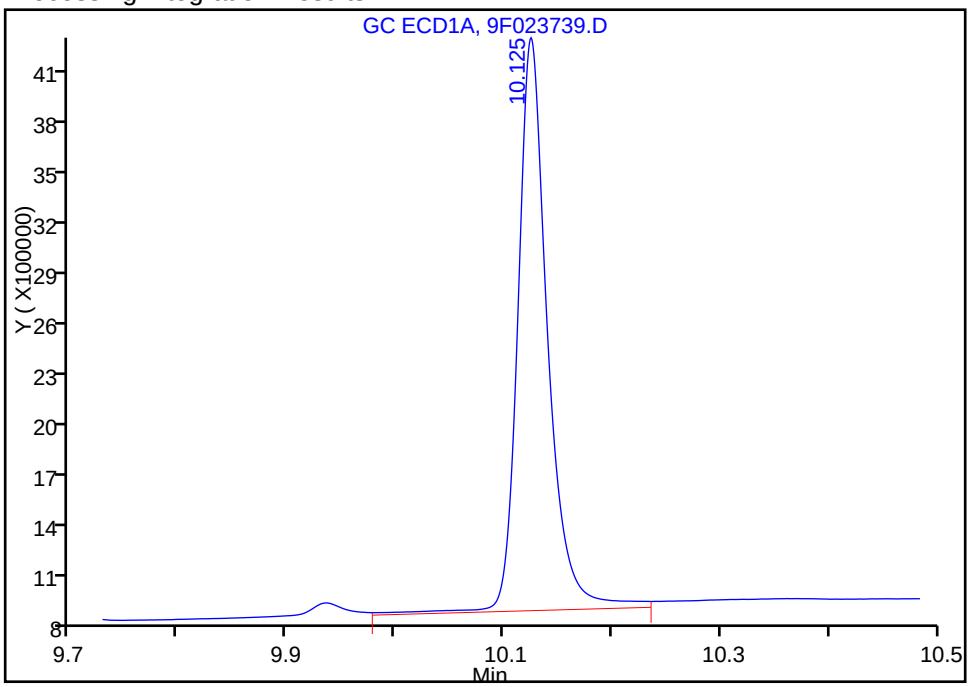
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023739.D				
Injection Date:	11-Jun-2016 15:54:15	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-4-A	Lab Sample ID:	460-114699-4		
Client ID:	Manhole 2-1				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

$ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

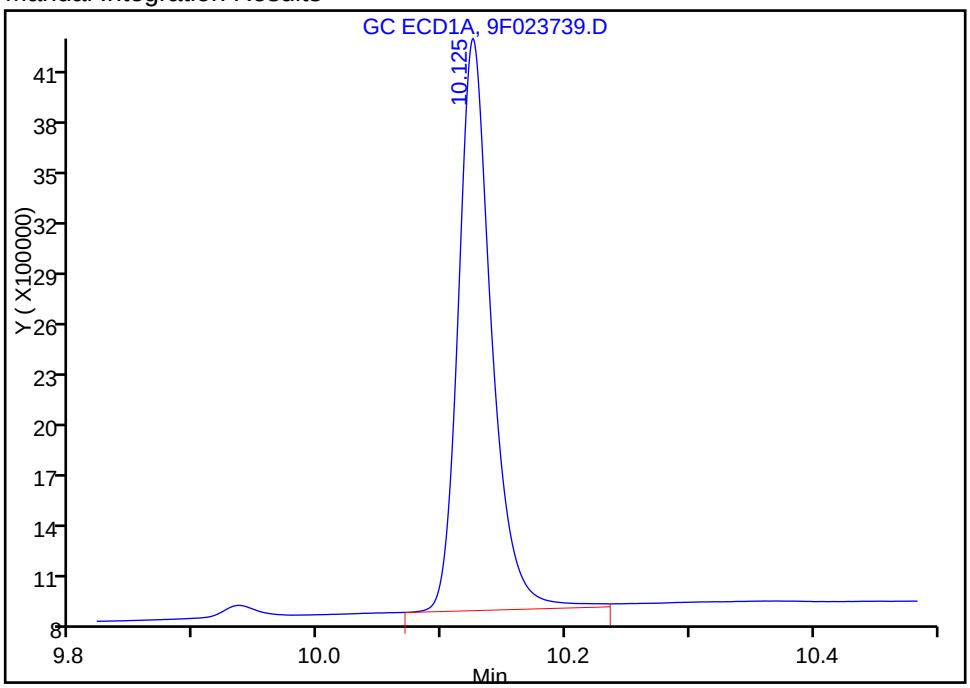
Processing Integration Results

RT: 10.12
Area: 6507335
Amount: 64.361095
Amount Units: ug/l



Manual Integration Results

RT: 10.12
Area: 6281306
Amount: 63.958596
Amount Units: ug/l



Reviewer: patelji, 13-Jun-2016 07:56:35

Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

TestAmerica Edison

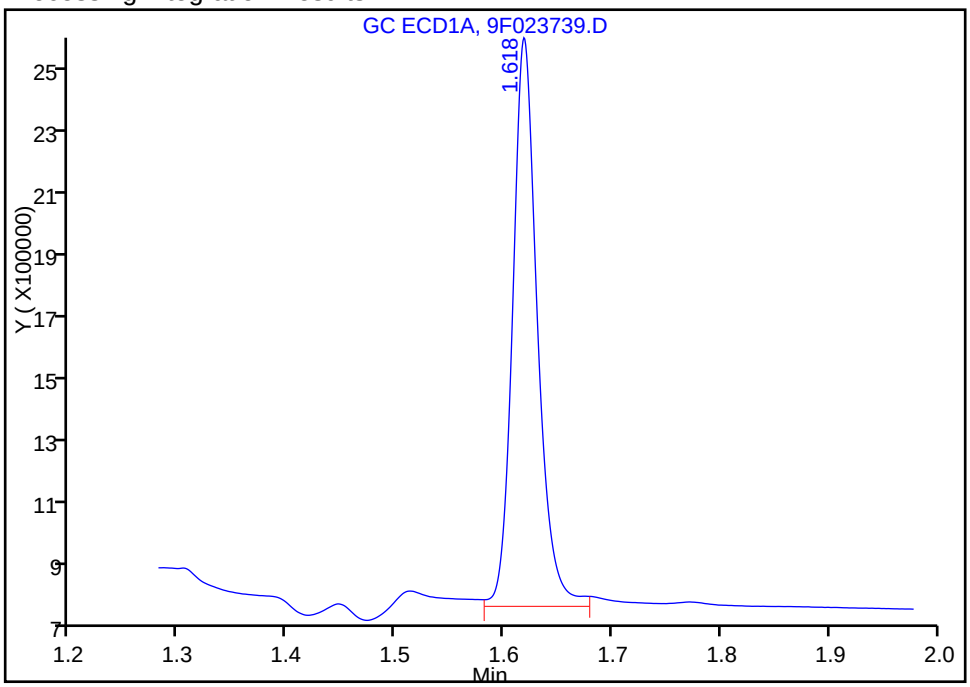
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023739.D				
Injection Date:	11-Jun-2016 15:54:15	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-4-A	Lab Sample ID:	460-114699-4		
Client ID:	Manhole 2-1				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 1

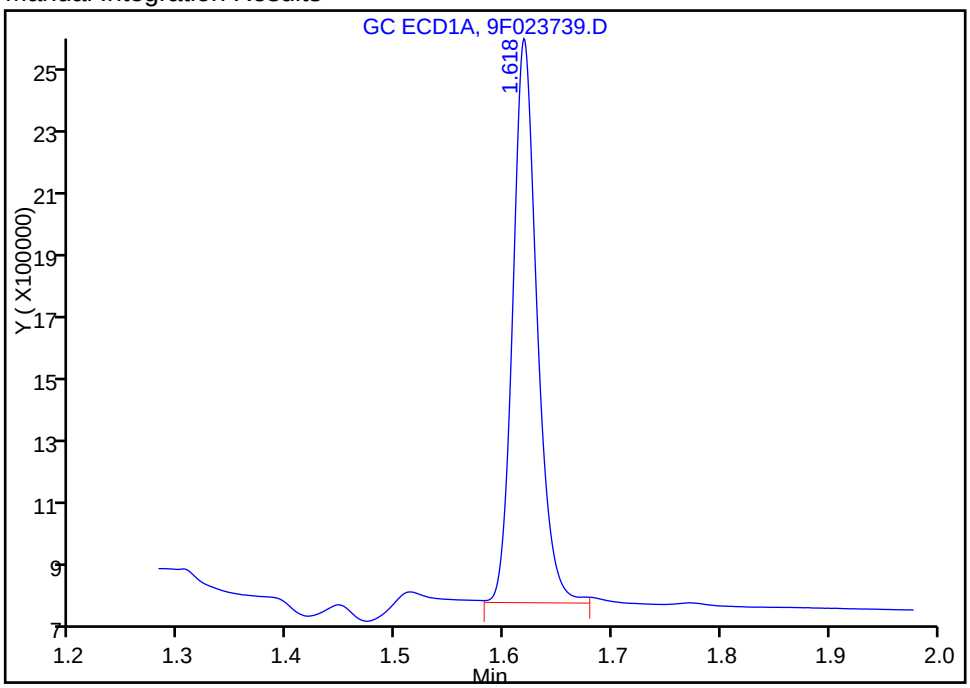
Processing Integration Results

RT: 1.62
Area: 2831232
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.62
Area: 2750089
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 13-Jun-2016 07:56:35
Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison
Job No.: 460-114699-1
SDG No.:
Client Sample ID: Manhole 2-1
Lab Sample ID: 460-114699-4
Matrix: Solid
Lab File ID: 9F023739.D
Analysis Method: 8082A
Date Collected: 05/31/2016 10:55
Extraction Method: 3546
Date Extracted: 06/10/2016 02:05
Sample wt/vol: 15.0033(g)
Date Analyzed: 06/11/2016 15:54
Con. Extract Vol.: 10(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: CLP-1 ID: 0.53(mm)
% Moisture: 17.6
GPC Cleanup:(Y/N) N
Analysis Batch No.: 373069
Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor 1016	0.011	U	0.081	0.011
11104-28-2	Aroclor 1221	0.011	U	0.081	0.011
11141-16-5	Aroclor 1232	0.011	U	0.081	0.011
53469-21-9	Aroclor 1242	0.011	U	0.081	0.011
11097-69-1	Aroclor 1254	0.011	U	0.081	0.011
37324-23-5	Aroclor 1262	0.011	U	0.081	0.011
11100-14-4	Aroclor 1268	0.011	U	0.081	0.011

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	105		47-150

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023739.D
Lims ID: 460-114699-A-4-A
Client ID: Manhole 2-1
Sample Type: Client
Inject. Date: 11-Jun-2016 15:54:15 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0042042-010
Operator ID: Instrument ID: CPESTGC9

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 13-Jun-2016 08:53:27 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: patelji Date: 13-Jun-2016 07:54:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene						M
1	1.618	1.618	0.000	2750089	20.0	M
2	1.405	1.403	0.002	3443702	20.0	M
					RPD = 0.00	
6 PCB-1248						M
1	3.716	3.714	0.002	1389154	603.0	M
1	4.284	4.281	0.003	3574571	741.9	M
1	4.713	4.714	-0.001	1994685	660.4	M
1	4.763	4.764	-0.001	2469045	832.2	M
1	5.192	5.194	-0.002	2563799	592.7	M
1	5.523	5.524	-0.001	1640472	391.1	M
1	5.577	5.579	-0.002	2850364	574.4	M
1	6.873	6.875	-0.002	1225743	589.5	
		Average of Peak Amounts =			623.1	
2	2.860	2.857	0.003	1270543	507.8	M
2	3.382	3.375	0.007	3893209	614.8	M
2	3.777	3.759	0.018	4417083	645.3	M
2	4.107	4.106	0.001	1644558	420.3	M
2	4.536	4.509	0.027	4642904	420.1	M
2	4.767	4.765	0.002	2209339	437.6	M
2	5.233	5.233	0.000	1863284	542.5	M
2	5.922	5.923	-0.001	653599	299.3	M
		Average of Peak Amounts =			486.0	
					RPD = 24.73	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
8 PCB-1260						M
1	6.554	6.561	-0.007	549472	169.4	
1	6.816	6.818	-0.002	1670688	251.3	
1	7.187	7.188	-0.001	1468319	184.5	
1	8.083	8.083	0.000	874302	148.0	
1	8.518	8.523	-0.005	700447	120.5	
1	8.827	8.834	-0.007	1527544	130.8	
1	9.188	9.202	-0.014	969262	113.1	M
1	9.686	9.710	-0.024	382681	109.2	M
		Average of Peak Amounts =			153.3	
2	5.456	5.453	0.003	1189419	159.9	M
2	6.192	6.188	0.004	2171307	166.1	M
2	6.366	6.363	0.003	898134	112.0	M
2	6.737	6.733	0.004	802580	99.1	M
2	7.265	7.261	0.004	1787795	90.8	M
2	7.801	7.797	0.004	867704	93.7	M
2	7.992	7.985	0.007	419157	65.6	M
2	8.733	8.738	-0.005	469267	84.9	
		Average of Peak Amounts =			109.0	
					RPD = 33.78	
$ 11 DCB Decachlorobiphenyl						M
1	10.125	10.157	-0.032	6281306	64.0	M
2	9.193	9.207	-0.014	7556313	52.7	
					RPD = 19.39	

QC Flag Legend

Review Flags

M - Manually Integrated

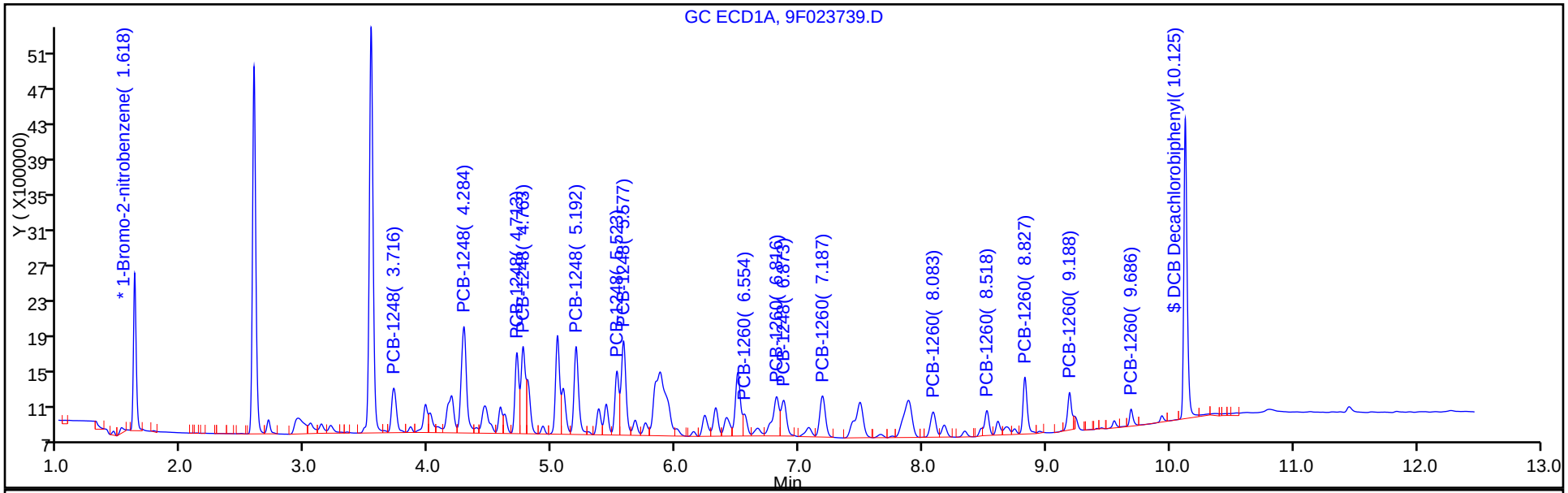
Reagents:

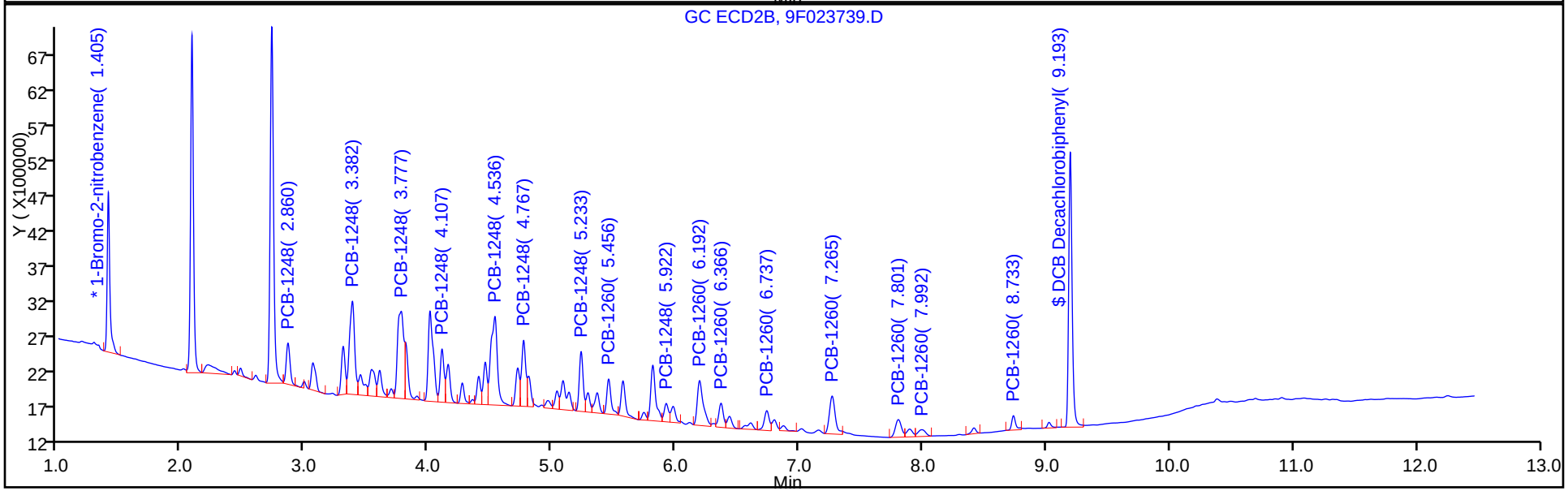
SGPCBISTD_00006 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 13-Jun-2016 08:53:41 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023739.D				
Injection Date:	11-Jun-2016 15:54:15	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	460-114699-A-4-A	Lab Sample ID:	460-114699-4	Worklist Smp#:	10
Client ID:	Manhole 2-1				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		



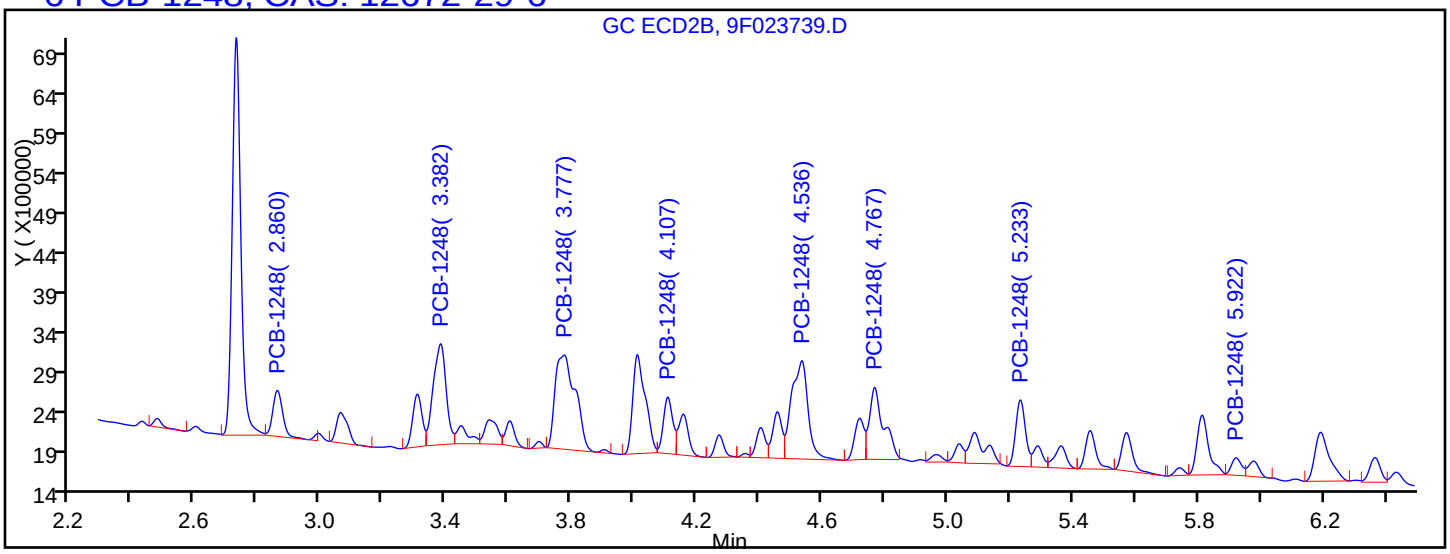


Report Date: 13-Jun-2016 08:53:42 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

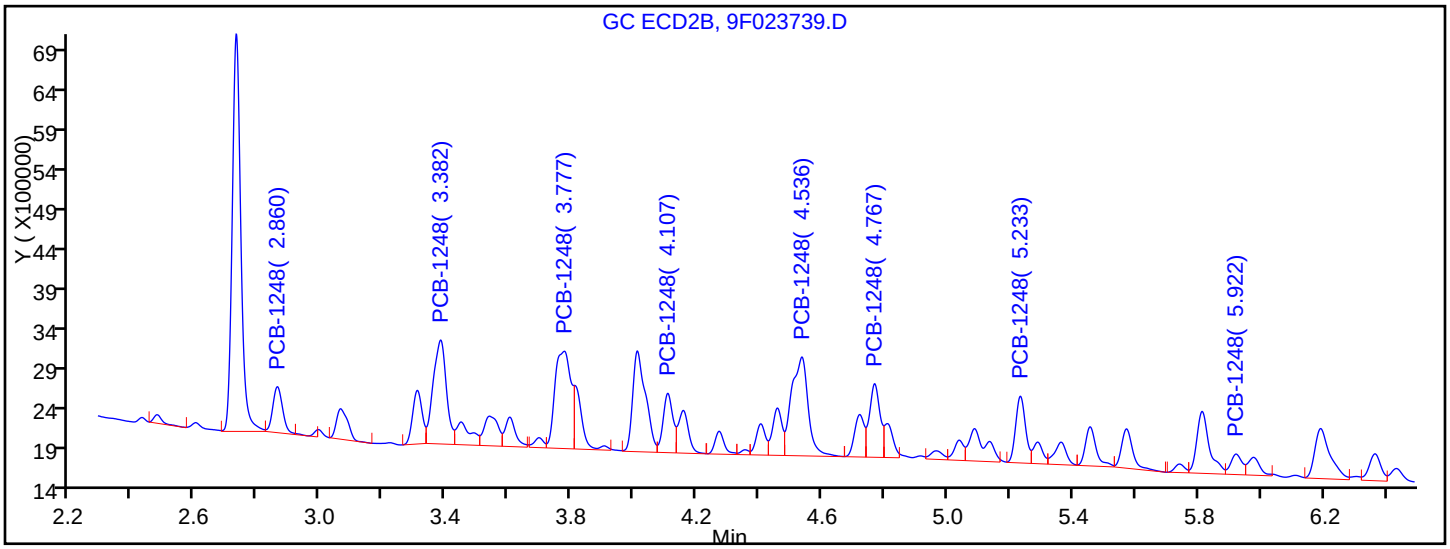
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023739.D				
Injection Date:	11-Jun-2016 15:54:15	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-4-A	Lab Sample ID:	460-114699-4		
Client ID:	Manhole 2-1				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

6 PCB-1248, CAS: 12672-29-6



Processing Integration Results

RT = 2.860	Response = 1355808	M
RT = 3.382	Response = 3687450	M
RT = 3.777	Response = 5418655	M
RT = 4.107	Response = 1512178	M
RT = 4.536	Response = 4576180	M
RT = 4.767	Response = 2885255	M
RT = 5.233	Response = 1853327	M
RT = 5.922	Response = 506211	M



Manual Integration Results

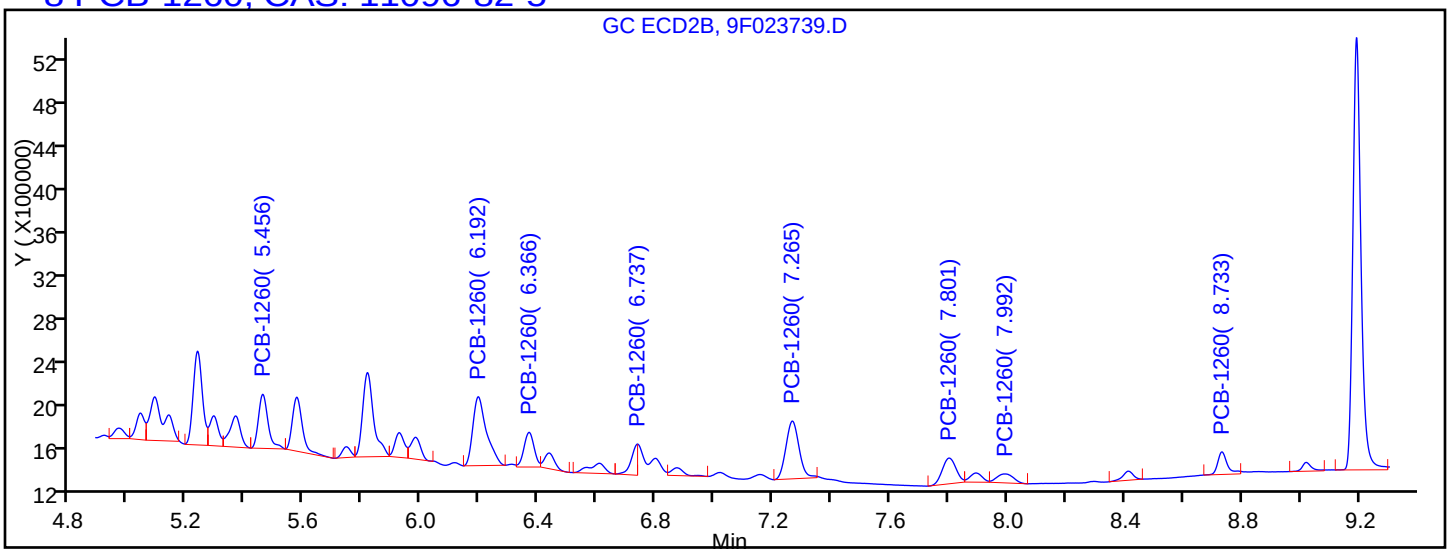
RT = 2.860	Response = 1270543	M
RT = 3.382	Response = 3893209	M
RT = 3.777	Response = 4417083	M
RT = 4.107	Response = 1644558	M
RT = 4.536	Response = 4642904	M
RT = 4.767	Response = 2209339	M

Report Date: 13-Jun-2016 08:53:42 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

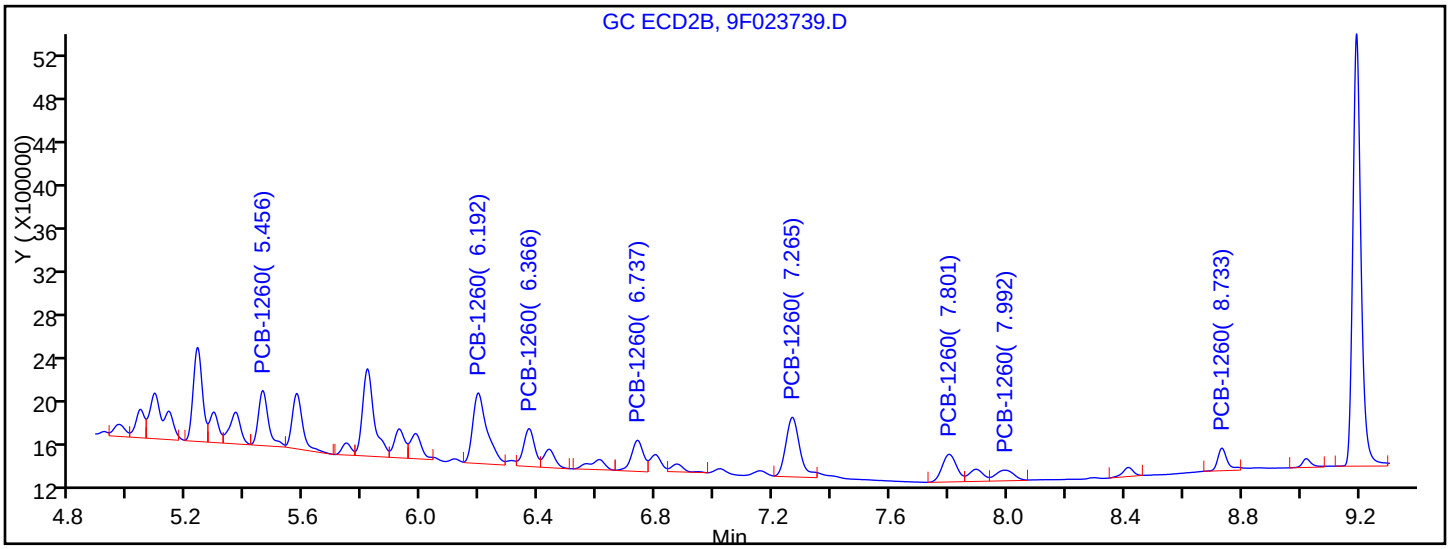
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023739.D				
Injection Date:	11-Jun-2016 15:54:15	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-4-A	Lab Sample ID:	460-114699-4		
Client ID:	Manhole 2-1				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

8 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 5.456	Response = 1112526	M
RT = 6.192	Response = 2014021	M
RT = 6.366	Response = 756398	M
RT = 6.737	Response = 402724	M
RT = 7.265	Response = 1624769	M
RT = 7.801	Response = 756100	M
RT = 7.992	Response = 317180	M
RT = 8.733	Response = 469267	



Manual Integration Results

RT = 5.456	Response = 1189419	M
RT = 6.192	Response = 2171307	M
RT = 6.366	Response = 898134	M
RT = 6.737	Response = 802580	M
RT = 7.265	Response = 1787795	M
RT = 7.801	Response = 867704	M

TestAmerica Edison

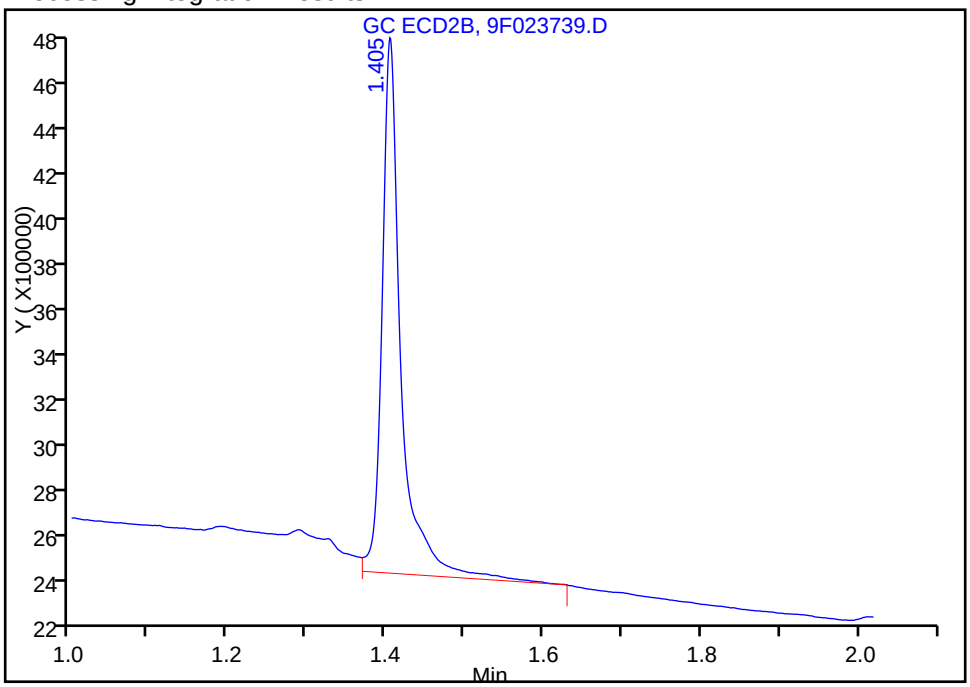
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023739.D				
Injection Date:	11-Jun-2016 15:54:15	Instrument ID:	CPESTGC9		
Lims ID:	460-114699-A-4-A	Lab Sample ID:	460-114699-4		
Client ID:	Manhole 2-1				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

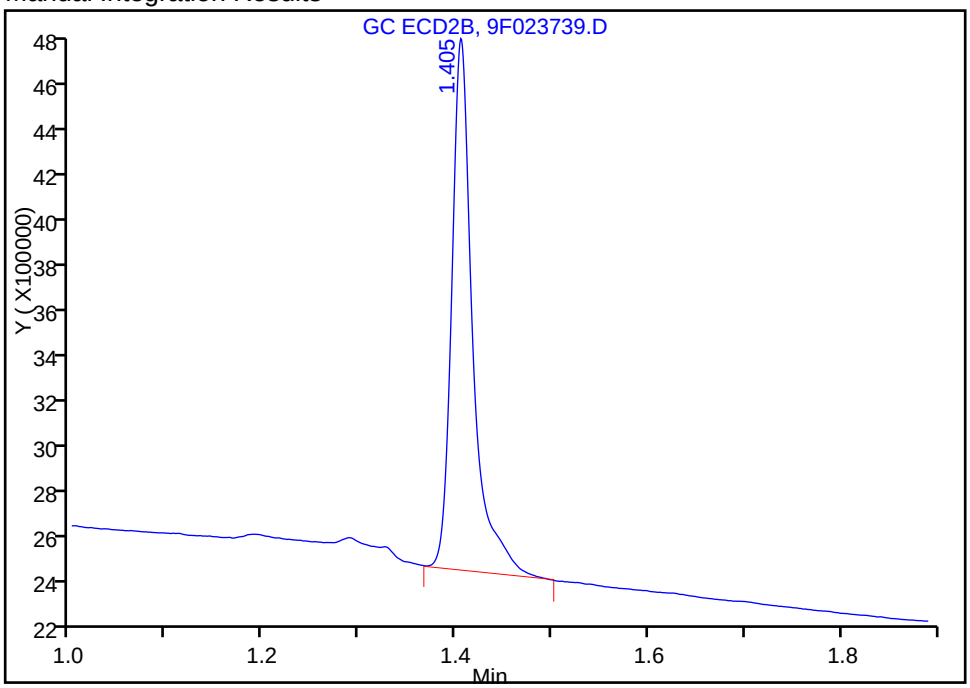
Processing Integration Results

RT: 1.40
Area: 3879273
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.40
Area: 3443702
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 13-Jun-2016 07:54:03
Audit Action: Manually Integrated Audit Reason: Peak not integrated

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 10:14 Calibration End Date: 05/12/2016 11:53 Calibration ID: 55694

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/2	9F001880.D
Level 2	IC 460-367709/3	9F001881.D
Level 3	IC 460-367709/4	9F001882.D
Level 4	IC 460-367709/5	9F001883.D
Level 5	IC 460-367709/6	9F001884.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1016 Peak 1	0.0196	0.0187	0.0173	0.0177	0.0176	Ave		0.0182				5.2		20.0			0.9900
PCB-1016 Peak 2	0.0398	0.0388	0.0356	0.0363	0.0364	Ave		0.0374				4.9		20.0			0.9900
PCB-1016 Peak 3	0.0188	0.0179	0.0149	0.0152	0.0163	Ave		0.0166				10.2		20.0			0.9900
PCB-1016 Peak 4	0.0721	0.0648	0.0599	0.0617	0.0675	Ave		0.0652				7.4		20.0			0.9900
PCB-1016 Peak 5	0.0317	0.0308	0.0279	0.0285	0.0303	Ave		0.0299				5.4		20.0			0.9900
PCB-1016 Peak 6	0.0193	0.0168	0.0150	0.0152	0.0158	Ave		0.0165				10.7		20.0			0.9900
PCB-1016 Peak 7	0.0285	0.0231	0.0217	0.0221	0.0239	Ave		0.0238				11.5		20.0			0.9900
PCB-1016 Peak 8	0.0270	0.0257	0.0247	0.0254	0.0273	Ave		0.0260				4.2		20.0			0.9900
PCB-1260 Peak 1	0.0256	0.0229	0.0220	0.0225	0.0249	Ave		0.0236				6.7		20.0			0.9900
PCB-1260 Peak 2	0.0548	0.0476	0.0447	0.0452	0.0495	Ave		0.0484				8.4		20.0			0.9900
PCB-1260 Peak 3	0.0748	0.0546	0.0511	0.0517	0.0572	Ave		0.0579				16.9		20.0			0.9900
PCB-1260 Peak 4	0.0495	0.0416	0.0393	0.0401	0.0443	Ave		0.0430				9.6		20.0			0.9900
PCB-1260 Peak 5	0.0462	0.0413	0.0389	0.0401	0.0449	Ave		0.0423				7.4		20.0			0.9900
PCB-1260 Peak 6	0.0992	0.0817	0.0764	0.0785	0.0889	Ave		0.0849				10.9		20.0			0.9900
PCB-1260 Peak 7	0.0731	0.0598	0.0562	0.0580	0.0645	Ave		0.0623				10.9		20.0			0.9900
PCB-1260 Peak 8	0.0291	0.0245	0.0234	0.0240	0.0266	Ave		0.0255				9.1		20.0			0.9900
Tetrachloro-m-xylene	0.8689	0.8644	0.7940	0.7934	0.8275	Ave		0.8297				4.4		20.0			0.9900
DCB Decachlorobiphenyl	0.9247	0.7083	0.6305	0.6112	0.6964	Ave		0.7142				17.5		20.0			0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 10:14 Calibration End Date: 05/12/2016 11:53 Calibration ID: 55694

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/2	9F001880.D
Level 2	IC 460-367709/3	9F001881.D
Level 3	IC 460-367709/4	9F001882.D
Level 4	IC 460-367709/5	9F001883.D
Level 5	IC 460-367709/6	9F001884.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	BNB	Ave	145541	1595369	2924115	4369736	6155311	50.0	500	1000	1500	2500
PCB-1016 Peak 2	BNB	Ave	295880	3309803	6004627	8959256	12678388	50.0	500	1000	1500	2500
PCB-1016 Peak 3	BNB	Ave	139486	1526780	2519160	3743966	5687774	50.0	500	1000	1500	2500
PCB-1016 Peak 4	BNB	Ave	536157	5522433	10108992	15248808	23551614	50.0	500	1000	1500	2500
PCB-1016 Peak 5	BNB	Ave	235853	2628581	4712190	7047286	10582390	50.0	500	1000	1500	2500
PCB-1016 Peak 6	BNB	Ave	143617	1436666	2537118	3767776	5513465	50.0	500	1000	1500	2500
PCB-1016 Peak 7	BNB	Ave	211655	1966187	3661187	5454281	8344979	50.0	500	1000	1500	2500
PCB-1016 Peak 8	BNB	Ave	200511	2194391	4167289	6284163	9519974	50.0	500	1000	1500	2500
PCB-1260 Peak 1	BNB	Ave	190526	1951506	3718492	5566734	8682406	50.0	500	1000	1500	2500
PCB-1260 Peak 2	BNB	Ave	407387	4056846	7549602	11169719	17248720	50.0	500	1000	1500	2500
PCB-1260 Peak 3	BNB	Ave	555852	4657312	8628437	12780758	19940336	50.0	500	1000	1500	2500
PCB-1260 Peak 4	BNB	Ave	368076	3550456	6628004	9904597	15454420	50.0	500	1000	1500	2500
PCB-1260 Peak 5	BNB	Ave	343289	3524230	6563297	9897151	15657966	50.0	500	1000	1500	2500
PCB-1260 Peak 6	BNB	Ave	736946	6963669	12889307	19406860	31010518	50.0	500	1000	1500	2500
PCB-1260 Peak 7	BNB	Ave	543036	5102647	9478610	14338368	22497806	50.0	500	1000	1500	2500
PCB-1260 Peak 8	BNB	Ave	215968	2087900	3951876	5922048	9261706	50.0	500	1000	1500	2500
Tetrachloro-m-xylene	BNB	Ave	1614359	7370188	13403637	19604800	23087417	12.5	50.0	100	150	200
DCB Decachlorobiphenyl	BNB	Ave	1717969	6039647	10643250	15101165	19430254	12.5	50.0	100	150	200

Curve Type Legend:

Ave = Average ISTD

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D
Lims ID: IC PCB 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 12-May-2016 10:14:48 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info:
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub1

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:20:49 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 11:17:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.625	1.624	0.001	2972583	20.0	20.0	
2	1.407	1.410	-0.003	3247370	20.0	20.0	M
						RPD = 0.00	
$ 2 Tetrachloro-m-xylene							M
1	2.596	2.593	0.003	1614359	12.5	13.1	
2	2.084	2.087	-0.003	1649418	12.5	13.3	M
						RPD = 1.68	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 PCB-1016							M
1	3.219	3.216	0.003	145541	50.0	53.8	
1	3.731	3.728	0.003	295880	50.0	53.3	M
1	4.033	4.025	0.008	139486	50.0	56.5	M
1	4.299	4.296	0.003	536157	50.0	55.3	M
1	4.469	4.467	0.002	235853	50.0	53.1	M
1	4.731	4.727	0.004	143617	50.0	58.7	M
1	5.059	5.057	0.002	211655	50.0	59.7	M
1	5.213	5.210	0.003	200511	50.0	51.8	M
		Average of Peak Amounts =				55.3	
2	2.476	2.477	-0.001	142670	50.0	51.8	M
2	2.865	2.866	-0.001	274152	50.0	52.8	M
2	3.086	3.087	-0.001	175662	50.0	51.5	M
2	3.384	3.387	-0.003	583539	50.0	55.3	M
2	3.538	3.541	-0.003	233794	50.0	49.4	M
2	3.608	3.611	-0.003	131574	50.0	45.2	M
2	4.016	4.020	-0.004	230242	50.0	50.2	M
2	4.113	4.118	-0.005	96771	50.0	41.3	M
		Average of Peak Amounts =				49.7	
						RPD = 10.69	
8 PCB-1260							M
1	6.586	6.582	0.004	190526	50.0	54.3	
1	6.844	6.840	0.004	407387	50.0	56.7	M
1	7.216	7.212	0.004	555852	50.0	64.6	
1	8.113	8.108	0.005	368076	50.0	57.6	M
1	8.547	8.541	0.006	343289	50.0	54.6	
1	8.859	8.849	0.010	736946	50.0	58.4	
1	9.231	9.216	0.015	543036	50.0	58.6	M
1	9.749	9.724	0.025	215968	50.0	57.0	
		Average of Peak Amounts =				57.7	
2	5.466	5.469	-0.003	404536	50.0	57.7	M
2	6.203	6.206	-0.003	653350	50.0	53.0	
2	6.379	6.382	-0.003	358051	50.0	47.4	M
2	6.751	6.754	-0.003	455665	50.0	59.7	M
2	7.284	7.285	-0.001	1029322	50.0	55.4	M
2	7.820	7.824	-0.004	462009	50.0	52.9	M
2	0.000	8.013	-8.013	0	50.0	0	
2	8.757	8.752	0.005	269940	50.0	51.8	
		Average of Peak Amounts =				54.0	
						RPD = 6.72	
$ 11 DCB Decachlorobiphenyl							M
1	10.207	10.172	0.035	1717969	12.5	16.2	M
2	9.231	9.217	0.014	2097610	12.5	15.5	M
						RPD = 4.32	
S 12 Polychlorinated biphenyls, Total							
1						113.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660(LVI)L1_00009	Amount Added:	1.00	Units: mL	
SGPCBISTD_00006	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:20:54 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D

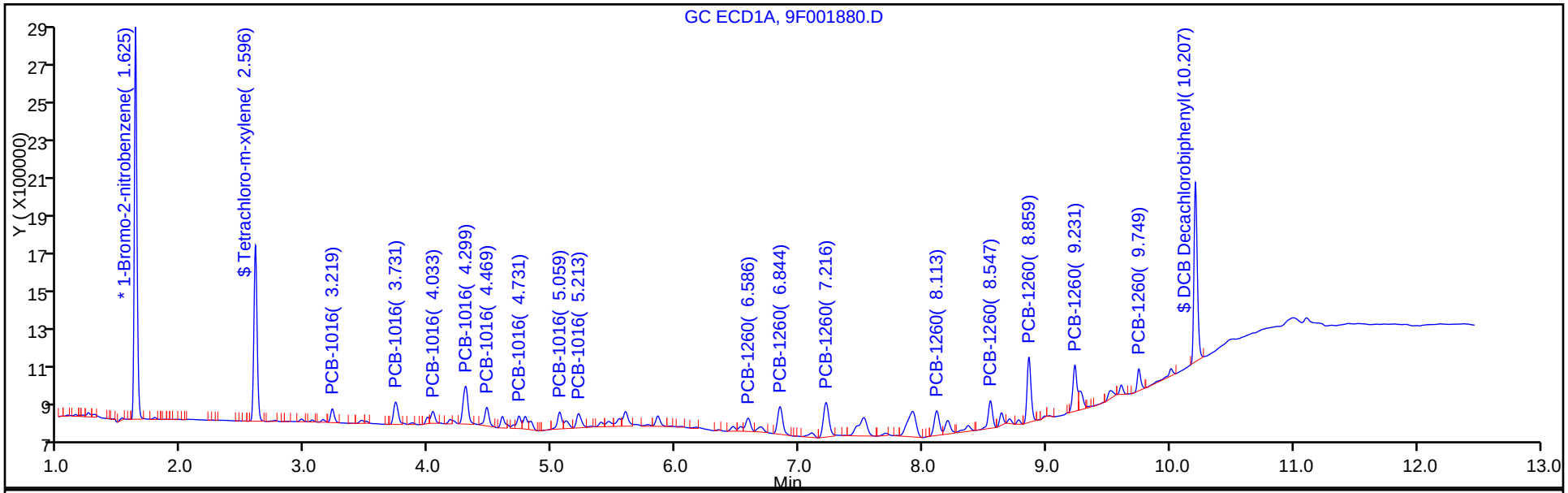
Injection Date: 12-May-2016 10:14:48 Instrument ID: CPESTGC9 Operator ID:

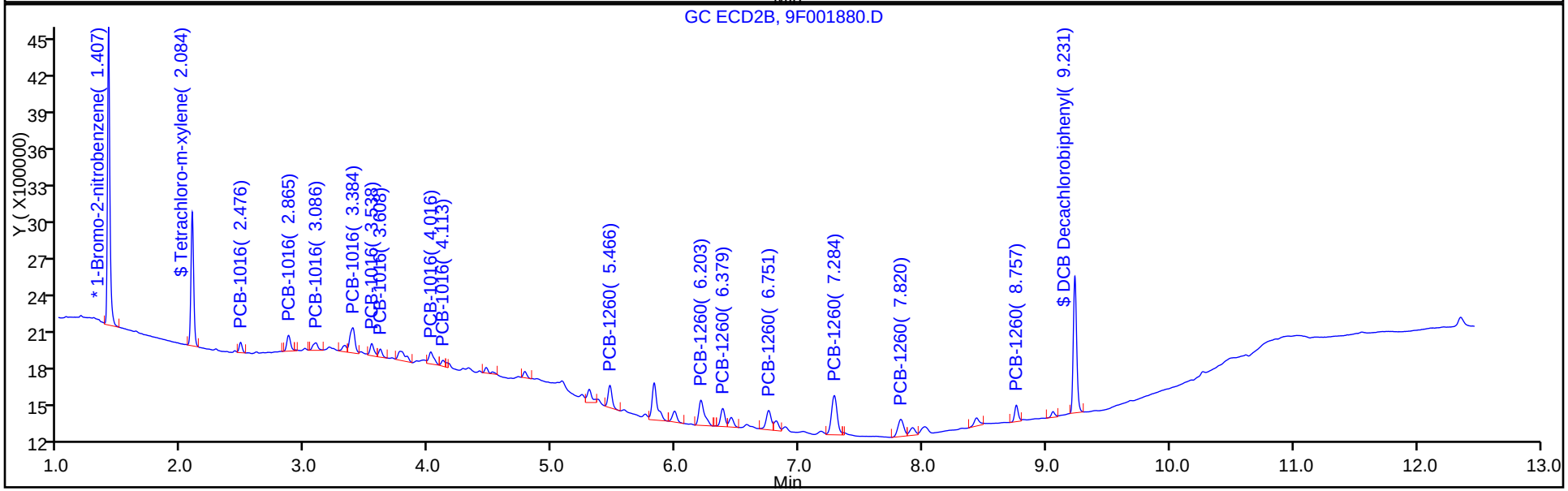
Lims ID: IC PCB 1 Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD



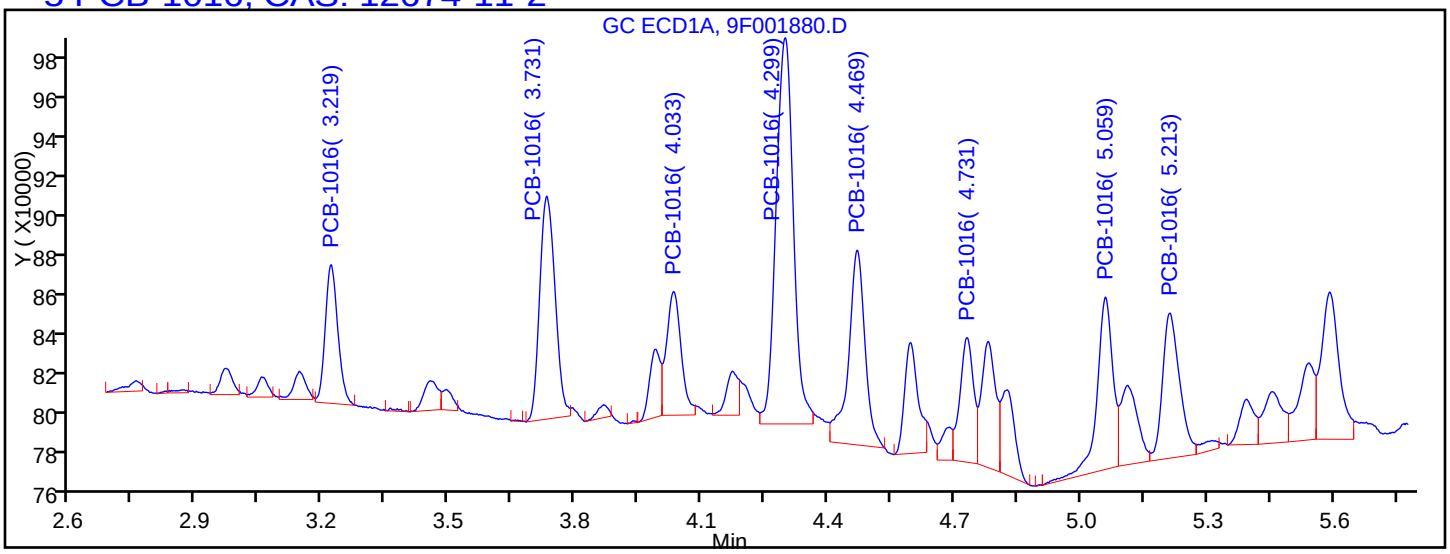


Report Date: 12-May-2016 15:20:55 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

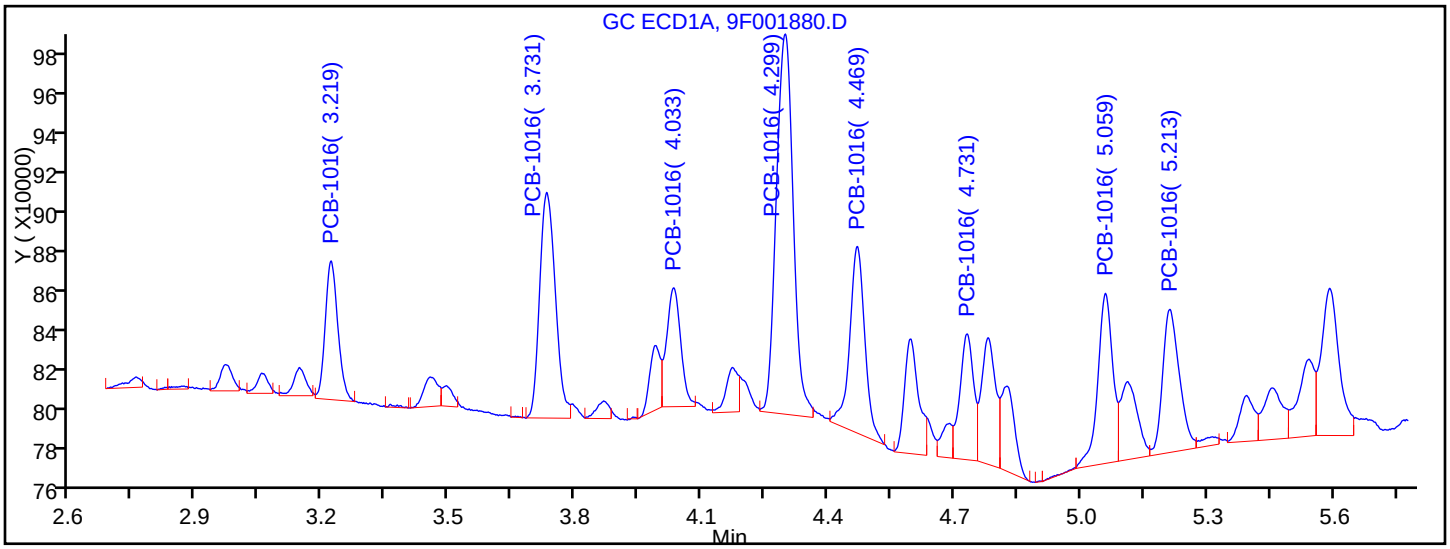
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D
Injection Date: 12-May-2016 10:14:48 Instrument ID: CPESTGC9
Lims ID: IC PCB 1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD1A

5 PCB-1016, CAS: 12674-11-2



Processing Integration Results

RT = 3.219	Response = 145541	
RT = 3.731	Response = 286533	M
RT = 4.033	Response = 150919	M
RT = 4.299	Response = 558418	M
RT = 4.469	Response = 267583	M
RT = 4.731	Response = 141260	M
RT = 5.059	Response = 227511	M
RT = 5.213	Response = 207358	M



Manual Integration Results

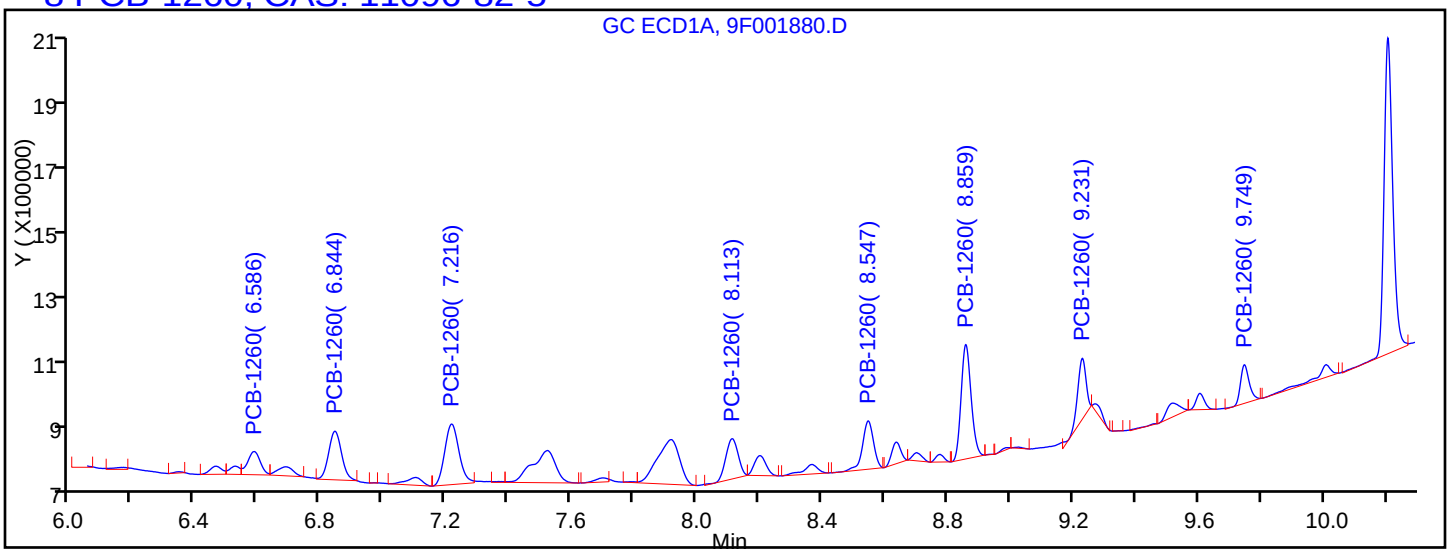
RT = 3.219	Response = 145541	
RT = 3.731	Response = 295880	M
RT = 4.033	Response = 139486	M
RT = 4.299	Response = 536157	M
RT = 4.469	Response = 235853	M
RT = 4.731	Response = 143617	M

Report Date: 12-May-2016 15:20:55 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

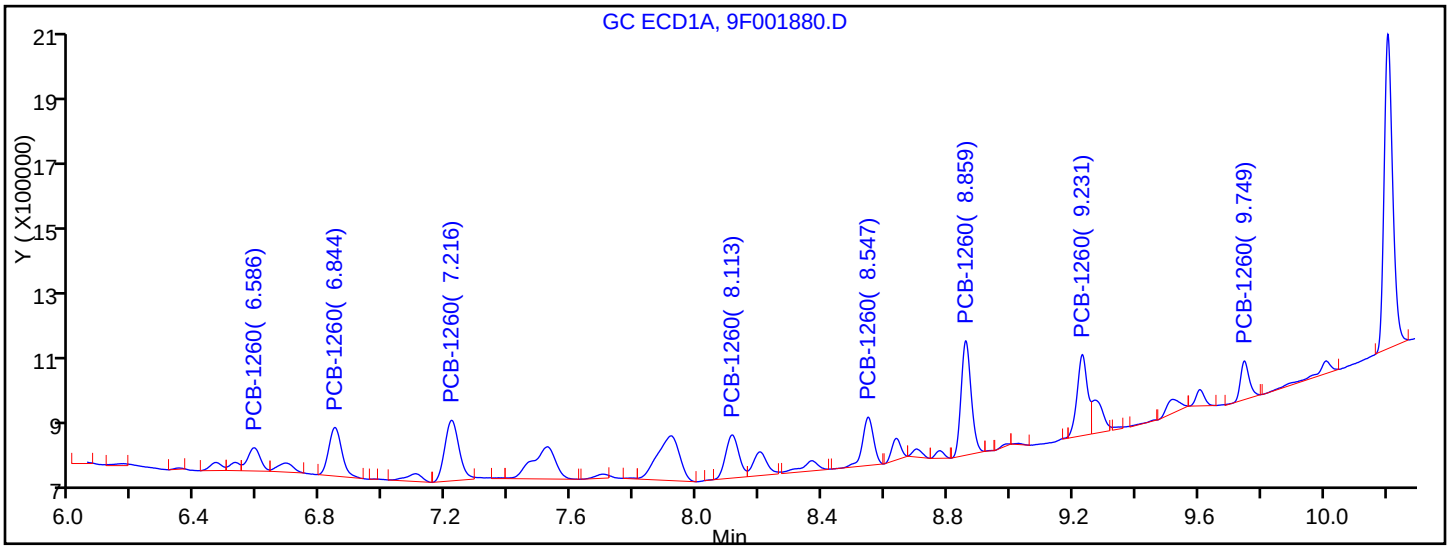
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D				
Injection Date:	12-May-2016 10:14:48	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 1				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

8 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 6.586	Response = 190526	
RT = 6.844	Response = 404698	M
RT = 7.216	Response = 555852	
RT = 8.113	Response = 322698	M
RT = 8.547	Response = 343289	
RT = 8.859	Response = 736946	
RT = 9.231	Response = 334353	M
RT = 9.749	Response = 215968	



Manual Integration Results

RT = 6.586	Response = 190526	
RT = 6.844	Response = 407387	M
RT = 7.216	Response = 555852	
RT = 8.113	Response = 368076	M
RT = 8.547	Response = 343289	
RT = 8.859	Response = 736946	

TestAmerica Edison

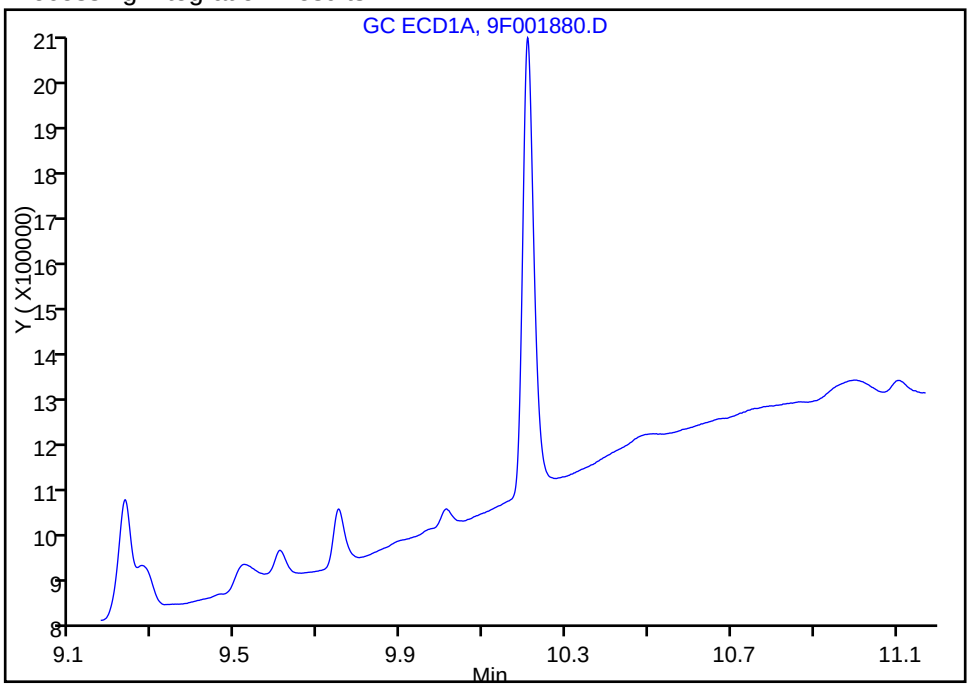
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D				
Injection Date:	12-May-2016 10:14:48	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 1				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

$ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

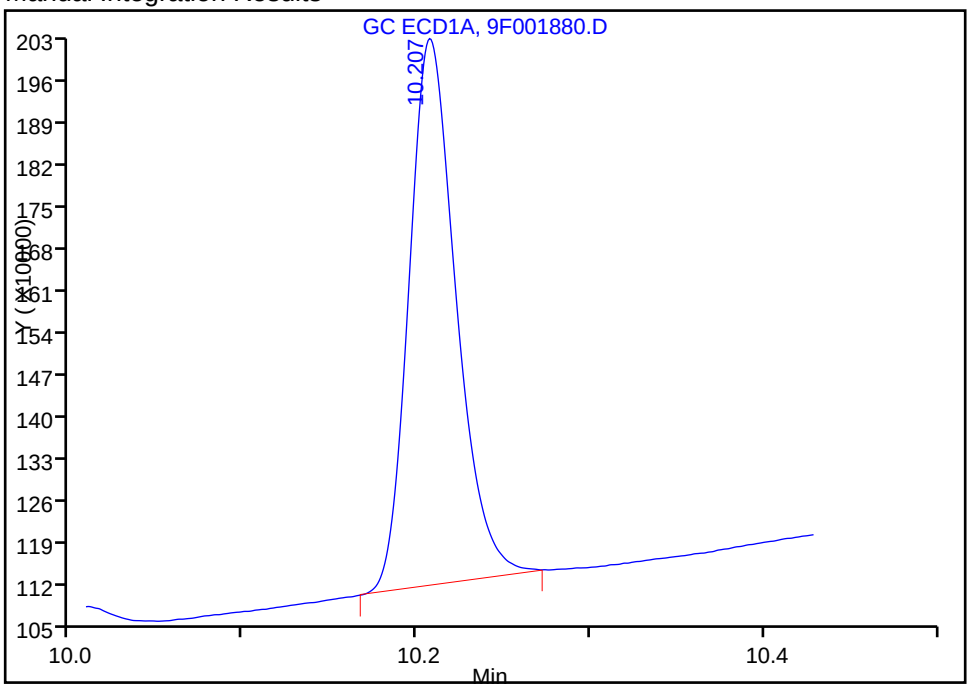
Processing Integration Results

Not Detected
Expected RT: 10.17



Manual Integration Results

RT: 10.21
Area: 1717969
Amount: 16.183671
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 11:25:56
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

TestAmerica Edison

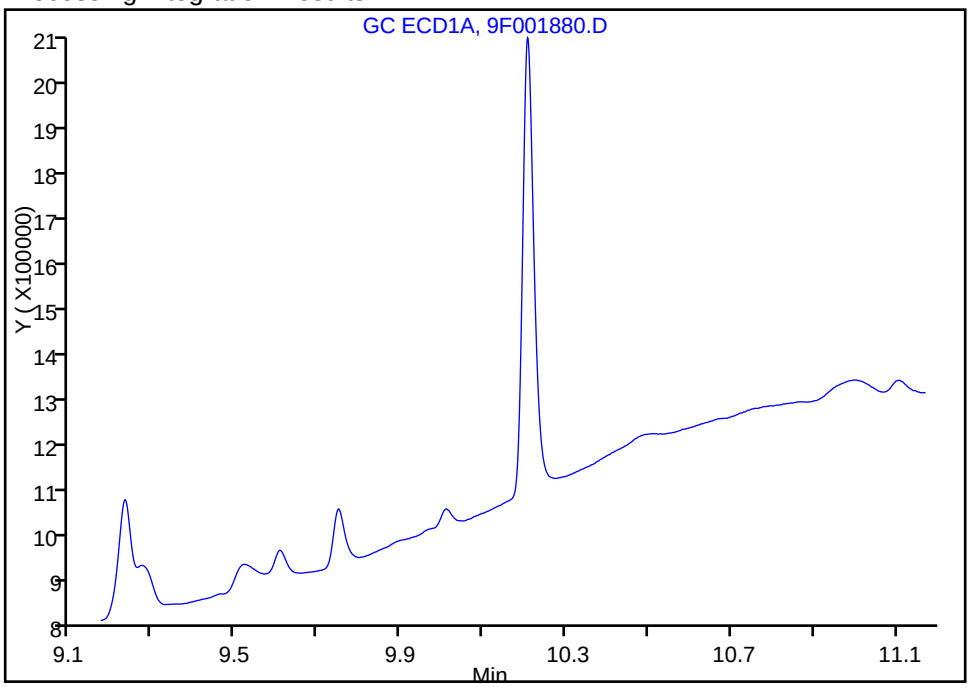
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D				
Injection Date:	12-May-2016 10:14:48	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 1				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

$ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

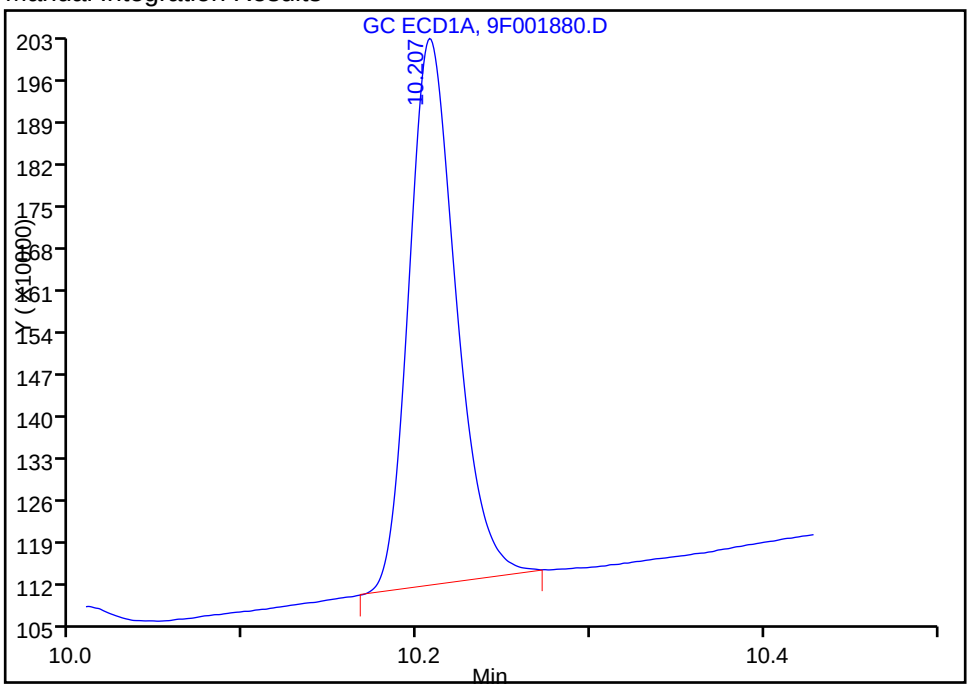
Processing Integration Results

Not Detected
Expected RT: 10.17



Manual Integration Results

RT: 10.21
Area: 1717969
Amount: 16.183671
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 12:16:20
Audit Action: Manually Integrated Audit Reason: Peak not integrated

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001881.D
Lims ID: IC PCB 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 12-May-2016 10:32:48 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info:
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub1

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:21:03 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 10:50:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.623	1.624	-0.001	3410733	20.0	20.0	M
2	1.407	1.410	-0.003	3337301	20.0	20.0	M
						RPD = 0.00	
$ 2 Tetrachloro-m-xylene							M
1	2.593	2.593	0.000	7370188	50.0	52.1	
2	2.086	2.087	-0.001	6750713	50.0	53.0	M
						RPD = 1.77	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 PCB-1016							M
1	3.215	3.216	-0.001	1595369	500.0	514.3	
1	3.728	3.728	0.000	3309803	500.0	519.4	M
1	4.024	4.025	-0.001	1526780	500.0	538.9	M
1	4.294	4.296	-0.002	5522433	500.0	496.6	M
1	4.466	4.467	-0.001	2628581	500.0	516.0	M
1	4.727	4.727	0.000	1436666	500.0	512.0	M
1	5.056	5.057	-0.001	1966187	500.0	483.5	M
1	5.208	5.210	-0.002	2194391	500.0	494.4	M
		Average of Peak Amounts =				509.4	
2	2.476	2.477	-0.001	1488247	500.0	525.5	M
2	2.865	2.866	-0.001	2768680	500.0	519.3	M
2	3.086	3.087	-0.001	1740535	500.0	496.8	M
2	3.386	3.387	-0.001	5797158	500.0	534.2	M
2	3.539	3.541	-0.002	2894717	500.0	595.0	M
2	3.608	3.611	-0.003	1910107	500.0	638.3	M
2	4.018	4.020	-0.002	2617412	500.0	555.6	M
2	4.116	4.118	-0.002	1344834	500.0	557.9	M
		Average of Peak Amounts =				552.8	
						RPD = 8.18	
8 PCB-1260							M
1	6.581	6.582	-0.001	1951506	500.0	485.0	M
1	6.839	6.840	-0.001	4056846	500.0	491.9	M
1	7.211	7.212	-0.001	4657312	500.0	471.8	M
1	8.108	8.108	0.000	3550456	500.0	484.5	M
1	8.542	8.541	0.001	3524230	500.0	488.9	M
1	8.852	8.849	0.003	6963669	500.0	480.8	M
1	9.221	9.216	0.005	5102647	500.0	480.1	M
1	9.733	9.724	0.009	2087900	500.0	480.2	
		Average of Peak Amounts =				482.9	
2	5.468	5.469	-0.001	3716605	500.0	515.5	M
2	6.204	6.206	-0.002	6548906	500.0	516.8	M
2	6.380	6.382	-0.002	4156593	500.0	535.0	M
2	6.752	6.754	-0.002	3975975	500.0	506.8	M
2	7.283	7.285	-0.002	10000594	500.0	524.2	
2	7.822	7.824	-0.002	4729185	500.0	527.2	
2	8.012	8.013	-0.001	3326716	500.0	537.2	
2	8.754	8.752	0.002	2748973	500.0	513.4	M
		Average of Peak Amounts =				522.0	
						RPD = 7.78	
$ 11 DCB Decachlorobiphenyl							M
1	10.184	10.172	0.012	6039647	50.0	49.6	
2	9.222	9.217	0.005	7326448	50.0	52.7	M
						RPD = 6.05	
S 12 Polychlorinated biphenyls, Total							
1						992.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

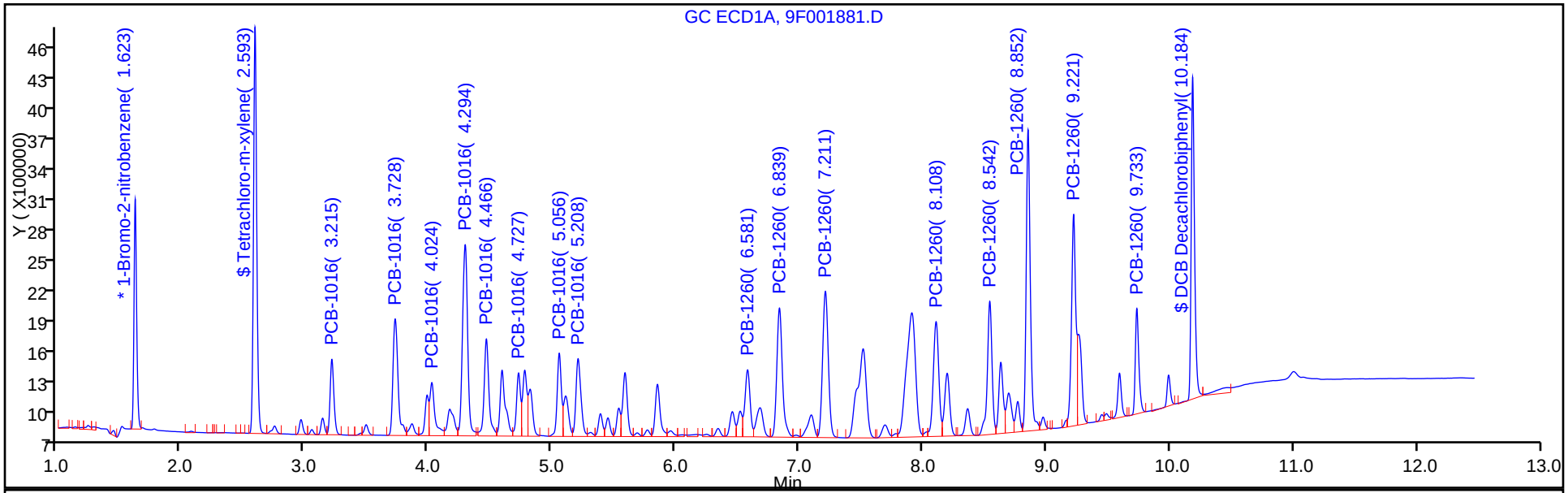
SG1660L2_00022	Amount Added:	1.00	Units: mL	
SGPCBISTD_00006	Amount Added:	20.00	Units: uL	Run Reagent

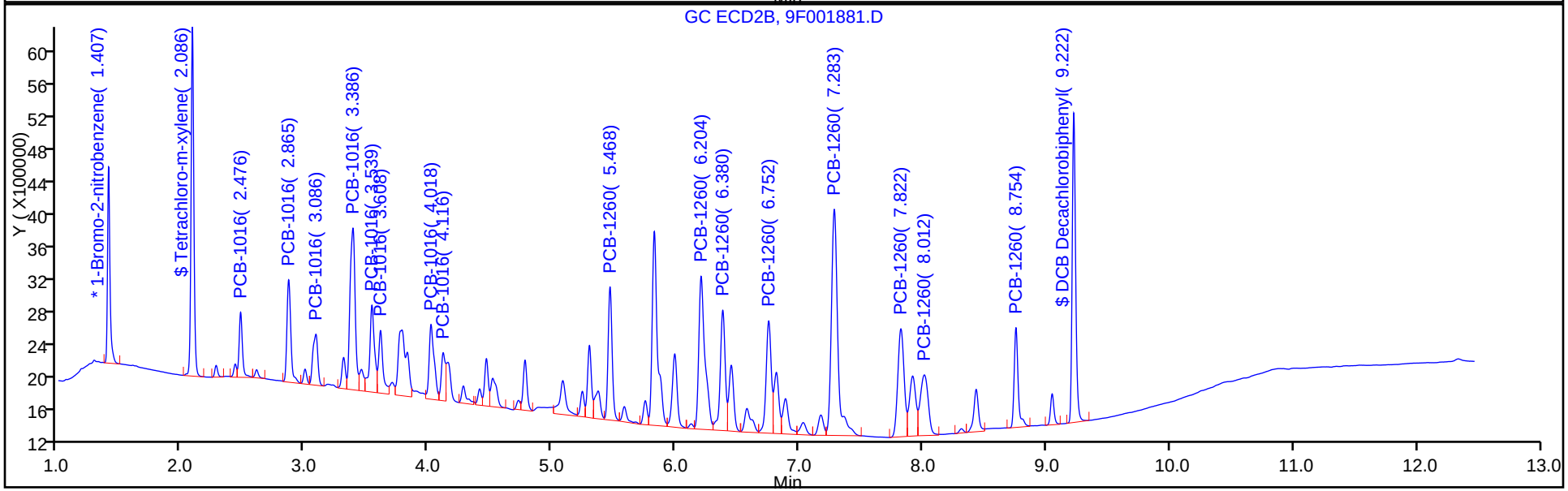
Report Date: 12-May-2016 15:21:08 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001881.D

Injection Date:	12-May-2016 10:32:48	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	IC PCB 2			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		





Manual Integration/User Assign Peak Report

TestAmerica Edison

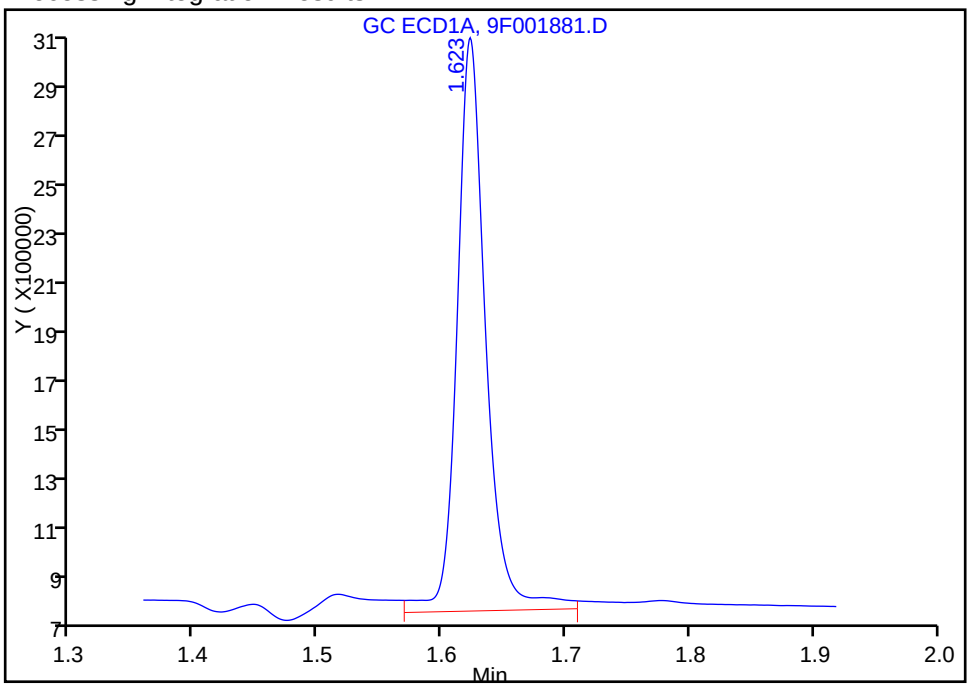
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001881.D				
Injection Date:	12-May-2016 10:32:48	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 2				
Client ID:					
Operator ID:		ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 1

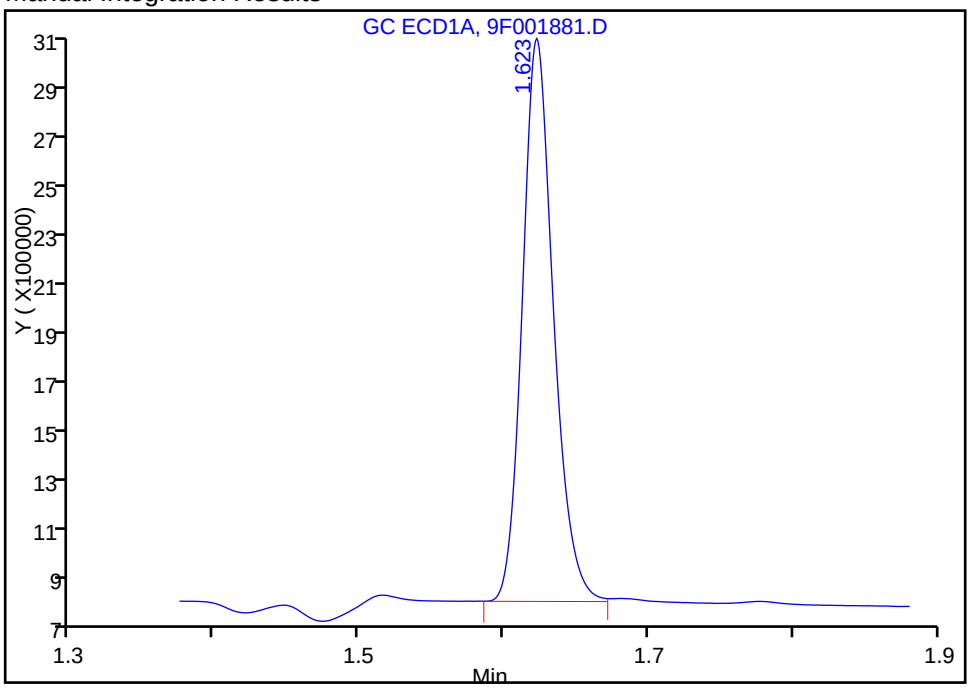
Processing Integration Results

RT: 1.62
Area: 3768286
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.62
Area: 3410733
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 11:27:35

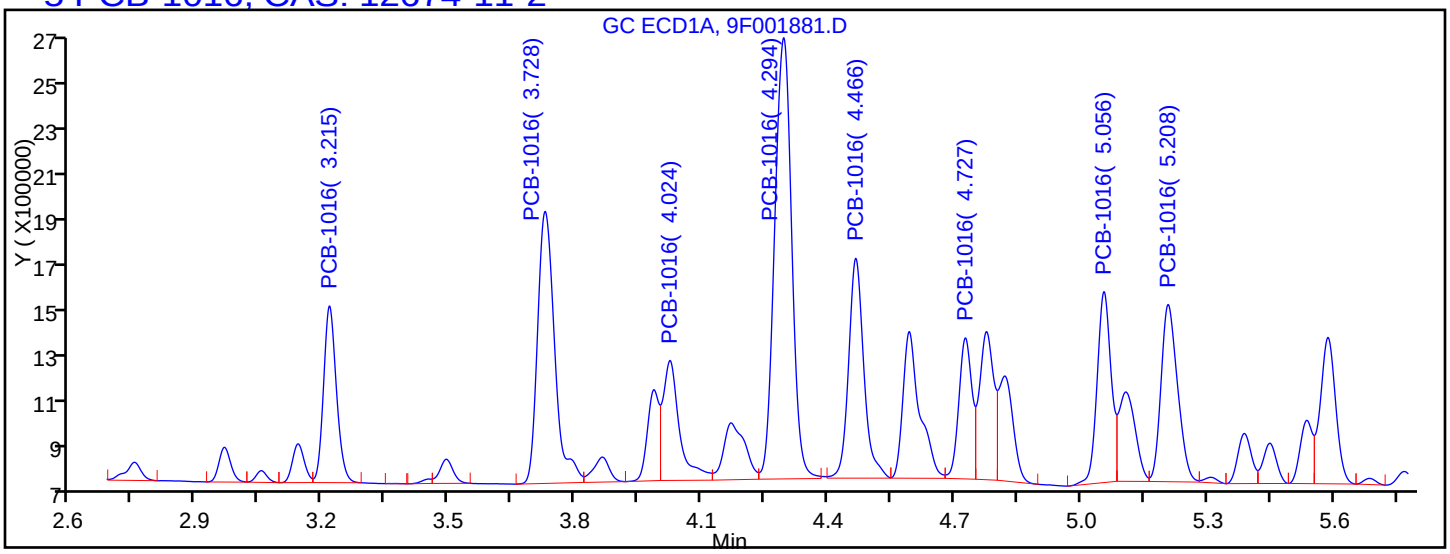
Audit Action: Manually Integrated Audit Reason: Peak not integrated

Report Date: 12-May-2016 15:21:08 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

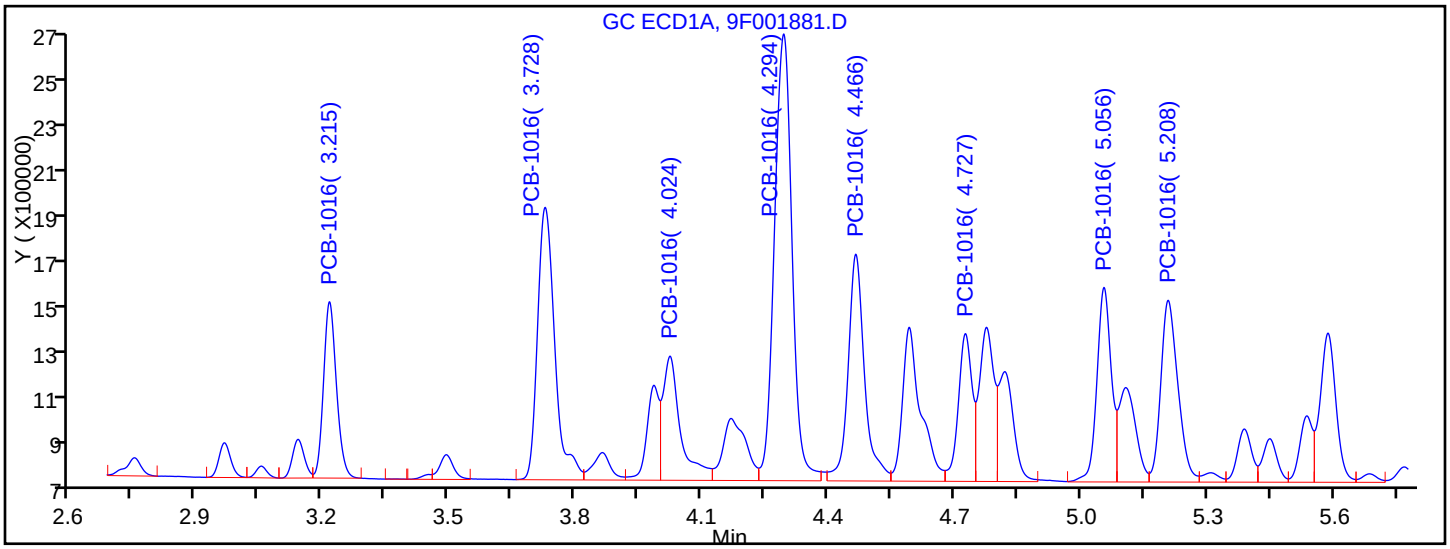
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001881.D
Injection Date: 12-May-2016 10:32:48 Instrument ID: CPESTGC9
Lims ID: IC PCB 2
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD1A

5 PCB-1016, CAS: 12674-11-2



Processing Integration Results

RT = 3.215	Response = 1595369	
RT = 3.728	Response = 3267160	M
RT = 4.024	Response = 1384489	M
RT = 4.294	Response = 5280572	M
RT = 4.466	Response = 2344238	M
RT = 4.727	Response = 1305463	M
RT = 5.056	Response = 1883504	M
RT = 5.208	Response = 2048353	M



Manual Integration Results

RT = 3.215	Response = 1595369	
RT = 3.728	Response = 3309803	M
RT = 4.024	Response = 1526780	M
RT = 4.294	Response = 5522433	M
RT = 4.466	Response = 2628581	M
RT = 4.727	Response = 1436666	M

Report Date: 12-May-2016 15:21:08 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001881.D

Injection Date: 12-May-2016 10:32:48 Instrument ID: CPESTGC9

Lims ID: IC PCB 2

Client ID:

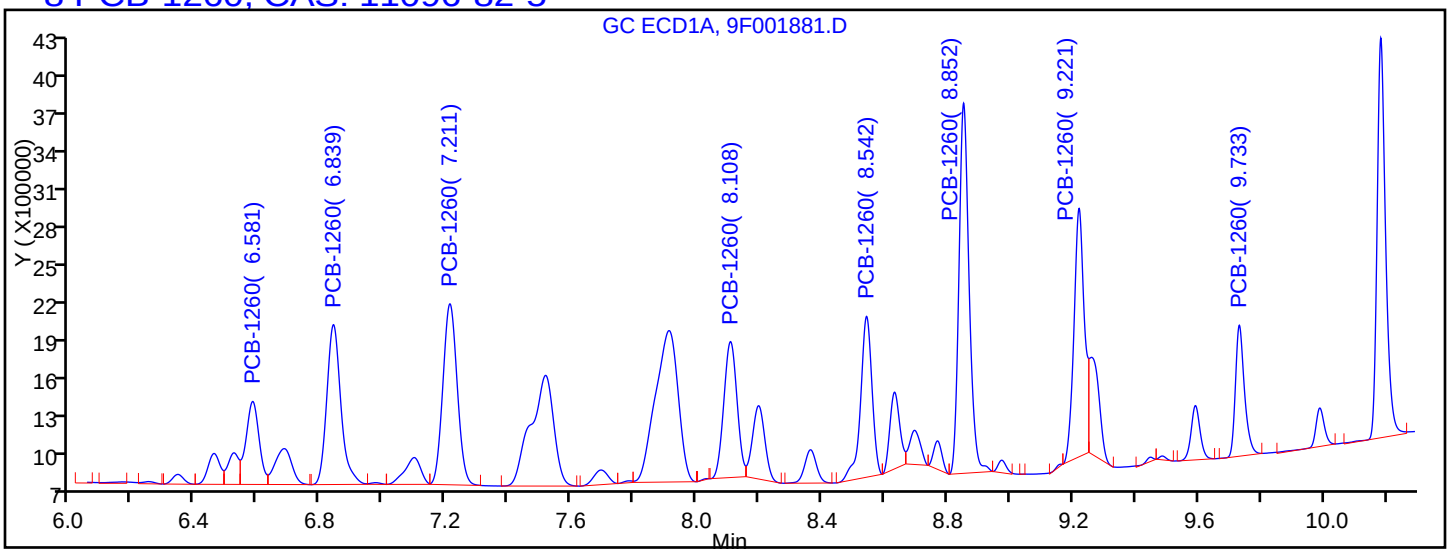
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

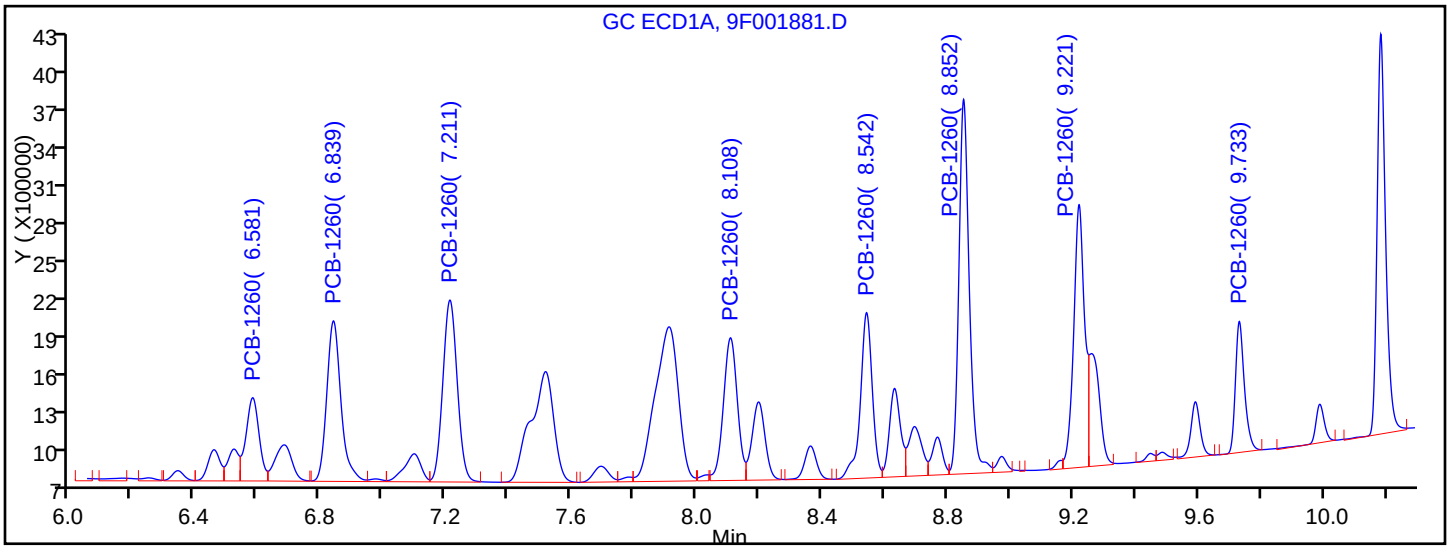
Column: Detector GC ECD1A

8 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 6.581	Response = 1940617	M
RT = 6.839	Response = 3997910	M
RT = 7.211	Response = 4590989	M
RT = 8.108	Response = 3190089	M
RT = 8.542	Response = 3276607	M
RT = 8.852	Response = 6674119	M
RT = 9.221	Response = 4581147	M
RT = 9.733	Response = 2087900	



Manual Integration Results

RT = 6.581	Response = 1951506	M
RT = 6.839	Response = 4056846	M
RT = 7.211	Response = 4657312	M
RT = 8.108	Response = 3550456	M
RT = 8.542	Response = 3524230	M
RT = 8.852	Response = 6963669	M

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001882.D
Lims ID: IC PCB 3
Client ID:
Sample Type: ICRT Calib Level: 3
Inject. Date: 12-May-2016 10:50:51 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info:
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub1

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:21:13 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 11:17:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.623	1.623	0.000	3376020	20.0	20.0	M
2	1.408	1.408	0.000	3568353	20.0	20.0	
						RPD = 0.00	
$ 2 Tetrachloro-m-xylene							M
1	2.593	2.593	0.000	13403637	100.0	95.7	M
2	2.087	2.087	0.000	11968377	100.0	87.9	M
						RPD = 8.49	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 PCB-1016							M
1	3.216	3.216	0.000	2924115	1000.0	952.3	
1	3.728	3.728	0.000	6004627	1000.0	952.1	M
1	4.025	4.025	0.000	2519160	1000.0	898.4	M
1	4.296	4.296	0.000	10108992	1000.0	918.4	M
1	4.467	4.467	0.000	4712190	1000.0	934.6	M
1	4.727	4.727	0.000	2537118	1000.0	913.6	M
1	5.057	5.057	0.000	3661187	1000.0	909.5	M
1	5.210	5.210	0.000	4167289	1000.0	948.5	M
		Average of Peak Amounts =				928.4	
2	2.477	2.477	0.000	2665895	1000.0	880.3	M
2	2.866	2.866	0.000	4958047	1000.0	869.7	
2	3.087	3.087	0.000	3370555	1000.0	899.7	M
2	3.387	3.387	0.000	10097178	1000.0	870.1	M
2	3.541	3.541	0.000	4469017	1000.0	859.1	M
2	3.611	3.611	0.000	2715679	1000.0	848.8	M
2	4.020	4.020	0.000	4410039	1000.0	875.6	M
2	4.118	4.118	0.000	2533958	1000.0	983.2	M
		Average of Peak Amounts =				885.8	
						RPD = 4.70	
8 PCB-1260							M
1	6.582	6.582	0.000	3718492	1000.0	933.6	M
1	6.840	6.840	0.000	7549602	1000.0	924.9	M
1	7.212	7.212	0.000	8628437	1000.0	883.0	M
1	8.108	8.108	0.000	6628004	1000.0	913.9	
1	8.541	8.541	0.000	6563297	1000.0	919.8	
1	8.849	8.849	0.000	12889307	1000.0	899.1	
1	9.216	9.216	0.000	9478610	1000.0	901.0	M
1	9.724	9.724	0.000	3951876	1000.0	918.2	
		Average of Peak Amounts =				911.7	
2	5.469	5.469	0.000	6979606	1000.0	905.4	M
2	6.206	6.206	0.000	13004344	1000.0	959.8	M
2	6.382	6.382	0.000	8044868	1000.0	968.4	M
2	6.754	6.754	0.000	7587017	1000.0	904.5	M
2	7.285	7.285	0.000	18435917	1000.0	903.7	M
2	7.824	7.824	0.000	8825536	1000.0	920.1	M
2	8.013	8.013	0.000	6108355	1000.0	922.5	M
2	8.752	8.752	0.000	5247204	1000.0	916.5	
		Average of Peak Amounts =				925.1	
						RPD = 1.46	
$ 11 DCB Decachlorobiphenyl							M
1	10.172	10.172	0.000	10643250	100.0	88.3	M
2	9.217	9.217	0.000	13096920	100.0	88.1	
						RPD = 0.24	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660L3_00028	Amount Added:	1.00	Units: mL	
SGPCBISTD_00006	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:21:17 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001882.D

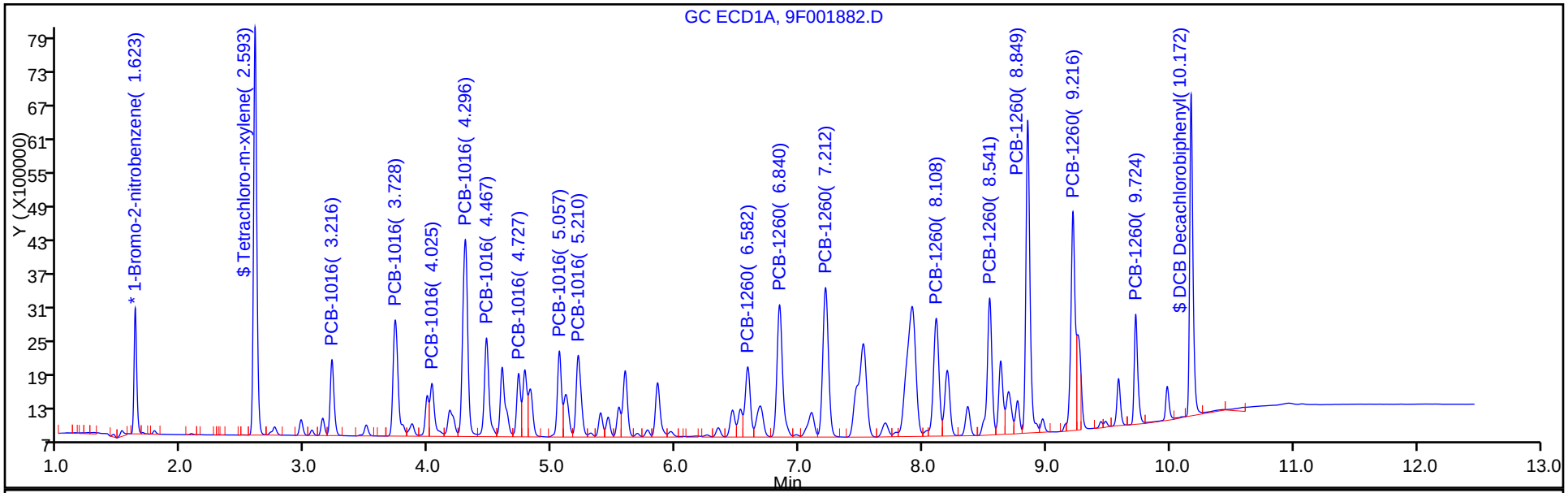
Injection Date: 12-May-2016 10:50:51 Instrument ID: CPESTGC9 Operator ID:

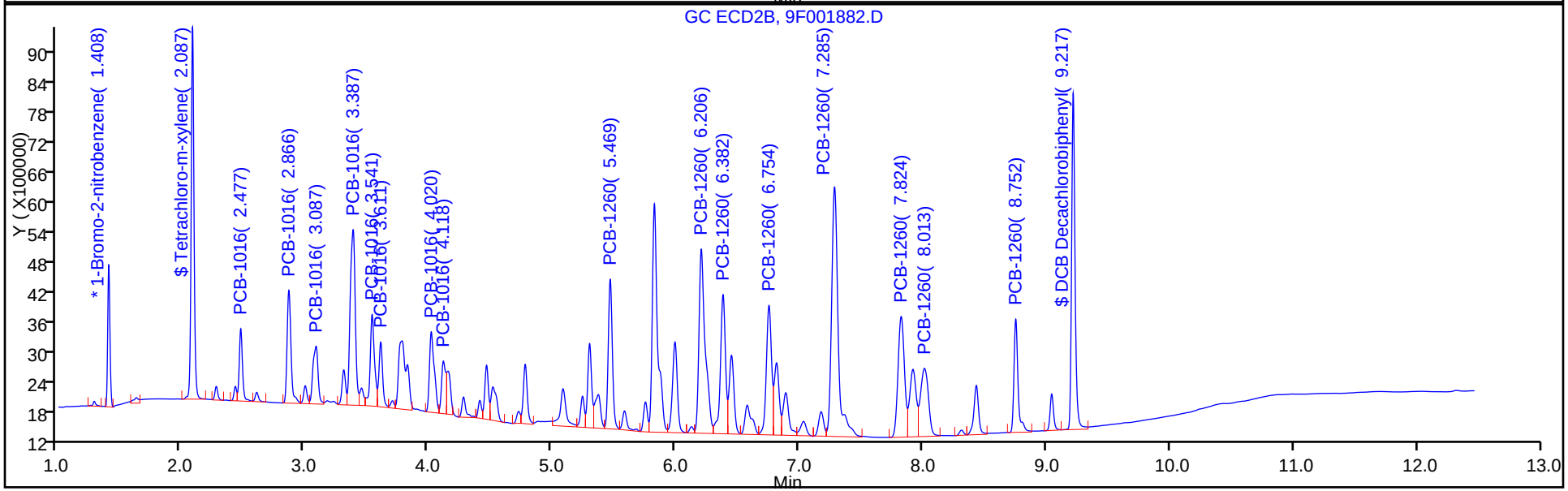
Lims ID: IC PCB 3 Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD





Manual Integration/User Assign Peak Report

TestAmerica Edison

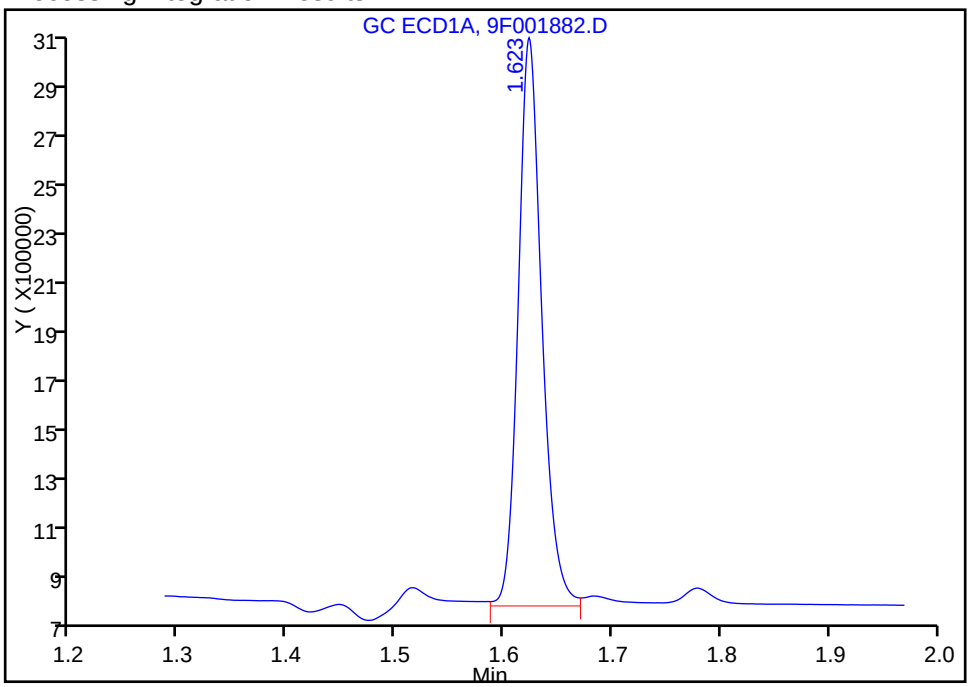
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001882.D				
Injection Date:	12-May-2016 10:50:51	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 3				
Client ID:					
Operator ID:		ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 1

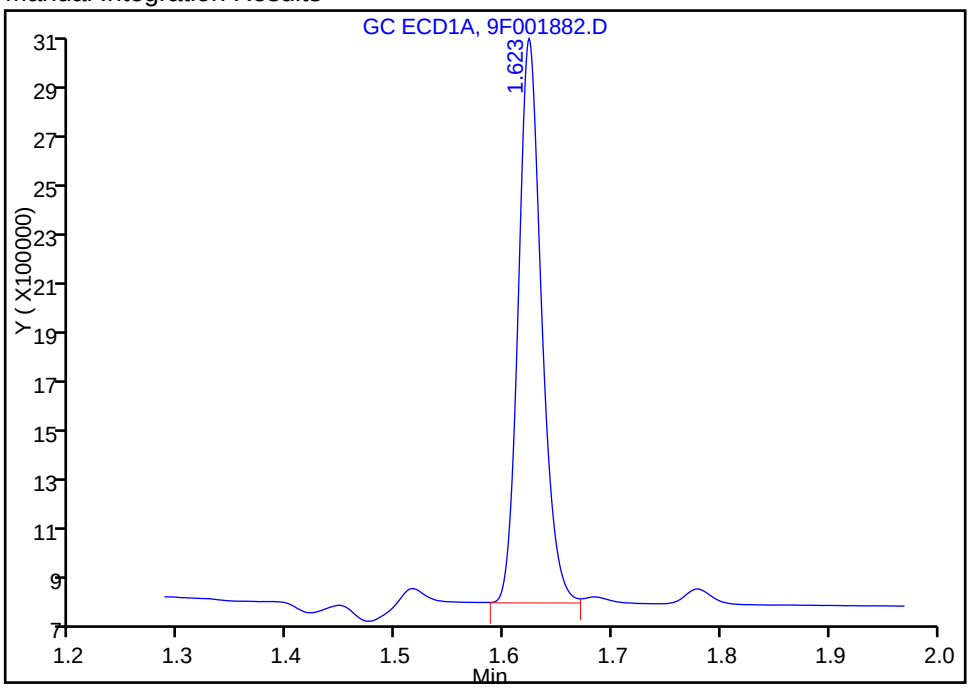
Processing Integration Results

RT: 1.62
Area: 3453563
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.62
Area: 3376020
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 11:28:53

Audit Action: Assigned New Baseline Audit Reason: Sample matrix interference

Manual Integration/User Assign Peak Report

TestAmerica Edison

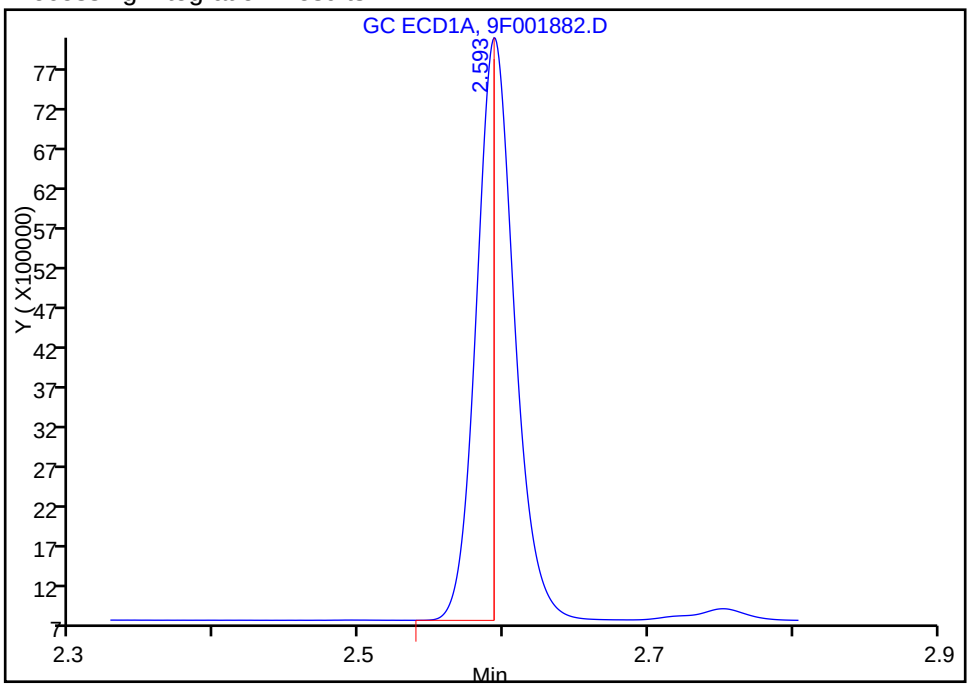
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001882.D				
Injection Date:	12-May-2016 10:50:51	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 3				
Client ID:					
Operator ID:		ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

$ 2 Tetrachloro-m-xylene, CAS: 877-09-8

Signal: 1

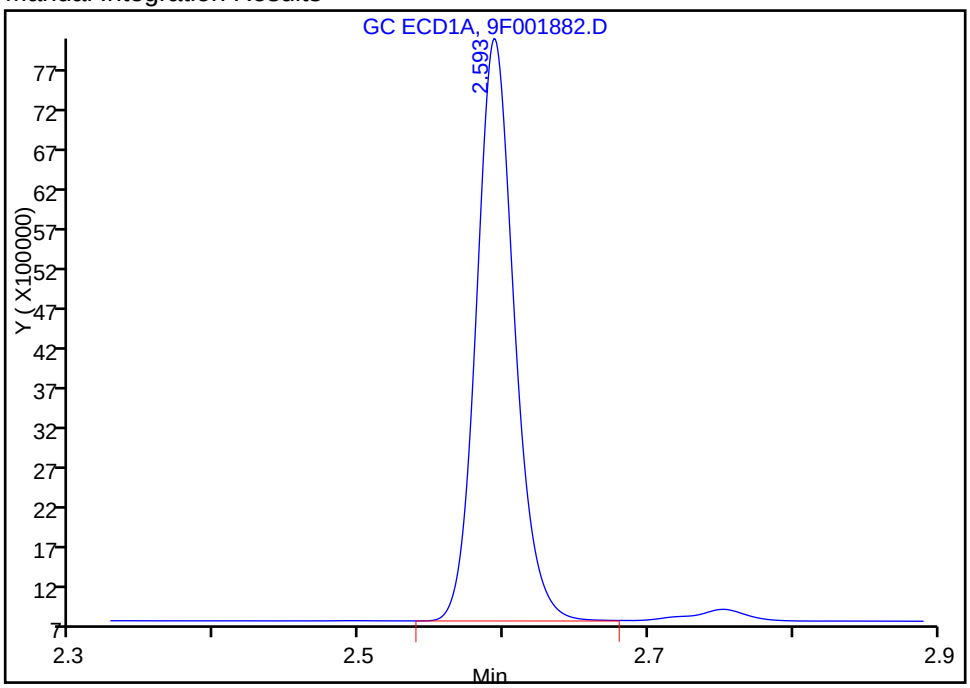
Processing Integration Results

RT: 2.59
Area: 6114987
Amount: 52.975975
Amount Units: ug/l



Manual Integration Results

RT: 2.59
Area: 13403637
Amount: 95.708529
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 11:25:14

Audit Action: Manually Integrated Audit Reason: Peak not integrated

Report Date: 12-May-2016 15:21:17 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001882.D

Injection Date: 12-May-2016 10:50:51 Instrument ID: CPESTGC9

Lims ID: IC PCB 3

Client ID:

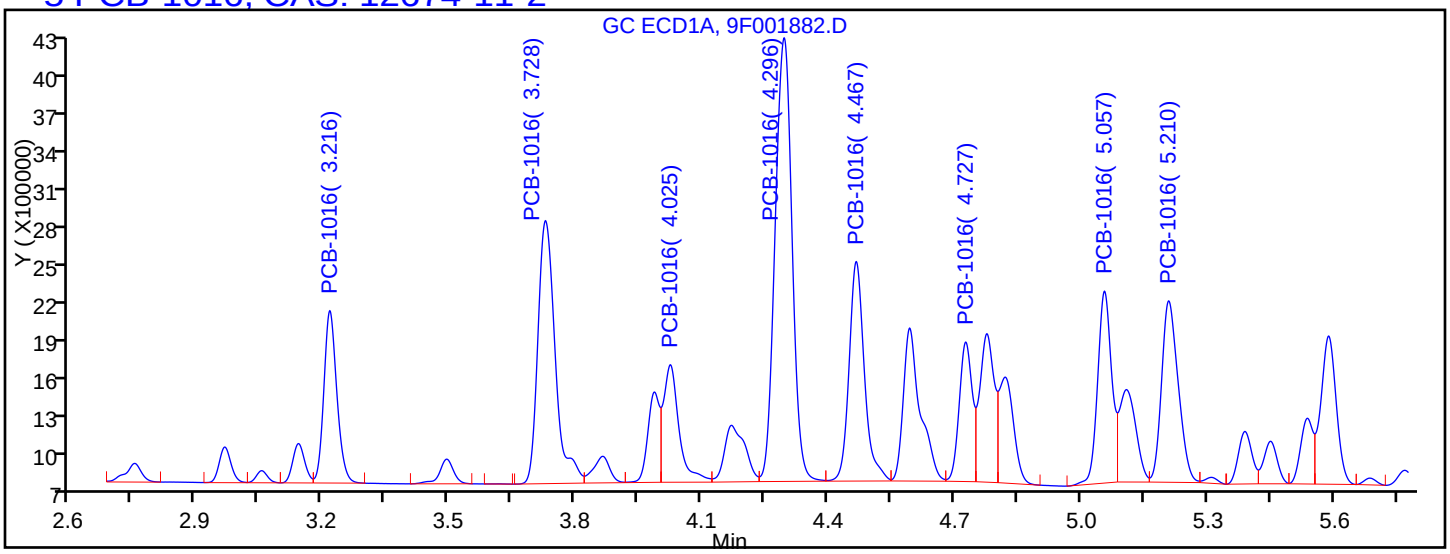
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

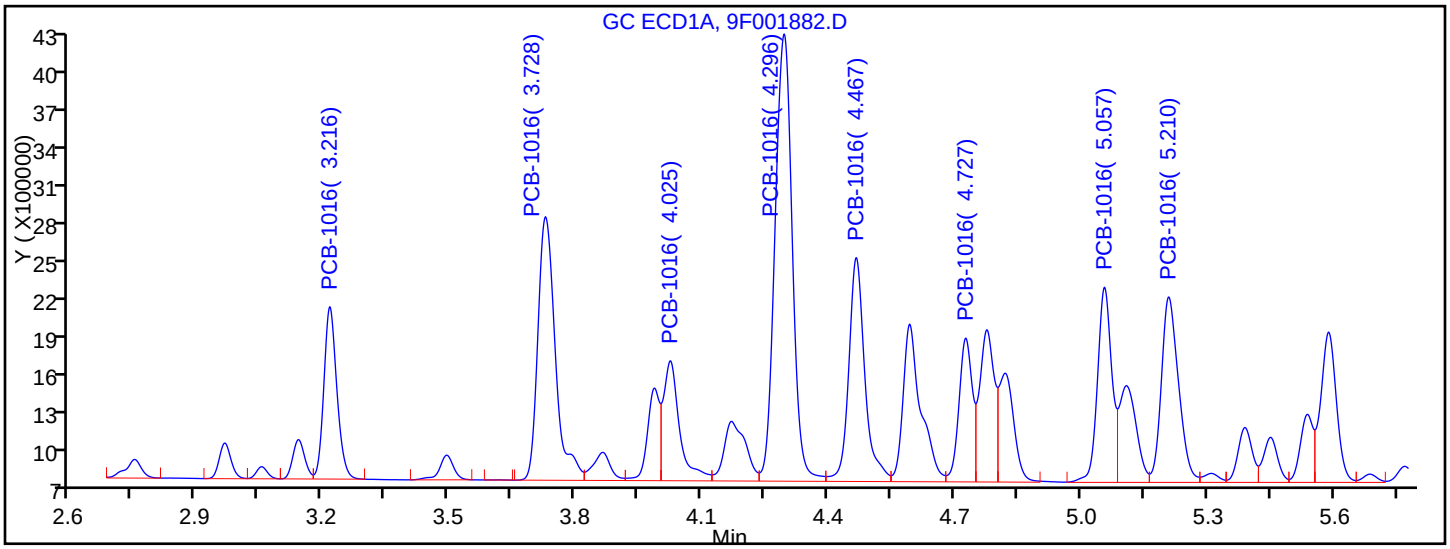
Column: Detector GC ECD1A

5 PCB-1016, CAS: 12674-11-2



Processing Integration Results

RT = 3.216	Response = 2924115	
RT = 3.728	Response = 5955071	M
RT = 4.025	Response = 2372040	M
RT = 4.296	Response = 9823355	M
RT = 4.467	Response = 4389425	M
RT = 4.727	Response = 2387595	M
RT = 5.057	Response = 3531489	M
RT = 5.210	Response = 3938617	M



Manual Integration Results

RT = 3.216	Response = 2924115	
RT = 3.728	Response = 6004627	M
RT = 4.025	Response = 2519160	M
RT = 4.296	Response = 10108992	M
RT = 4.467	Response = 4712190	M
RT = 4.727	Response = 2537118	M

Report Date: 12-May-2016 15:21:17 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001882.D

Injection Date: 12-May-2016 10:50:51 Instrument ID: CPESTGC9

Lims ID: IC PCB 3

Client ID:

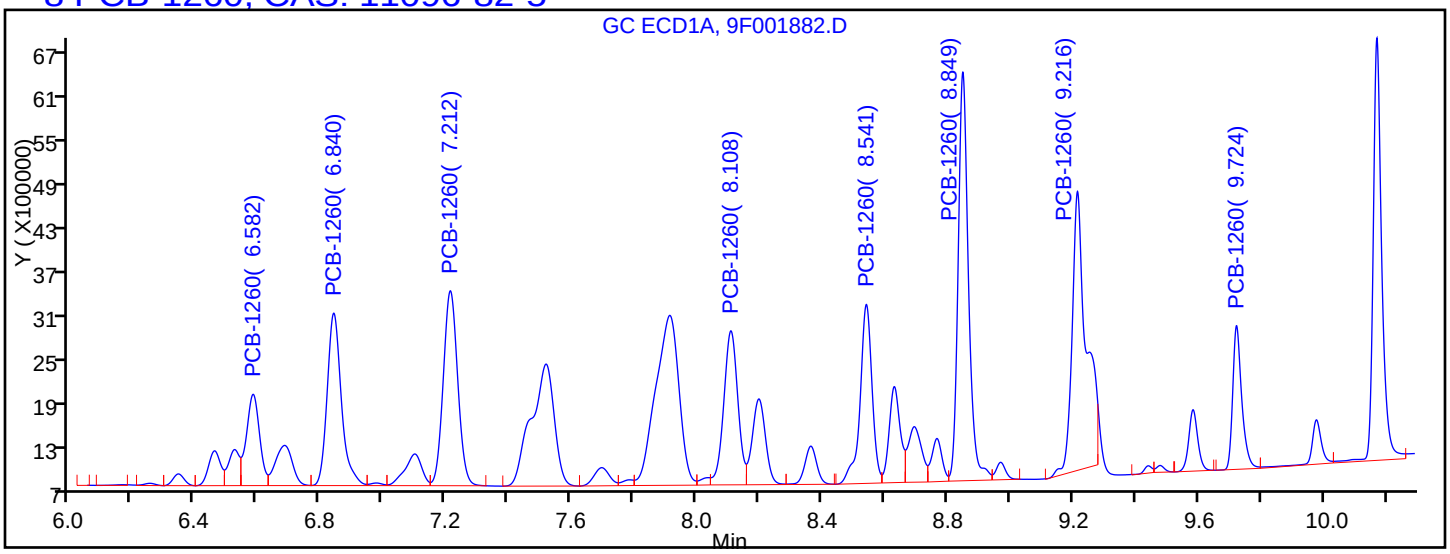
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

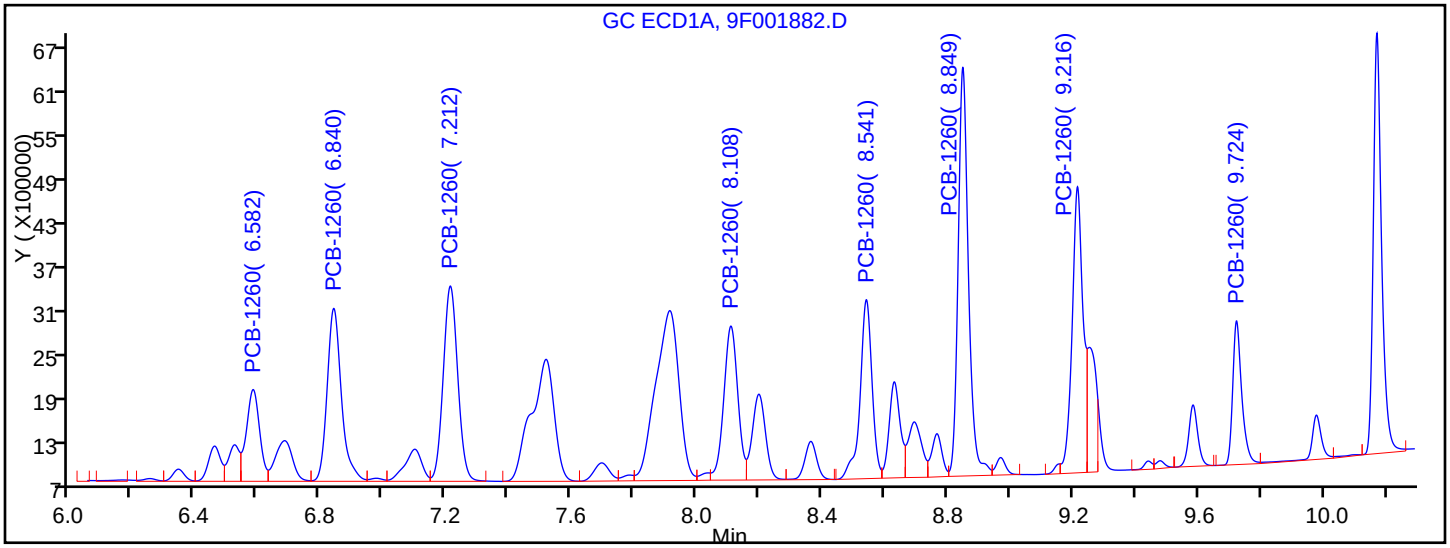
Column: Detector GC ECD1A

8 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 6.582	Response = 3686404	M
RT = 6.840	Response = 7482118	M
RT = 7.212	Response = 8580251	M
RT = 8.108	Response = 6628004	
RT = 8.541	Response = 6563297	
RT = 8.849	Response = 12889307	
RT = 9.216	Response = 11995655	M
RT = 9.724	Response = 3951876	



Manual Integration Results

RT = 6.582	Response = 3718492	M
RT = 6.840	Response = 7549602	M
RT = 7.212	Response = 8628437	M
RT = 8.108	Response = 6628004	
RT = 8.541	Response = 6563297	
RT = 8.849	Response = 12889307	

Manual Integration/User Assign Peak Report

TestAmerica Edison

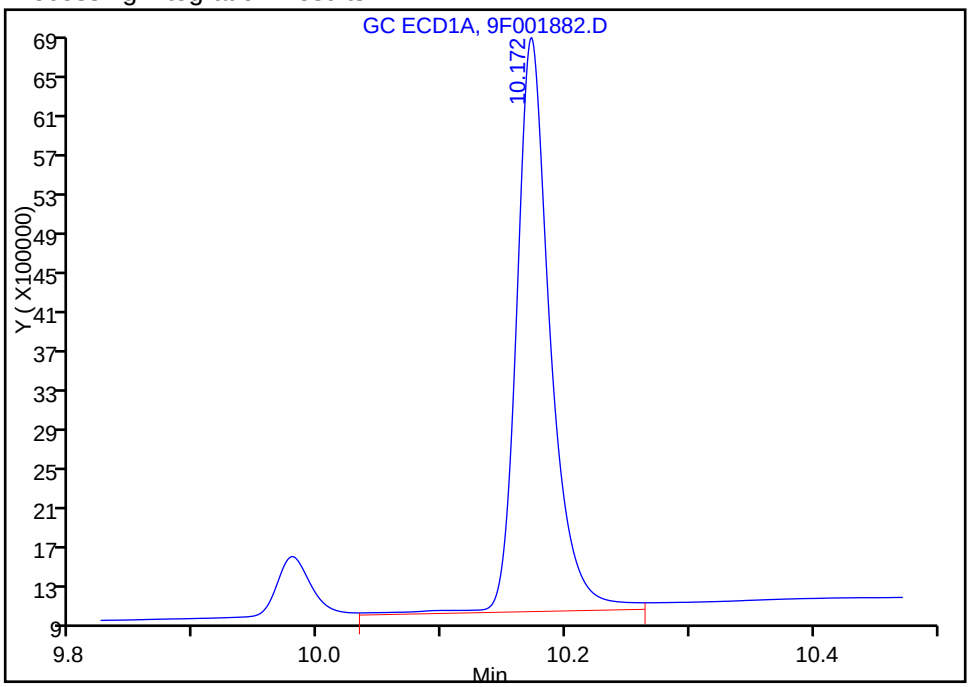
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001882.D				
Injection Date:	12-May-2016 10:50:51	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 3				
Client ID:					
Operator ID:		ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

$ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

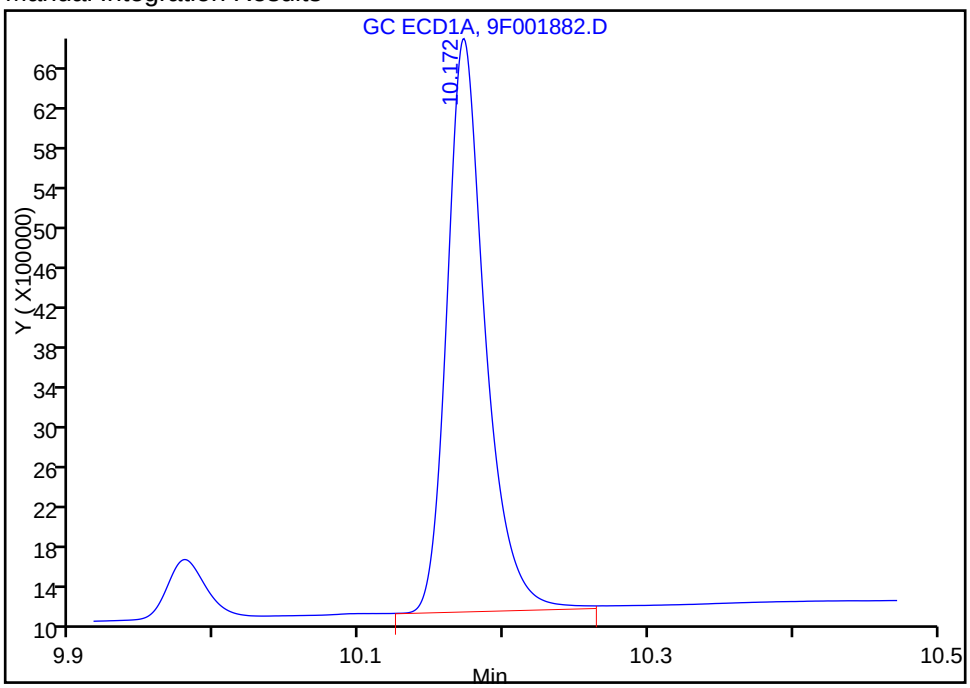
Processing Integration Results

RT: 10.17
Area: 11032847
Amount: 85.081127
Amount Units: ug/l



Manual Integration Results

RT: 10.17
Area: 10643250
Amount: 88.280538
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 11:28:53

Audit Action: Assigned New Baseline Audit Reason: Sample matrix interference

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001883.D
Lims ID: IC PCB 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 12-May-2016 11:08:53 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info:
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub1

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:21:22 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 11:31:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.624	1.623	0.001	3294505	20.0	20.0	M
2	1.409	1.408	0.001	3368276	20.0	20.0	M
						RPD = 0.00	
$ 2 Tetrachloro-m-xylene							M
1	2.594	2.593	0.001	19604800	150.0	143.5	
2	2.088	2.087	0.001	18362842	150.0	142.9	M
						RPD = 0.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 PCB-1016							M
1	3.216	3.216	0.000	4369736	1500.0	1458.3	
1	3.729	3.728	0.001	8959256	1500.0	1455.7	M
1	4.026	4.025	0.001	3743966	1500.0	1368.2	M
1	4.296	4.296	0.000	15248808	1500.0	1419.6	M
1	4.467	4.467	0.000	7047286	1500.0	1432.3	M
1	4.728	4.727	0.001	3767776	1500.0	1390.3	M
1	5.058	5.057	0.001	5454281	1500.0	1388.5	M
1	5.210	5.210	0.000	6284163	1500.0	1465.8	M
		Average of Peak Amounts =				1422.3	
2	2.478	2.477	0.001	4332530	1500.0	1515.7	
2	2.867	2.866	0.001	8047032	1500.0	1495.3	M
2	3.088	3.087	0.001	5294700	1500.0	1497.3	M
2	3.388	3.387	0.001	15267330	1500.0	1393.8	M
2	3.541	3.541	0.000	6893182	1500.0	1403.9	M
2	3.611	3.611	0.000	4182972	1500.0	1385.1	M
2	4.020	4.020	0.000	6831748	1500.0	1437.0	M
2	4.119	4.118	0.001	3654893	1500.0	1502.3	M
		Average of Peak Amounts =				1453.8	
						RPD = 2.19	
8 PCB-1260							M
1	6.582	6.582	0.000	5566734	1500.0	1432.2	M
1	6.840	6.840	0.000	11169719	1500.0	1402.2	M
1	7.212	7.212	0.000	12780758	1500.0	1340.3	M
1	8.108	8.108	0.000	9904597	1500.0	1399.4	
1	8.542	8.541	0.001	9897151	1500.0	1421.3	
1	8.850	8.849	0.001	19406860	1500.0	1387.2	
1	9.217	9.216	0.001	14338368	1500.0	1396.7	M
1	9.726	9.724	0.002	5922048	1500.0	1410.0	
		Average of Peak Amounts =				1398.7	
2	5.469	5.469	0.000	10236516	1500.0	1406.8	M
2	6.206	6.206	0.000	18837770	1500.0	1472.9	M
2	6.381	6.382	-0.001	11733006	1500.0	1496.3	M
2	6.754	6.754	0.000	11049030	1500.0	1395.5	M
2	7.285	7.285	0.000	27865186	1500.0	1447.1	M
2	7.825	7.824	0.001	12905522	1500.0	1425.4	
2	8.012	8.013	-0.001	9100459	1500.0	1456.1	
2	8.753	8.752	0.001	7933293	1500.0	1468.0	
		Average of Peak Amounts =				1446.0	
						RPD = 3.33	
$ 11 DCB Decachlorobiphenyl							M
1	10.175	10.172	0.003	15101165	150.0	128.4	M
2	9.219	9.217	0.002	18159335	150.0	129.4	M
						RPD = 0.78	
S 12 Polychlorinated biphenyls, Total							
1						2821.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660L4_00021	Amount Added:	1.00	Units: mL	
SGPCBISTD_00006	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:21:28 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001883.D

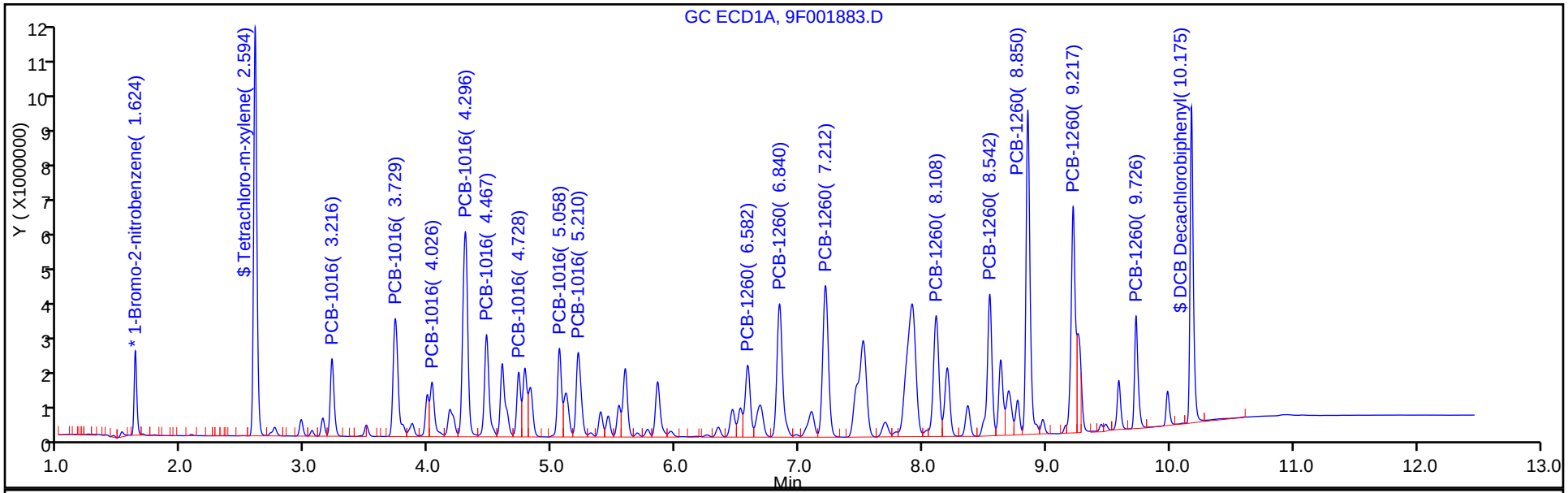
Injection Date: 12-May-2016 11:08:53 Instrument ID: CPESTGC9 Operator ID:

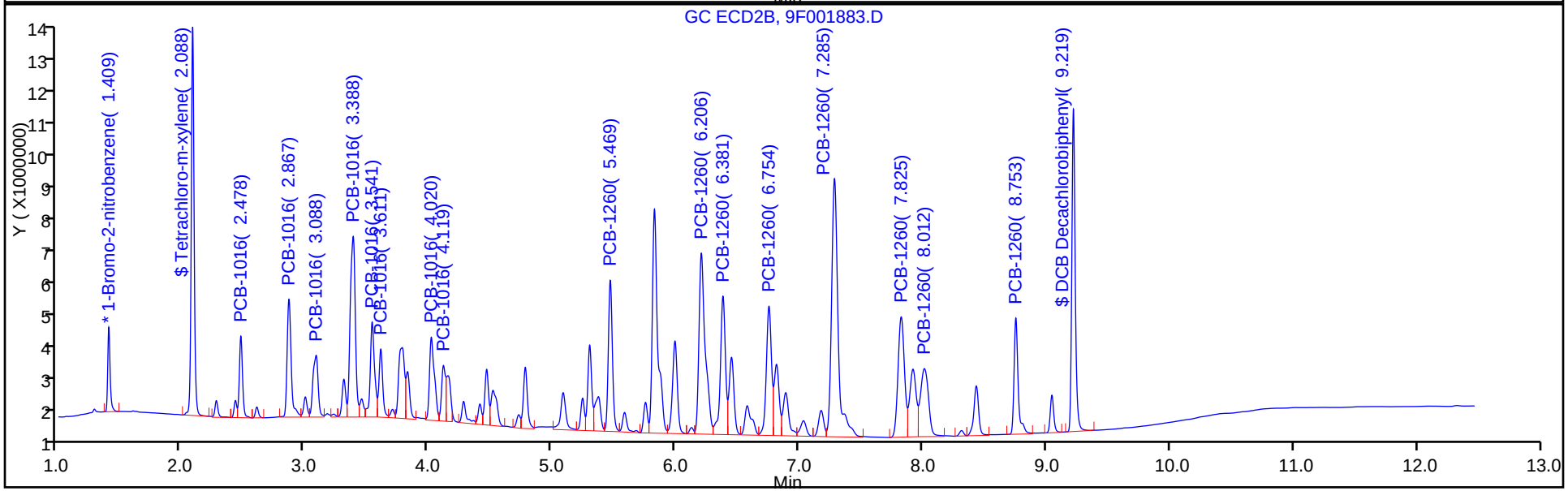
Lims ID: IC PCB 4 Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 5

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD





Manual Integration/User Assign Peak Report

TestAmerica Edison

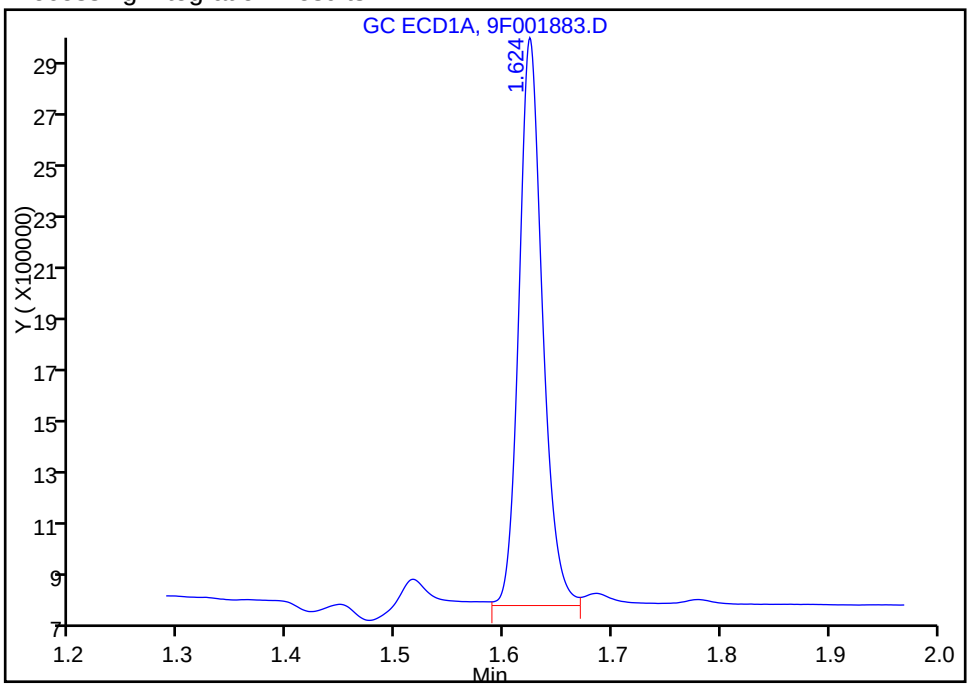
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001883.D				
Injection Date:	12-May-2016 11:08:53	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 4				
Client ID:					
Operator ID:		ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 1

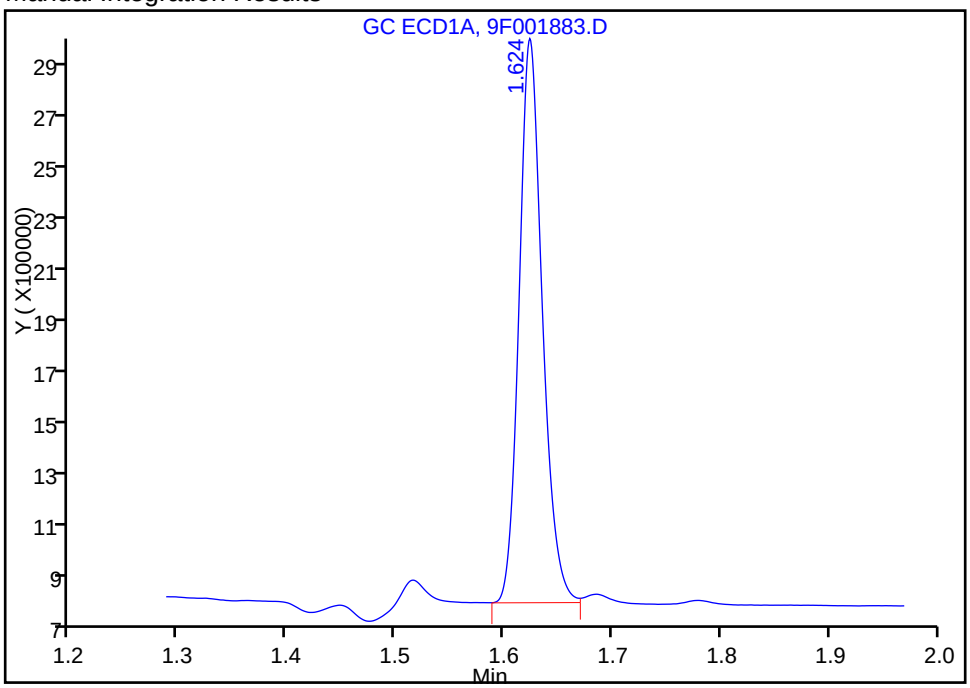
Processing Integration Results

RT: 1.62
Area: 3365236
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.62
Area: 3294505
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 11:31:02

Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

Report Date: 12-May-2016 15:21:28 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001883.D

Injection Date: 12-May-2016 11:08:53 Instrument ID: CPESTGC9

Lims ID: IC PCB 4

Client ID:

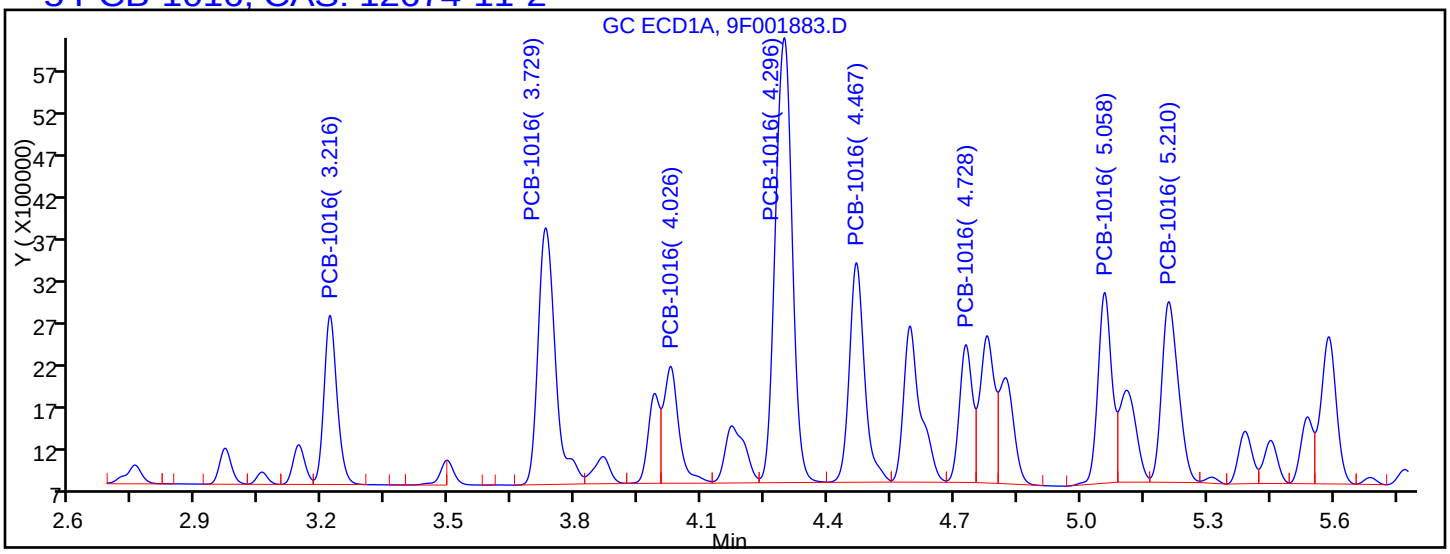
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

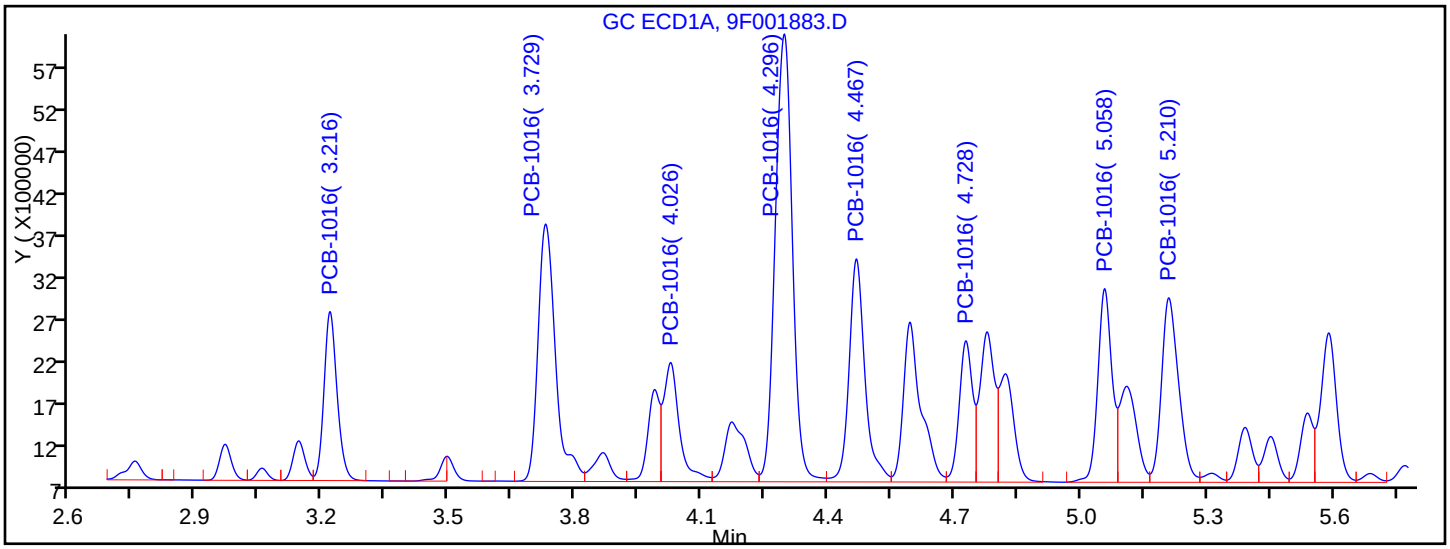
Column: Detector GC ECD1A

5 PCB-1016, CAS: 12674-11-2



Processing Integration Results

RT = 3.216	Response = 4369736	
RT = 3.729	Response = 8855281	M
RT = 4.026	Response = 3537263	M
RT = 4.296	Response = 14883519	M
RT = 4.467	Response = 6646141	M
RT = 4.728	Response = 3584575	M
RT = 5.058	Response = 5277555	M
RT = 5.210	Response = 5954931	M



Manual Integration Results

RT = 3.216	Response = 4369736	
RT = 3.729	Response = 8959256	M
RT = 4.026	Response = 3743966	M
RT = 4.296	Response = 15248808	M
RT = 4.467	Response = 7047286	M
RT = 4.728	Response = 3767776	M

Report Date: 12-May-2016 15:21:28 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001883.D

Injection Date: 12-May-2016 11:08:53 Instrument ID: CPESTGC9

Lims ID: IC PCB 4

Client ID:

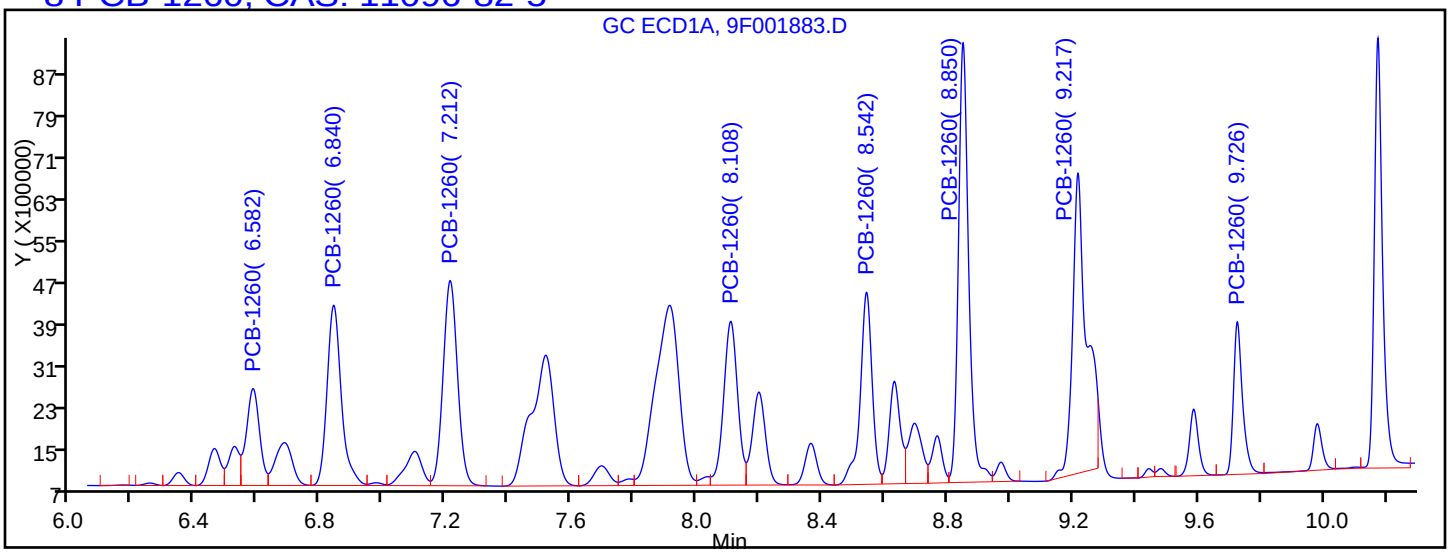
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

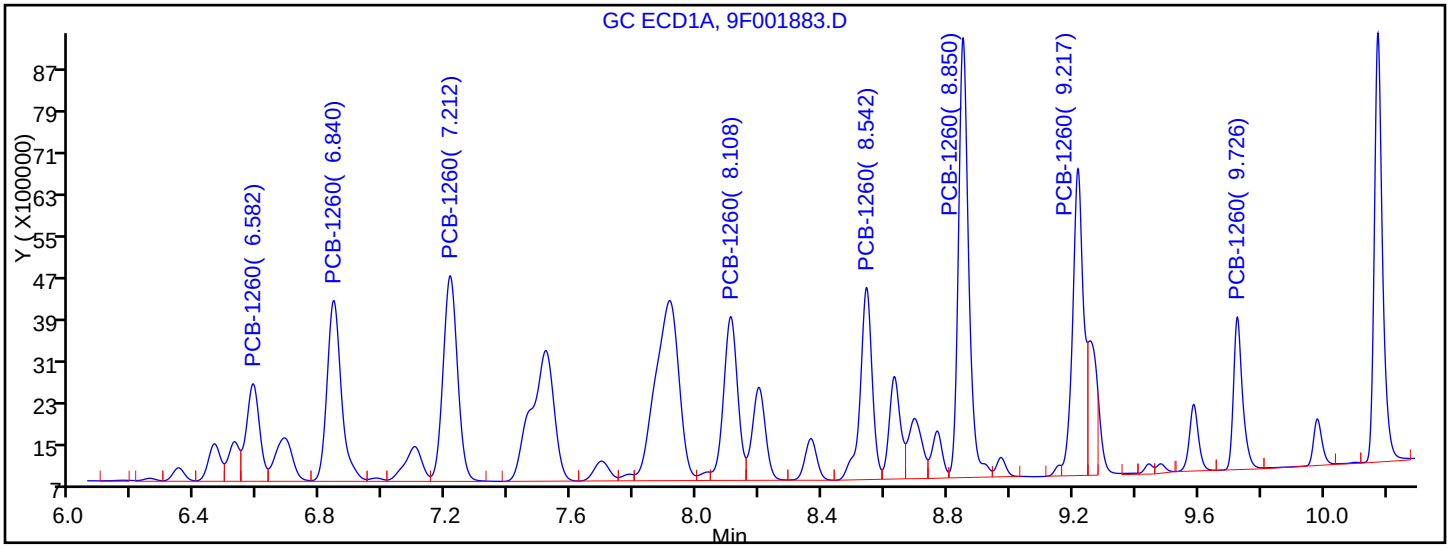
Column: Detector GC ECD1A

8 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 6.582	Response = 5507763	M
RT = 6.840	Response = 11045352	M
RT = 7.212	Response = 12706661	M
RT = 8.108	Response = 9904597	
RT = 8.542	Response = 9897151	
RT = 8.850	Response = 19406860	
RT = 9.217	Response = 18092330	M
RT = 9.726	Response = 5922048	



Manual Integration Results

RT = 6.582	Response = 5566734	M
RT = 6.840	Response = 11169719	M
RT = 7.212	Response = 12780758	M
RT = 8.108	Response = 9904597	
RT = 8.542	Response = 9897151	
RT = 8.850	Response = 19406860	

Manual Integration/User Assign Peak Report

TestAmerica Edison

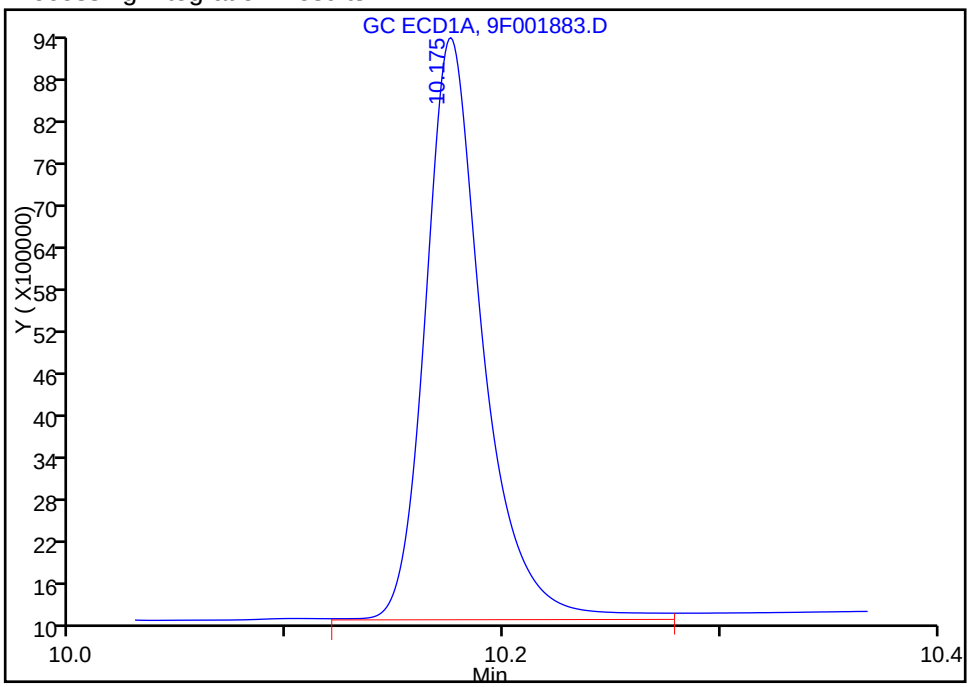
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001883.D				
Injection Date:	12-May-2016 11:08:53	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 4				
Client ID:					
Operator ID:		ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

$ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

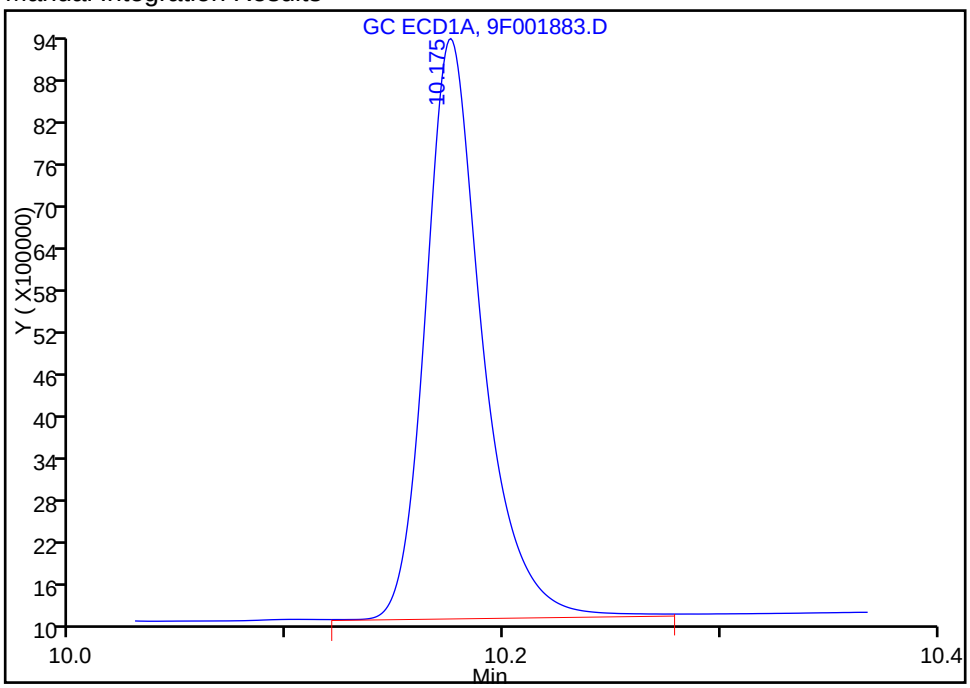
Processing Integration Results

RT: 10.18
Area: 15406044
Amount: 148.6341
Amount Units: ug/l



Manual Integration Results

RT: 10.18
Area: 15101165
Amount: 128.3559
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 11:31:02

Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001884.D
Lims ID: IC PCB 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 12-May-2016 11:53:46 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0040924-006
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub1

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:21:35 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 12:13:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.626	1.623	0.003	2790017	20.0	20.0	
2	1.409	1.408	0.001	2912960	20.0	20.0	M
						RPD = 0.00	
$ 2 Tetrachloro-m-xylene							
1	2.598	2.593	0.005	23087417	200.0	199.5	
2	2.087	2.087	0.000	23173590	200.0	208.5	
						RPD = 4.43	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 PCB-1016							M
1	3.219	3.216	0.003	6155311	2500.0	2425.7	
1	3.733	3.728	0.005	12678388	2500.0	2432.4	M
1	4.029	4.025	0.004	5687774	2500.0	2454.4	M
1	4.300	4.296	0.004	23551614	2500.0	2589.0	M
1	4.471	4.467	0.004	10582390	2500.0	2539.7	M
1	4.731	4.727	0.004	5513465	2500.0	2402.2	M
1	5.061	5.057	0.004	8344979	2500.0	2508.6	M
1	5.214	5.210	0.004	9519974	2500.0	2622.0	M
		Average of Peak Amounts =				2496.8	
2	2.477	2.477	0.000	6321901	2500.0	2557.3	
2	2.866	2.866	0.000	12079146	2500.0	2595.4	M
2	3.086	3.087	-0.001	8241089	2500.0	2694.8	M
2	3.386	3.387	-0.001	24327282	2500.0	2568.1	M
2	3.539	3.541	-0.002	10903573	2500.0	2567.8	M
2	3.609	3.611	-0.002	6838644	2500.0	2618.4	M
2	4.019	4.020	-0.001	10798811	2500.0	2626.4	M
2	4.117	4.118	-0.001	5650740	2500.0	2685.7	M
		Average of Peak Amounts =				2614.2	
						RPD = 4.60	
8 PCB-1260							M
1	6.586	6.582	0.004	8682406	2500.0	2637.7	M
1	6.844	6.840	0.004	17248720	2500.0	2556.9	M
1	7.216	7.212	0.004	19940336	2500.0	2469.3	M
1	8.112	8.108	0.004	15454420	2500.0	2578.4	
1	8.547	8.541	0.006	15657966	2500.0	2655.3	M
1	8.858	8.849	0.009	31010518	2500.0	2617.4	M
1	9.229	9.216	0.013	22497806	2500.0	2587.8	M
1	9.744	9.724	0.020	9261706	2500.0	2603.9	
		Average of Peak Amounts =				2588.3	
2	5.467	5.469	-0.002	15299719	2500.0	2431.2	M
2	6.204	6.206	-0.002	26680357	2500.0	2412.2	M
2	6.380	6.382	-0.002	17239840	2500.0	2542.2	M
2	6.752	6.754	-0.002	16391658	2500.0	2393.9	M
2	7.282	7.285	-0.003	40568730	2500.0	2436.1	M
2	7.822	7.824	-0.002	19903783	2500.0	2541.9	
2	8.010	8.013	-0.003	13949576	2500.0	2580.8	
2	8.757	8.752	0.005	12173148	2500.0	2604.6	M
		Average of Peak Amounts =				2492.9	
						RPD = 3.76	
$ 11 DCB Decachlorobiphenyl							M
1	10.200	10.172	0.028	19430254	200.0	195.0	M
2	9.229	9.217	0.012	23388934	200.0	192.7	M
						RPD = 1.21	
S 12 Polychlorinated biphenyls, Total							
1						5085.1	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660L5_00021	Amount Added:	1.00	Units: mL	
SGPCBISTD_00006	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:21:39 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001884.D

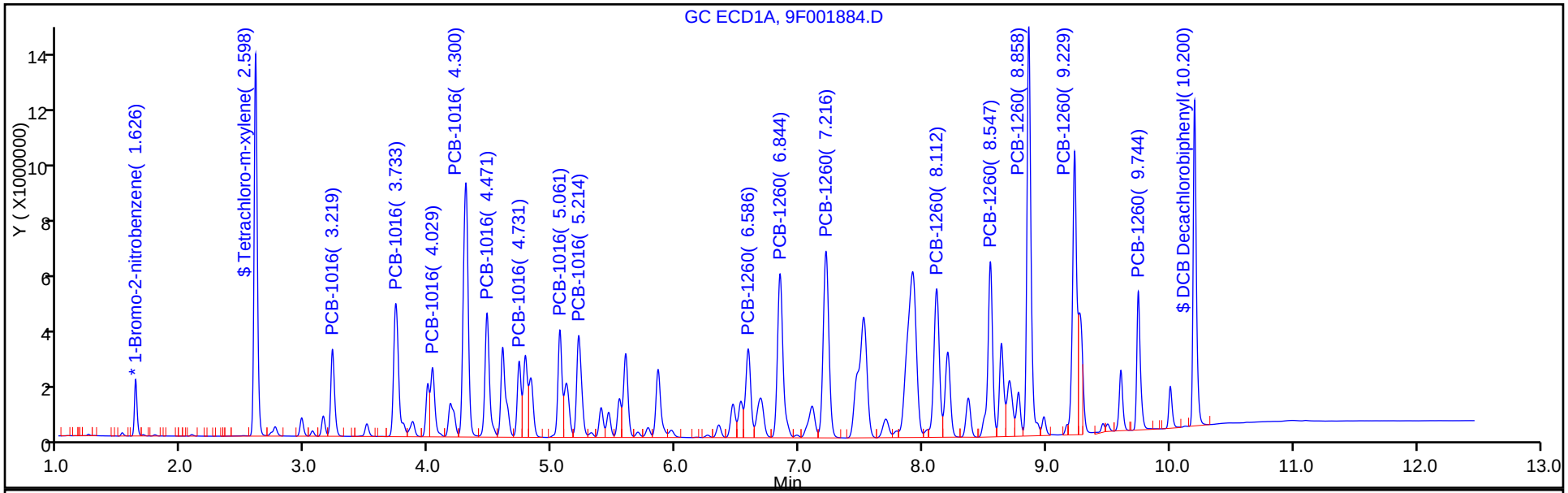
Injection Date: 12-May-2016 11:53:46 Instrument ID: CPESTGC9 Operator ID:

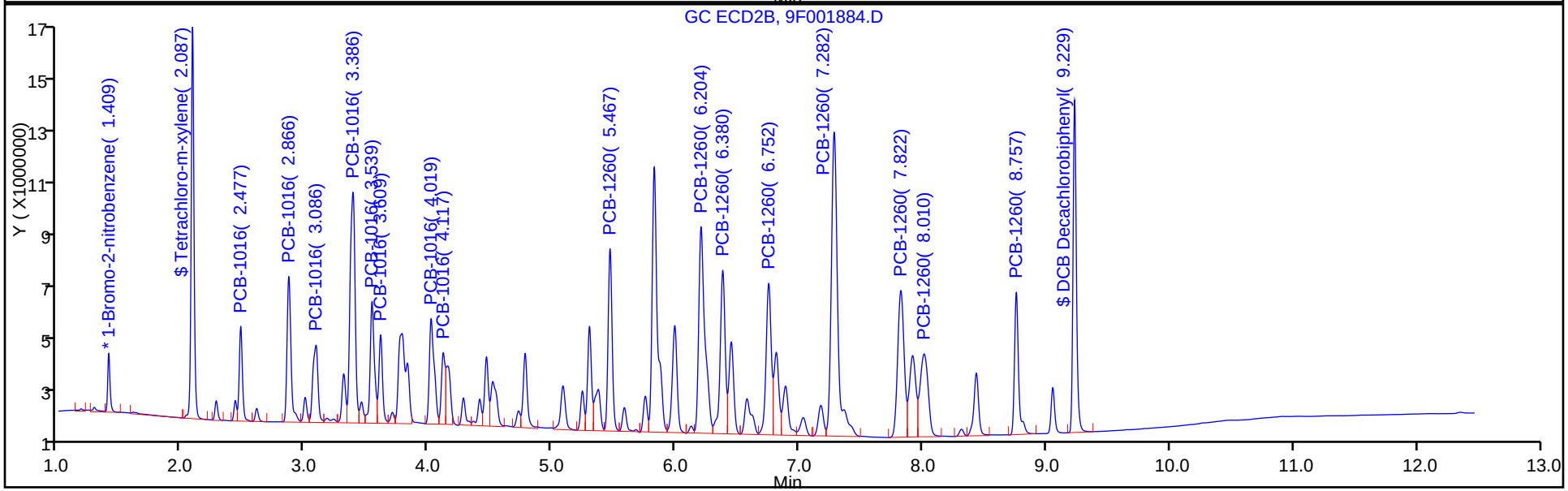
Lims ID: IC PCB 5 Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 6

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD





Report Date: 12-May-2016 15:21:40 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001884.D

Injection Date: 12-May-2016 11:53:46 Instrument ID: CPESTGC9

Lims ID: IC PCB 5

Client ID:

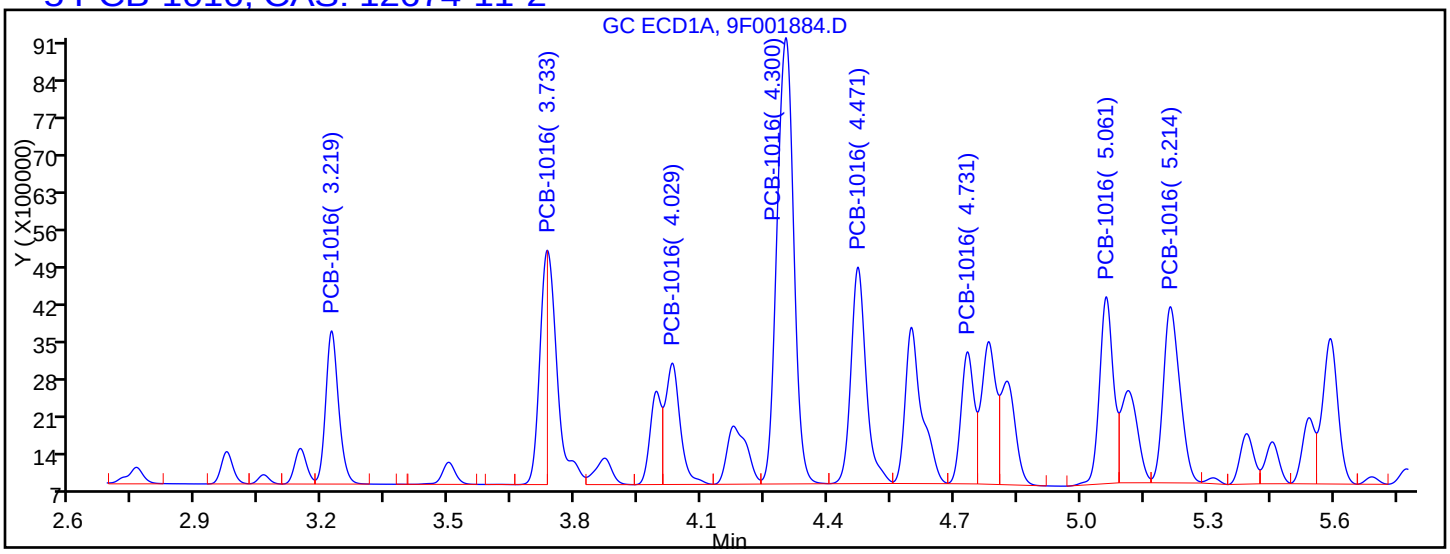
Operator ID: ALS Bottle#: 6 Worklist Smp#: 6

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

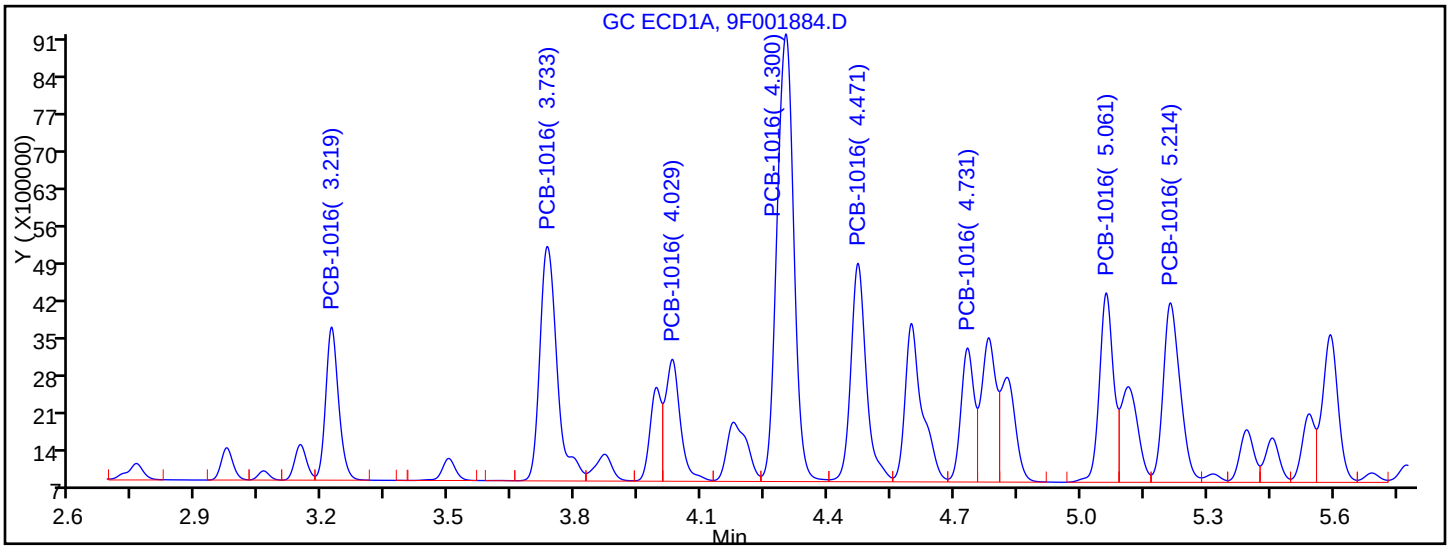
Column: Detector GC ECD1A

5 PCB-1016, CAS: 12674-11-2



Processing Integration Results

RT = 3.219	Response = 6155311	
RT = 3.733	Response = 5363113	M
RT = 4.029	Response = 5585880	M
RT = 4.300	Response = 23267549	M
RT = 4.471	Response = 10238637	M
RT = 4.731	Response = 5346770	M
RT = 5.061	Response = 8106929	M
RT = 5.214	Response = 9072468	M



Manual Integration Results

RT = 3.219	Response = 6155311	
RT = 3.733	Response = 12678388	M
RT = 4.029	Response = 5687774	M
RT = 4.300	Response = 23551614	M
RT = 4.471	Response = 10582390	M
RT = 4.731	Response = 5513465	M

Report Date: 12-May-2016 15:21:40 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001884.D

Injection Date: 12-May-2016 11:53:46 Instrument ID: CPESTGC9

Lims ID: IC PCB 5

Client ID:

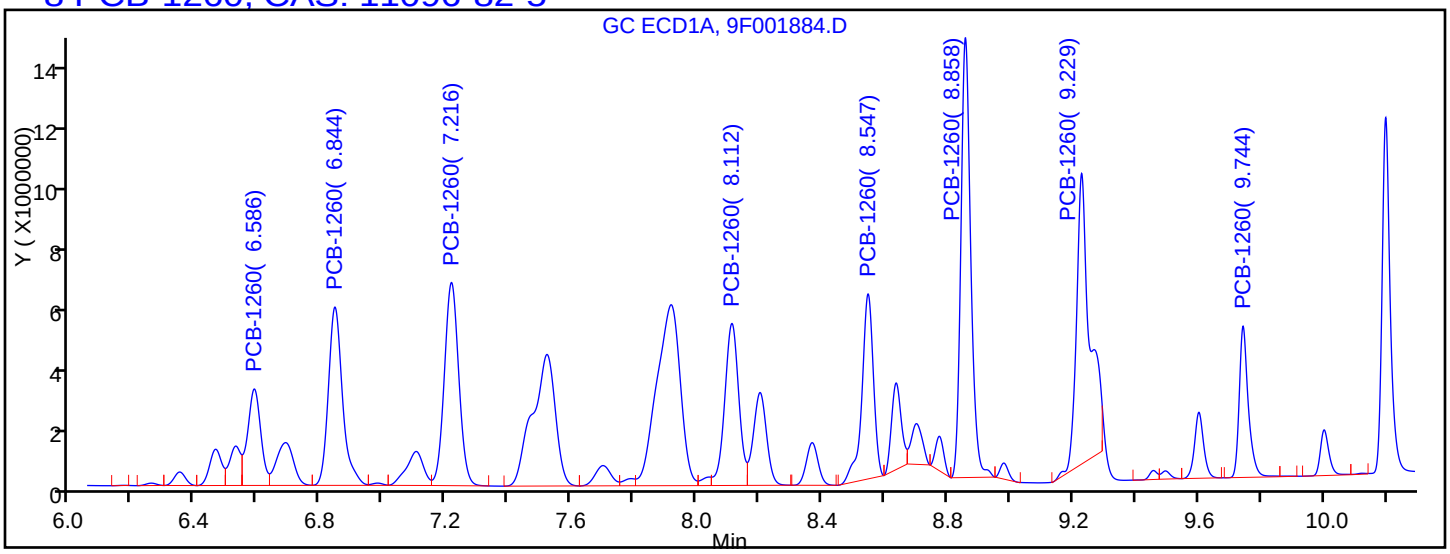
Operator ID: ALS Bottle#: 6 Worklist Smp#: 6

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

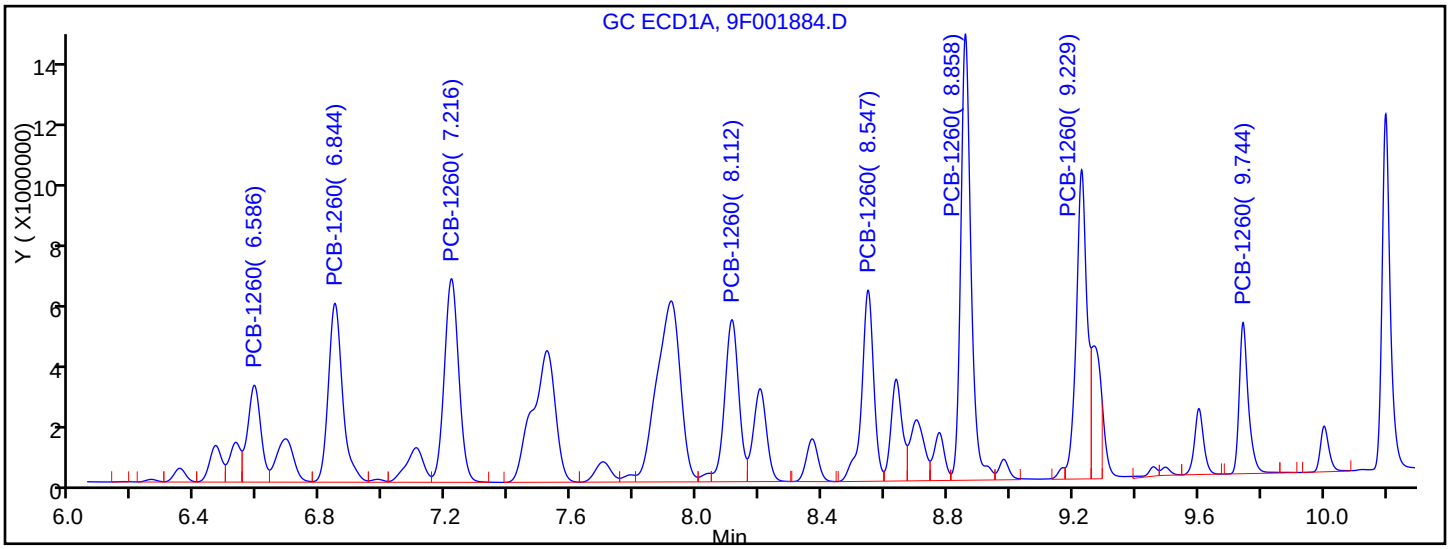
Column: Detector GC ECD1A

8 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 6.586	Response = 8613789	M
RT = 6.844	Response = 17057365	M
RT = 7.216	Response = 19822251	M
RT = 8.112	Response = 15454420	
RT = 8.547	Response = 14406200	M
RT = 8.858	Response = 29348154	M
RT = 9.229	Response = 26013547	M
RT = 9.744	Response = 9261706	



Manual Integration Results

RT = 6.586	Response = 8682406	M
RT = 6.844	Response = 17248720	M
RT = 7.216	Response = 19940336	M
RT = 8.112	Response = 15454420	
RT = 8.547	Response = 15657966	M
RT = 8.858	Response = 31010518	M

Manual Integration/User Assign Peak Report

TestAmerica Edison

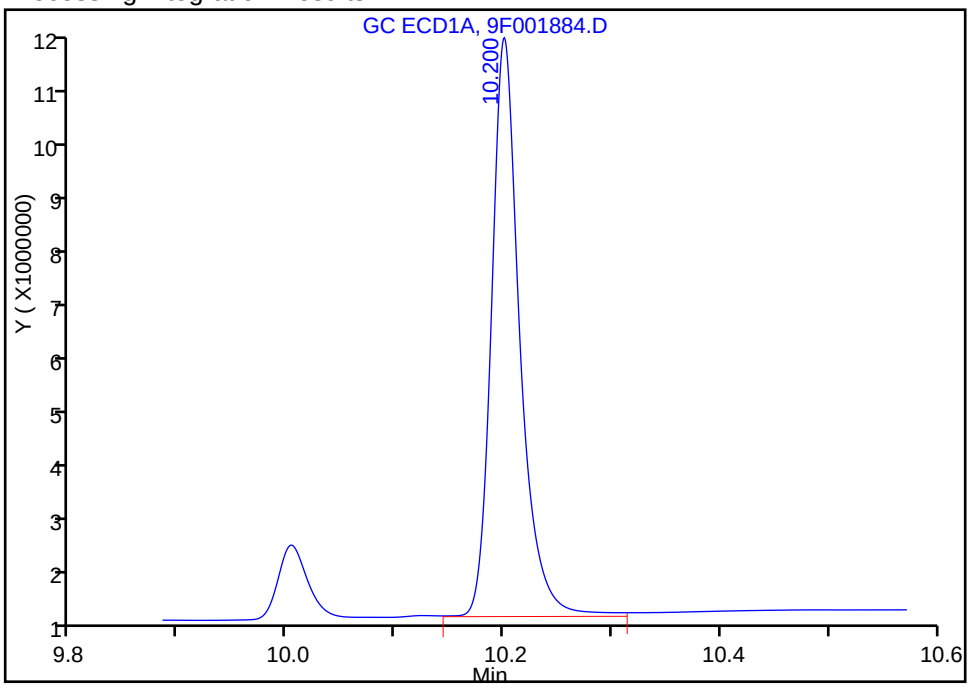
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001884.D				
Injection Date:	12-May-2016 11:53:46	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 5				
Client ID:					
Operator ID:		ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

$ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

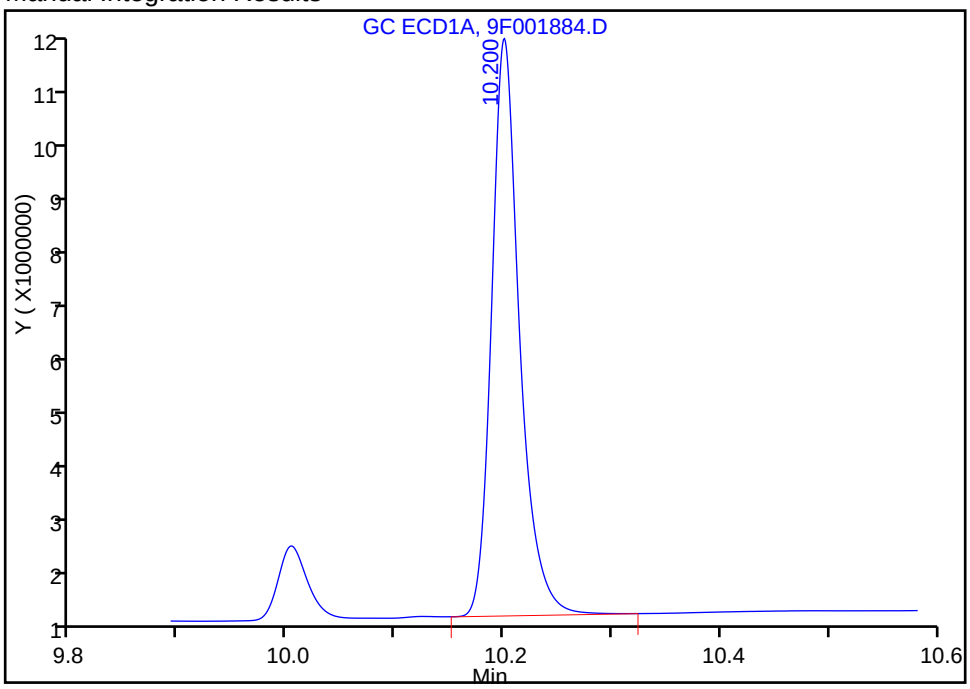
Processing Integration Results

RT: 10.20
Area: 19793751
Amount: 197.0121
Amount Units: ug/l



Manual Integration Results

RT: 10.20
Area: 19430254
Amount: 195.0147
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 12:13:35

Audit Action: Manually Integrated Audit Reason: Peak not integrated

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 10:14 Calibration End Date: 05/12/2016 11:53 Calibration ID: 55695

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/2	9F001880.D
Level 2	IC 460-367709/3	9F001881.D
Level 3	IC 460-367709/4	9F001882.D
Level 4	IC 460-367709/5	9F001883.D
Level 5	IC 460-367709/6	9F001884.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1016 Peak 1	0.0176	0.0178	0.0149	0.0172	0.0174	Ave		0.0170				6.9		20.0			0.9900
PCB-1016 Peak 2	0.0338	0.0332	0.0278	0.0319	0.0332	Ave		0.0320				7.6		20.0			0.9900
PCB-1016 Peak 3	0.0216	0.0209	0.0189	0.0210	0.0226	Ave		0.0210				6.5		20.0			0.9900
PCB-1016 Peak 4	0.0719	0.0695	0.0566	0.0604	0.0668	Ave		0.0650				9.8		20.0			0.9900
PCB-1016 Peak 5	0.0288	0.0347	0.0250	0.0273	0.0299	Ave		0.0292				12.3		20.0			0.9900
PCB-1016 Peak 6	0.0162	0.0229	0.0152	0.0166	0.0188	Ave		0.0179				17.1		20.0			0.9900
PCB-1016 Peak 7	0.0284	0.0314	0.0247	0.0270	0.0297	Ave		0.0282				9.0		20.0			0.9900
PCB-1016 Peak 8	0.0119	0.0161	0.0142	0.0145	0.0155	Ave		0.0144				11.2		20.0			0.9900
PCB-1260 Peak 1	0.0498	0.0445	0.0391	0.0405	0.0420	Ave		0.0432				9.7		20.0			0.9900
PCB-1260 Peak 2	0.0805	0.0785	0.0729	0.0746	0.0733	Ave		0.0759				4.4		20.0			0.9900
PCB-1260 Peak 3	0.0441	0.0498	0.0451	0.0464	0.0473	Ave		0.0466				4.7		20.0			0.9900
PCB-1260 Peak 4	0.0561	0.0477	0.0425	0.0437	0.0450	Ave		0.0470				11.6		20.0			0.9900
PCB-1260 Peak 5	0.1268	0.1199	0.1033	0.1103	0.1114	Ave		0.1143				8.0		20.0			0.9900
PCB-1260 Peak 6	0.0569	0.0567	0.0495	0.0511	0.0547	Ave		0.0538				6.2		20.0			0.9900
PCB-1260 Peak 7	+++++	0.0399	0.0342	0.0360	0.0383	Ave		0.0371				6.7		20.0			0.9900
PCB-1260 Peak 8	0.0333	0.0329	0.0294	0.0314	0.0334	Ave		0.0321				5.3		20.0			0.9900
Tetrachloro-m-xylene	0.8127	0.8091	0.6708	0.7269	0.7955	Ave		0.7630				8.1		20.0			0.9900
DCB Decachlorobiphenyl	1.0335	0.8781	0.7341	0.7188	0.8029	Ave		0.8335				15.4		20.0			0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 10:14 Calibration End Date: 05/12/2016 11:53 Calibration ID: 55695

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/2	9F001880.D
Level 2	IC 460-367709/3	9F001881.D
Level 3	IC 460-367709/4	9F001882.D
Level 4	IC 460-367709/5	9F001883.D
Level 5	IC 460-367709/6	9F001884.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	BNB	Ave	142670	1488247	2665895	4332530	6321901	50.0	500	1000	1500	2500
PCB-1016 Peak 2	BNB	Ave	274152	2768680	4958047	8047032	12079146	50.0	500	1000	1500	2500
PCB-1016 Peak 3	BNB	Ave	175662	1740535	3370555	5294700	8241089	50.0	500	1000	1500	2500
PCB-1016 Peak 4	BNB	Ave	583539	5797158	10097178	15267330	24327282	50.0	500	1000	1500	2500
PCB-1016 Peak 5	BNB	Ave	233794	2894717	4469017	6893182	10903573	50.0	500	1000	1500	2500
PCB-1016 Peak 6	BNB	Ave	131574	1910107	2715679	4182972	6838644	50.0	500	1000	1500	2500
PCB-1016 Peak 7	BNB	Ave	230242	2617412	4410039	6831748	10798811	50.0	500	1000	1500	2500
PCB-1016 Peak 8	BNB	Ave	96771	1344834	2533958	3654893	5650740	50.0	500	1000	1500	2500
PCB-1260 Peak 1	BNB	Ave	404536	3716605	6979606	10236516	15299719	50.0	500	1000	1500	2500
PCB-1260 Peak 2	BNB	Ave	653350	6548906	13004344	18837770	26680357	50.0	500	1000	1500	2500
PCB-1260 Peak 3	BNB	Ave	358051	4156593	8044868	11733006	17239840	50.0	500	1000	1500	2500
PCB-1260 Peak 4	BNB	Ave	455665	3975975	7587017	11049030	16391658	50.0	500	1000	1500	2500
PCB-1260 Peak 5	BNB	Ave	1029322	10000594	18435917	27865186	40568730	50.0	500	1000	1500	2500
PCB-1260 Peak 6	BNB	Ave	462009	4729185	8825536	12905522	19903783	50.0	500	1000	1500	2500
PCB-1260 Peak 7	BNB	Ave	+++++	3326716	6108355	9100459	13949576	+++++	500	1000	1500	2500
PCB-1260 Peak 8	BNB	Ave	269940	2748973	5247204	7933293	12173148	50.0	500	1000	1500	2500
Tetrachloro-m-xylene	BNB	Ave	1649418	6750713	11968377	18362842	23173590	12.5	50.0	100	150	200
DCB Decachlorobiphenyl	BNB	Ave	2097610	7326448	13096920	18159335	23388934	12.5	50.0	100	150	200

Curve Type Legend:

Ave = Average ISTD

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D
Lims ID: IC PCB 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 12-May-2016 10:14:48 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info:
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub1

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:20:49 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 11:17:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.625	1.624	0.001	2972583	20.0	20.0	
2	1.407	1.410	-0.003	3247370	20.0	20.0	M
						RPD = 0.00	
$ 2 Tetrachloro-m-xylene							M
1	2.596	2.593	0.003	1614359	12.5	13.1	
2	2.084	2.087	-0.003	1649418	12.5	13.3	M
						RPD = 1.68	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 PCB-1016							M
1	3.219	3.216	0.003	145541	50.0	53.8	
1	3.731	3.728	0.003	295880	50.0	53.3	M
1	4.033	4.025	0.008	139486	50.0	56.5	M
1	4.299	4.296	0.003	536157	50.0	55.3	M
1	4.469	4.467	0.002	235853	50.0	53.1	M
1	4.731	4.727	0.004	143617	50.0	58.7	M
1	5.059	5.057	0.002	211655	50.0	59.7	M
1	5.213	5.210	0.003	200511	50.0	51.8	M
		Average of Peak Amounts =				55.3	
2	2.476	2.477	-0.001	142670	50.0	51.8	M
2	2.865	2.866	-0.001	274152	50.0	52.8	M
2	3.086	3.087	-0.001	175662	50.0	51.5	M
2	3.384	3.387	-0.003	583539	50.0	55.3	M
2	3.538	3.541	-0.003	233794	50.0	49.4	M
2	3.608	3.611	-0.003	131574	50.0	45.2	M
2	4.016	4.020	-0.004	230242	50.0	50.2	M
2	4.113	4.118	-0.005	96771	50.0	41.3	M
		Average of Peak Amounts =				49.7	
						RPD = 10.69	
8 PCB-1260							M
1	6.586	6.582	0.004	190526	50.0	54.3	
1	6.844	6.840	0.004	407387	50.0	56.7	M
1	7.216	7.212	0.004	555852	50.0	64.6	
1	8.113	8.108	0.005	368076	50.0	57.6	M
1	8.547	8.541	0.006	343289	50.0	54.6	
1	8.859	8.849	0.010	736946	50.0	58.4	
1	9.231	9.216	0.015	543036	50.0	58.6	M
1	9.749	9.724	0.025	215968	50.0	57.0	
		Average of Peak Amounts =				57.7	
2	5.466	5.469	-0.003	404536	50.0	57.7	M
2	6.203	6.206	-0.003	653350	50.0	53.0	
2	6.379	6.382	-0.003	358051	50.0	47.4	M
2	6.751	6.754	-0.003	455665	50.0	59.7	M
2	7.284	7.285	-0.001	1029322	50.0	55.4	M
2	7.820	7.824	-0.004	462009	50.0	52.9	M
2	0.000	8.013	-8.013	0	50.0	0	
2	8.757	8.752	0.005	269940	50.0	51.8	
		Average of Peak Amounts =				54.0	
						RPD = 6.72	
$ 11 DCB Decachlorobiphenyl							M
1	10.207	10.172	0.035	1717969	12.5	16.2	M
2	9.231	9.217	0.014	2097610	12.5	15.5	M
						RPD = 4.32	
S 12 Polychlorinated biphenyls, Total							
1						113.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660(LVI)L1_00009	Amount Added: 1.00	Units: mL	
SGPCBISTD_00006	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:20:55 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D

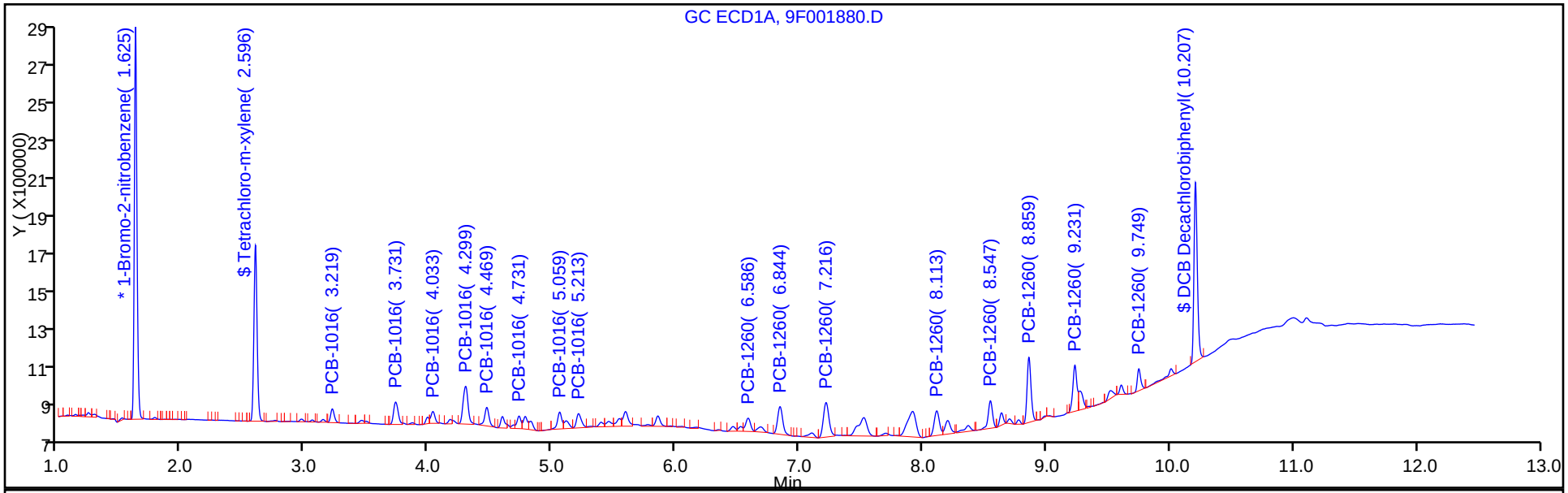
Injection Date: 12-May-2016 10:14:48 Instrument ID: CPESTGC9 Operator ID:

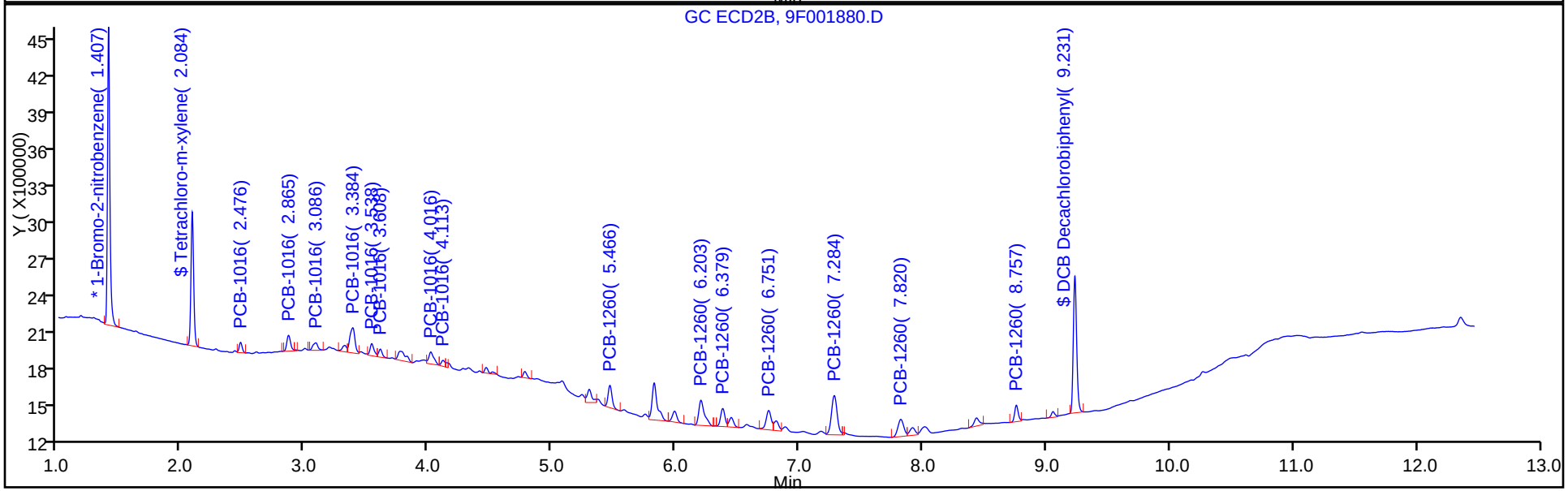
Lims ID: IC PCB 1 Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD





Report Date: 12-May-2016 15:20:55 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D

Injection Date: 12-May-2016 10:14:48 Instrument ID: CPESTGC9

Lims ID: IC PCB 1

Client ID:

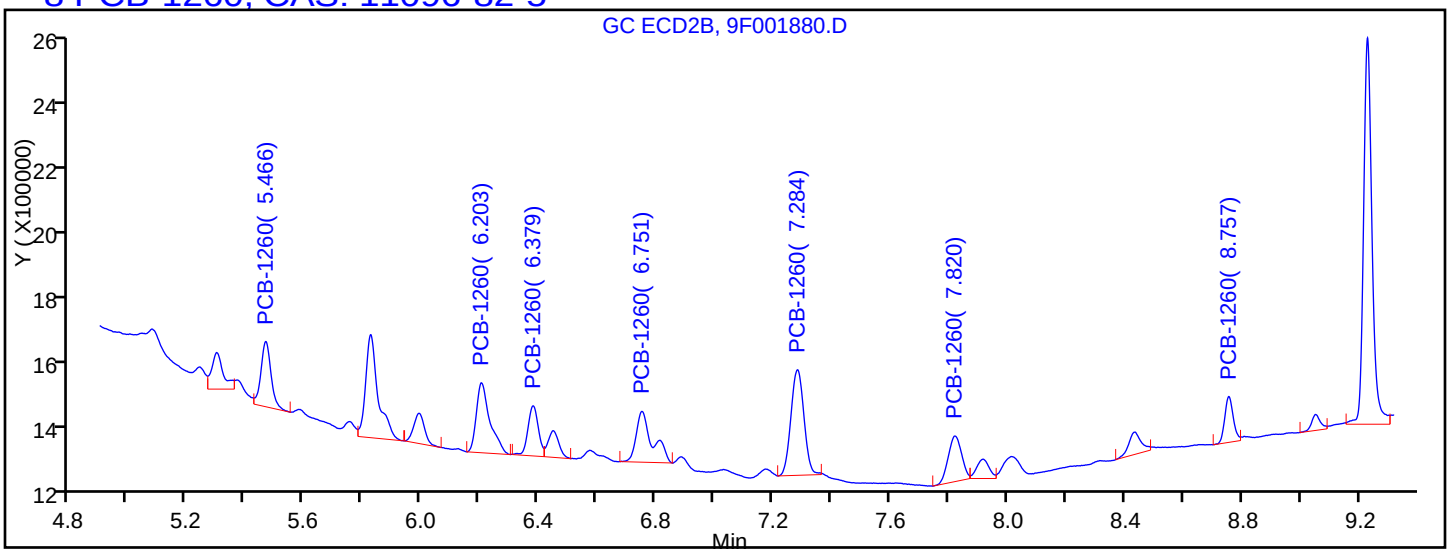
Operator ID: ALS Bottle#: 2 Worklist Smp#: 2

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

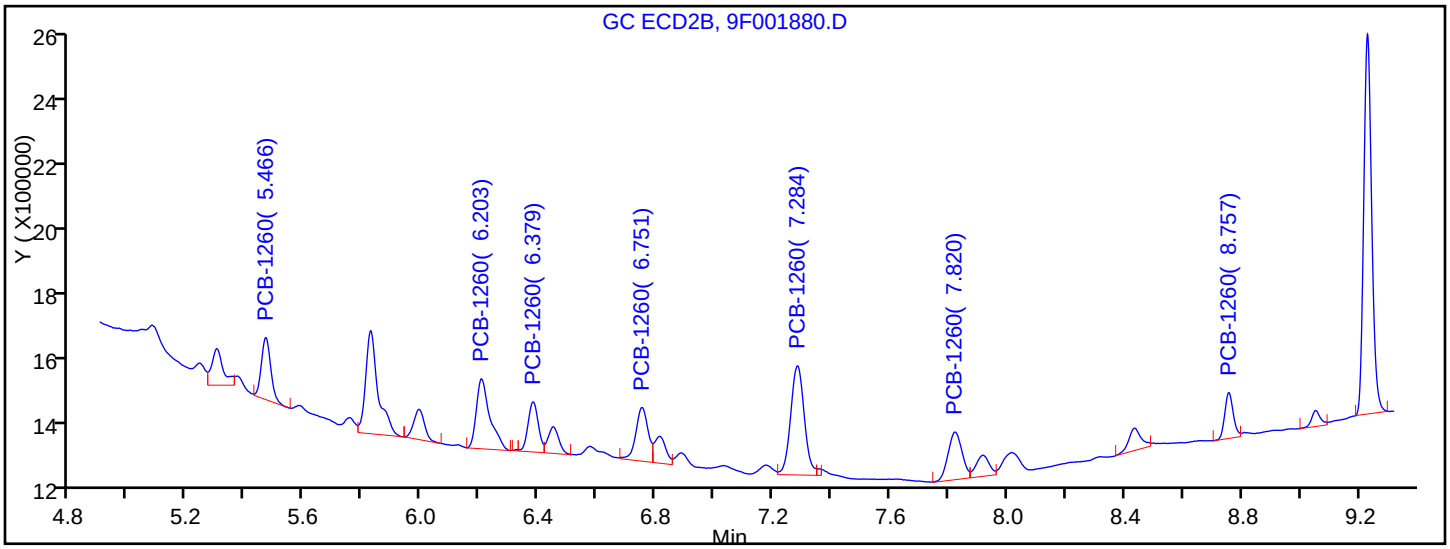
Column: Detector GC ECD2B

8 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 5.466	Response = 455561	M
RT = 6.203	Response = 653350	
RT = 6.379	Response = 361347	M
RT = 6.751	Response = 563437	M
RT = 7.284	Response = 950516	M
RT = 7.820	Response = 422229	M
RT = 0.000	Response = 0	
RT = 8.757	Response = 269940	



Manual Integration Results

RT = 5.466	Response = 404536	M
RT = 6.203	Response = 653350	
RT = 6.379	Response = 358051	M
RT = 6.751	Response = 455665	M
RT = 7.284	Response = 1029322	M
RT = 7.820	Response = 462009	M

Manual Integration/User Assign Peak Report

TestAmerica Edison

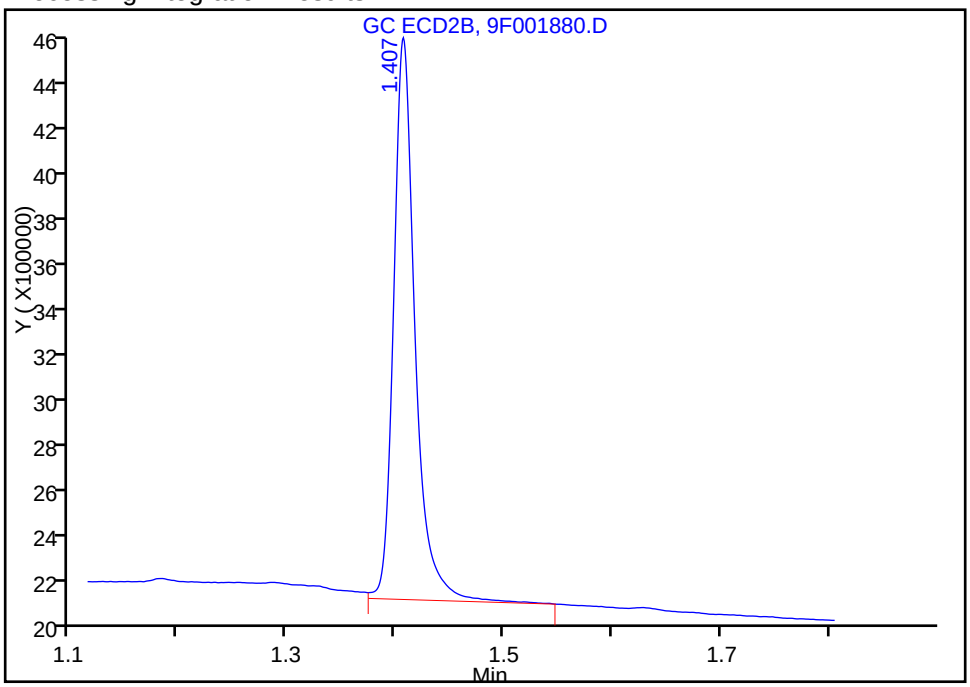
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D				
Injection Date:	12-May-2016 10:14:48	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 1				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

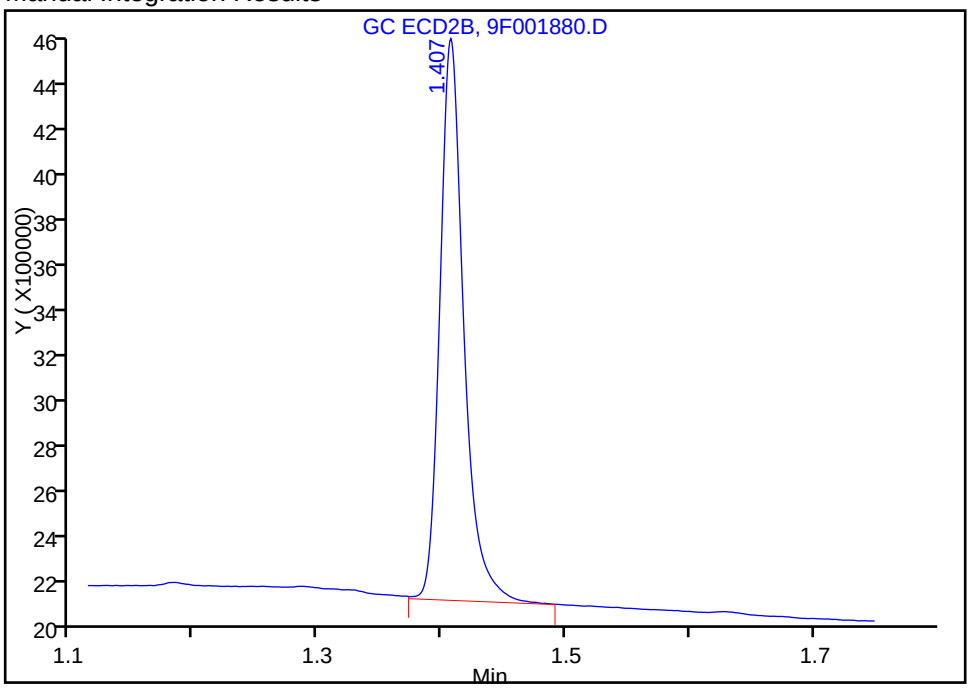
Processing Integration Results

RT: 1.41
Area: 3342911
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.41
Area: 3247370
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 11:39:56

Audit Action: Manually Integrated Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

TestAmerica Edison

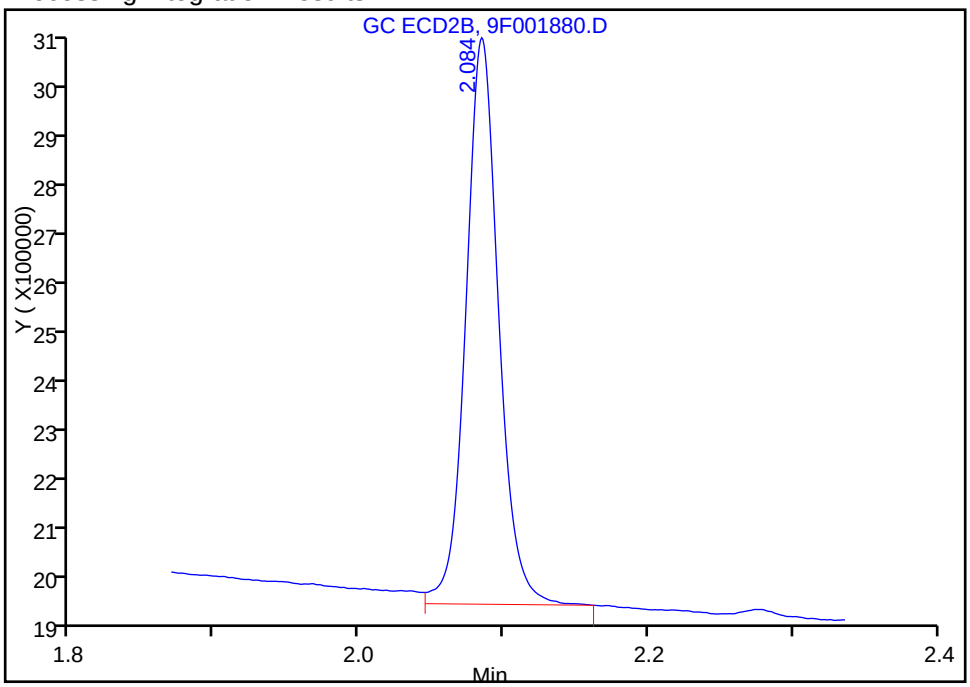
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D				
Injection Date:	12-May-2016 10:14:48	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 1				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

$ 2 Tetrachloro-m-xylene, CAS: 877-09-8

Signal: 2

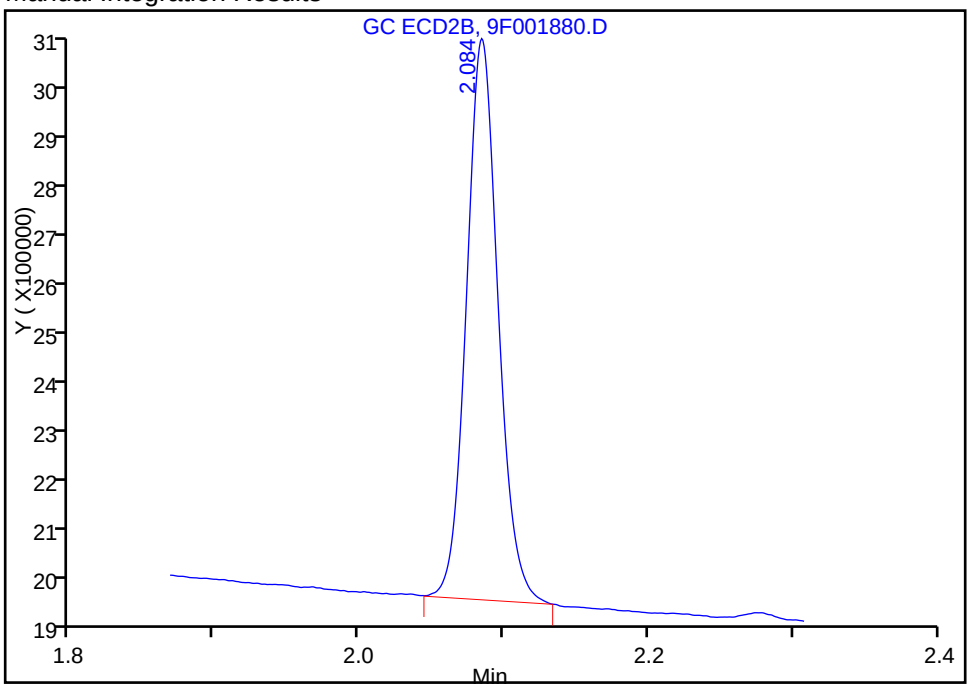
Processing Integration Results

RT: 2.08
Area: 1728383
Amount: 13.810296
Amount Units: ug/l



Manual Integration Results

RT: 2.08
Area: 1649418
Amount: 13.313748
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 12:16:20

Audit Action: Manually Integrated Audit Reason: Peak not integrated

Report Date: 12-May-2016 15:20:55 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D

Injection Date: 12-May-2016 10:14:48 Instrument ID: CPESTGC9

Lims ID: IC PCB 1

Client ID:

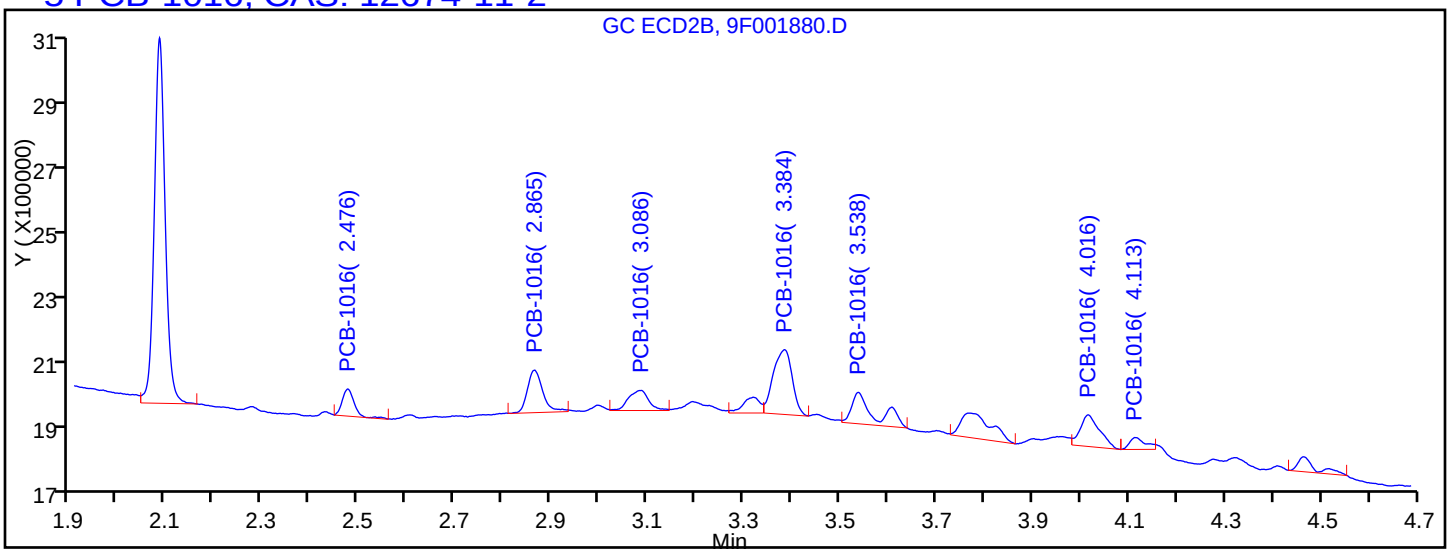
Operator ID: ALS Bottle#: 2 Worklist Smp#: 2

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

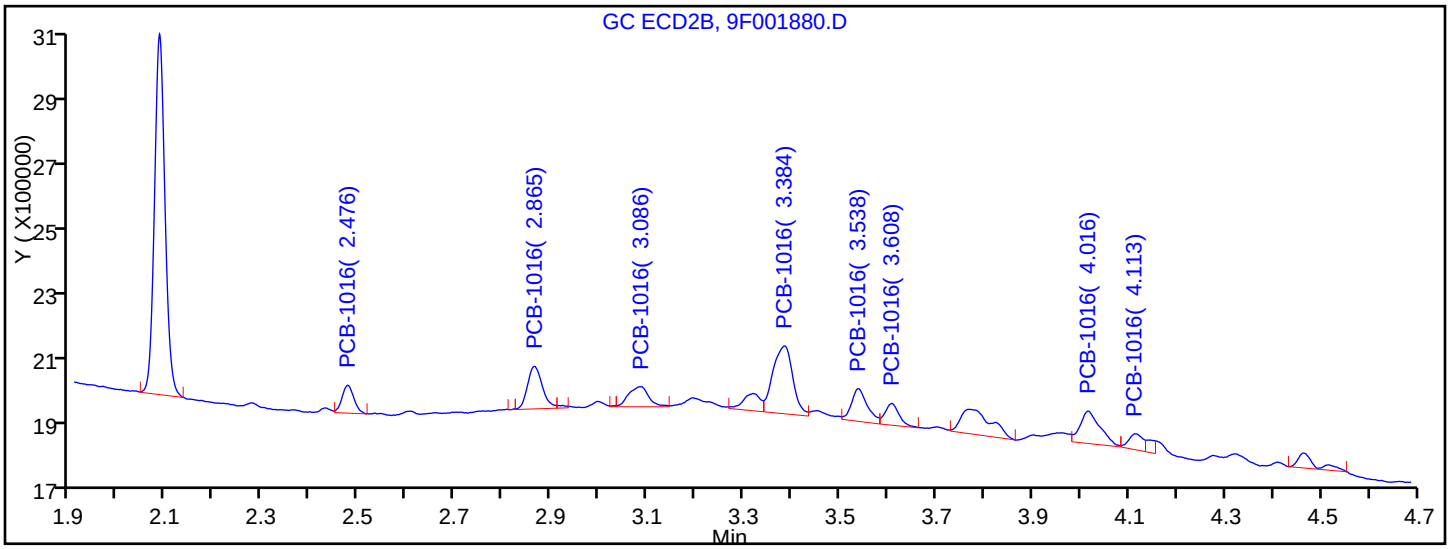
Column: Detector GC ECD2B

5 PCB-1016, CAS: 12674-11-2



Processing Integration Results

RT = 2.476	Response = 141596	M
RT = 2.865	Response = 284340	M
RT = 3.086	Response = 177831	M
RT = 3.384	Response = 531683	M
RT = 3.538	Response = 309967	M
RT = 0.000	Response = 0	M
RT = 4.016	Response = 266400	M
RT = 4.113	Response = 83454	M



Manual Integration Results

RT = 2.476	Response = 142670	M
RT = 2.865	Response = 274152	M
RT = 3.086	Response = 175662	M
RT = 3.384	Response = 583539	M
RT = 3.538	Response = 233794	M
RT = 3.608	Response = 131574	M

Manual Integration/User Assign Peak Report

TestAmerica Edison

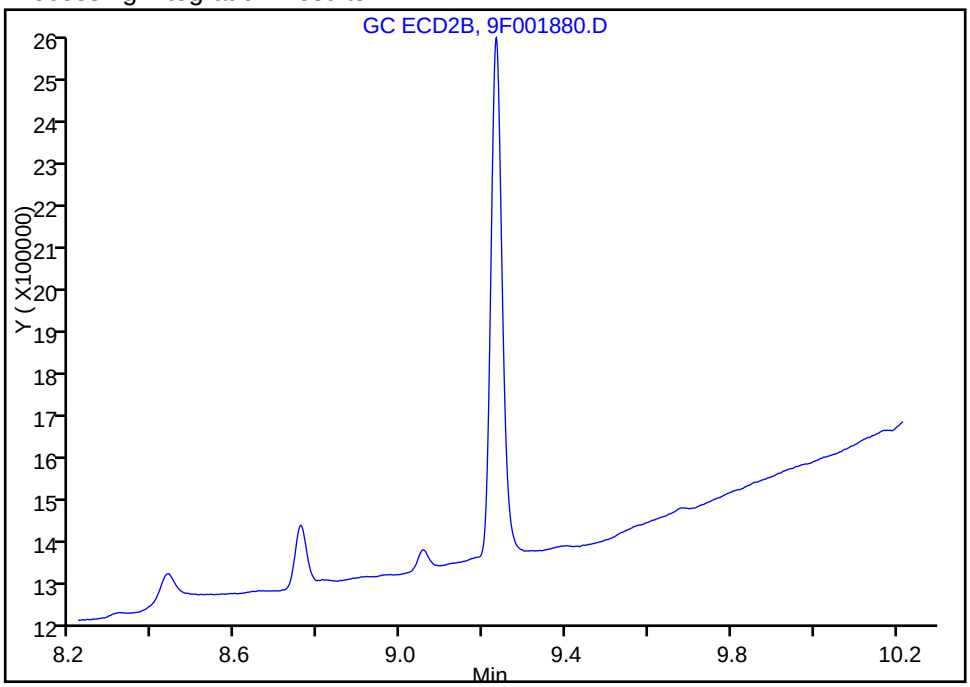
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D				
Injection Date:	12-May-2016 10:14:48	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 1				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

$ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 2

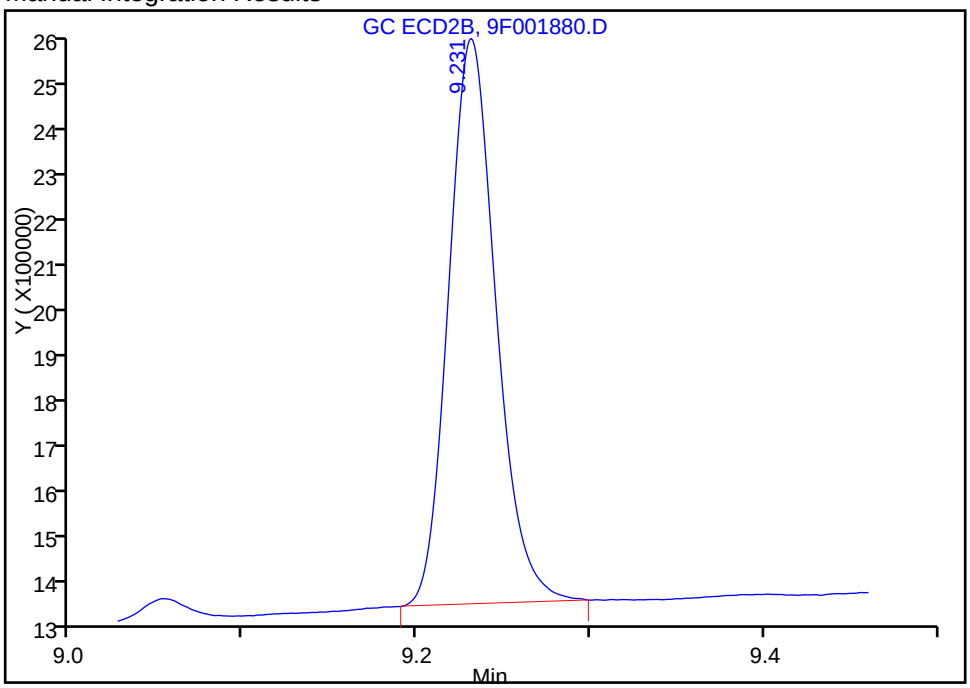
Processing Integration Results

Not Detected
Expected RT: 9.22



Manual Integration Results

RT:	9.23
Area:	2097610
Amount:	15.499642
Amount Units:	ug/l



Reviewer: patelji, 12-May-2016 11:25:56
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

TestAmerica Edison

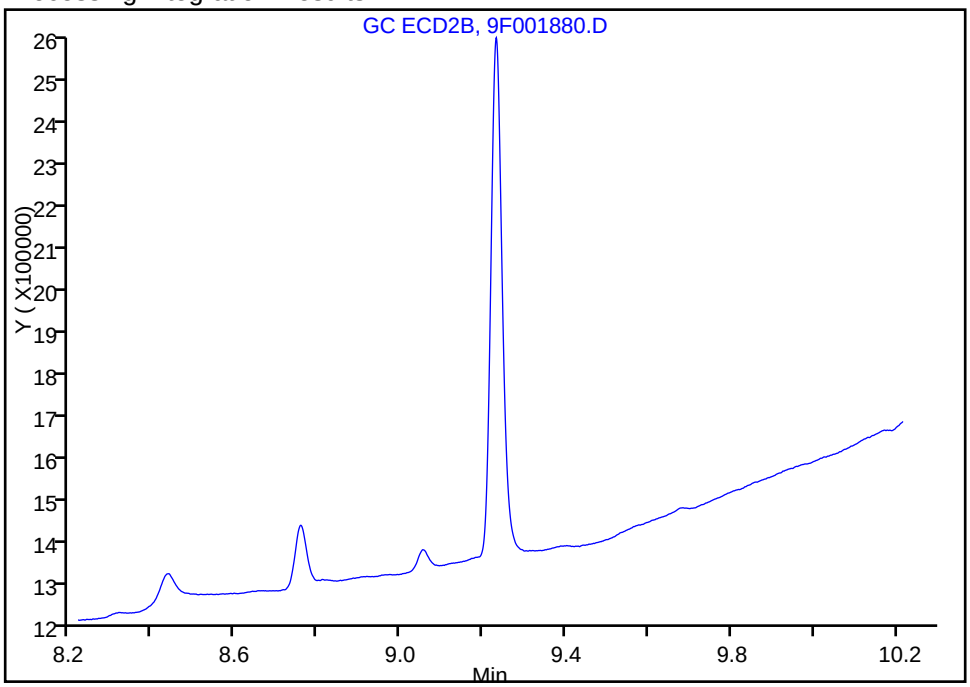
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D				
Injection Date:	12-May-2016 10:14:48	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 1				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

$ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 2

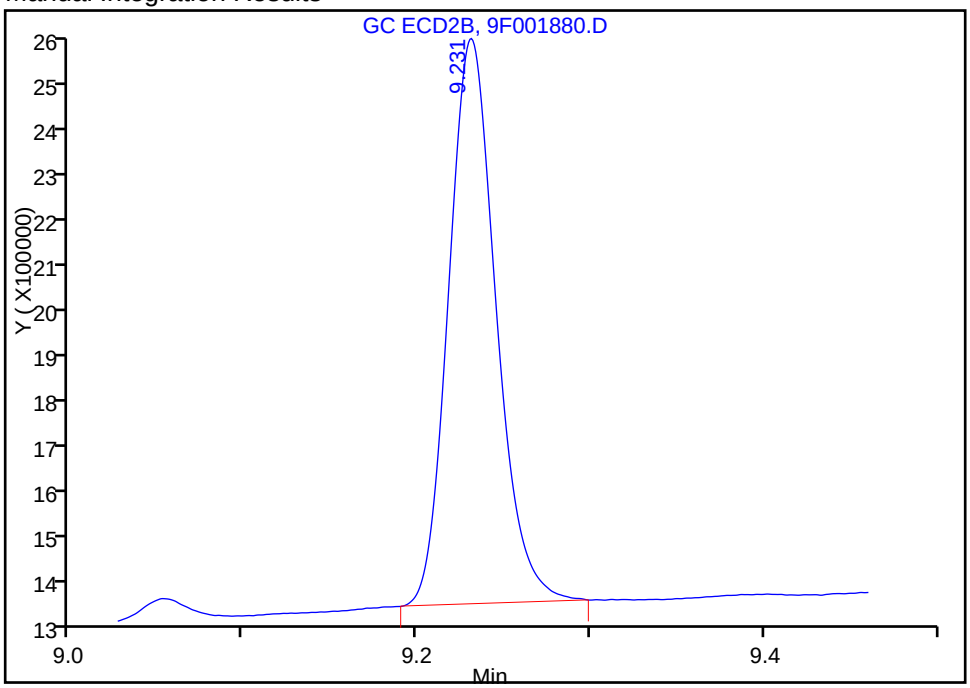
Processing Integration Results

Not Detected
Expected RT: 9.22



Manual Integration Results

RT: 9.23
Area: 2097610
Amount: 15.499642
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 12:16:20
Audit Action: Manually Integrated Audit Reason: Peak not integrated

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001881.D
Lims ID: IC PCB 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 12-May-2016 10:32:48 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info:
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub1

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:21:03 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 10:50:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.623	1.624	-0.001	3410733	20.0	20.0	M
2	1.407	1.410	-0.003	3337301	20.0	20.0	M
						RPD = 0.00	
$ 2 Tetrachloro-m-xylene							M
1	2.593	2.593	0.000	7370188	50.0	52.1	
2	2.086	2.087	-0.001	6750713	50.0	53.0	M
						RPD = 1.77	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 PCB-1016							M
1	3.215	3.216	-0.001	1595369	500.0	514.3	
1	3.728	3.728	0.000	3309803	500.0	519.4	M
1	4.024	4.025	-0.001	1526780	500.0	538.9	M
1	4.294	4.296	-0.002	5522433	500.0	496.6	M
1	4.466	4.467	-0.001	2628581	500.0	516.0	M
1	4.727	4.727	0.000	1436666	500.0	512.0	M
1	5.056	5.057	-0.001	1966187	500.0	483.5	M
1	5.208	5.210	-0.002	2194391	500.0	494.4	M
		Average of Peak Amounts =				509.4	
2	2.476	2.477	-0.001	1488247	500.0	525.5	M
2	2.865	2.866	-0.001	2768680	500.0	519.3	M
2	3.086	3.087	-0.001	1740535	500.0	496.8	M
2	3.386	3.387	-0.001	5797158	500.0	534.2	M
2	3.539	3.541	-0.002	2894717	500.0	595.0	M
2	3.608	3.611	-0.003	1910107	500.0	638.3	M
2	4.018	4.020	-0.002	2617412	500.0	555.6	M
2	4.116	4.118	-0.002	1344834	500.0	557.9	M
		Average of Peak Amounts =				552.8	
						RPD = 8.18	
8 PCB-1260							M
1	6.581	6.582	-0.001	1951506	500.0	485.0	M
1	6.839	6.840	-0.001	4056846	500.0	491.9	M
1	7.211	7.212	-0.001	4657312	500.0	471.8	M
1	8.108	8.108	0.000	3550456	500.0	484.5	M
1	8.542	8.541	0.001	3524230	500.0	488.9	M
1	8.852	8.849	0.003	6963669	500.0	480.8	M
1	9.221	9.216	0.005	5102647	500.0	480.1	M
1	9.733	9.724	0.009	2087900	500.0	480.2	
		Average of Peak Amounts =				482.9	
2	5.468	5.469	-0.001	3716605	500.0	515.5	M
2	6.204	6.206	-0.002	6548906	500.0	516.8	M
2	6.380	6.382	-0.002	4156593	500.0	535.0	M
2	6.752	6.754	-0.002	3975975	500.0	506.8	M
2	7.283	7.285	-0.002	10000594	500.0	524.2	
2	7.822	7.824	-0.002	4729185	500.0	527.2	
2	8.012	8.013	-0.001	3326716	500.0	537.2	
2	8.754	8.752	0.002	2748973	500.0	513.4	M
		Average of Peak Amounts =				522.0	
						RPD = 7.78	
$ 11 DCB Decachlorobiphenyl							M
1	10.184	10.172	0.012	6039647	50.0	49.6	
2	9.222	9.217	0.005	7326448	50.0	52.7	M
						RPD = 6.05	
S 12 Polychlorinated biphenyls, Total							
1						992.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

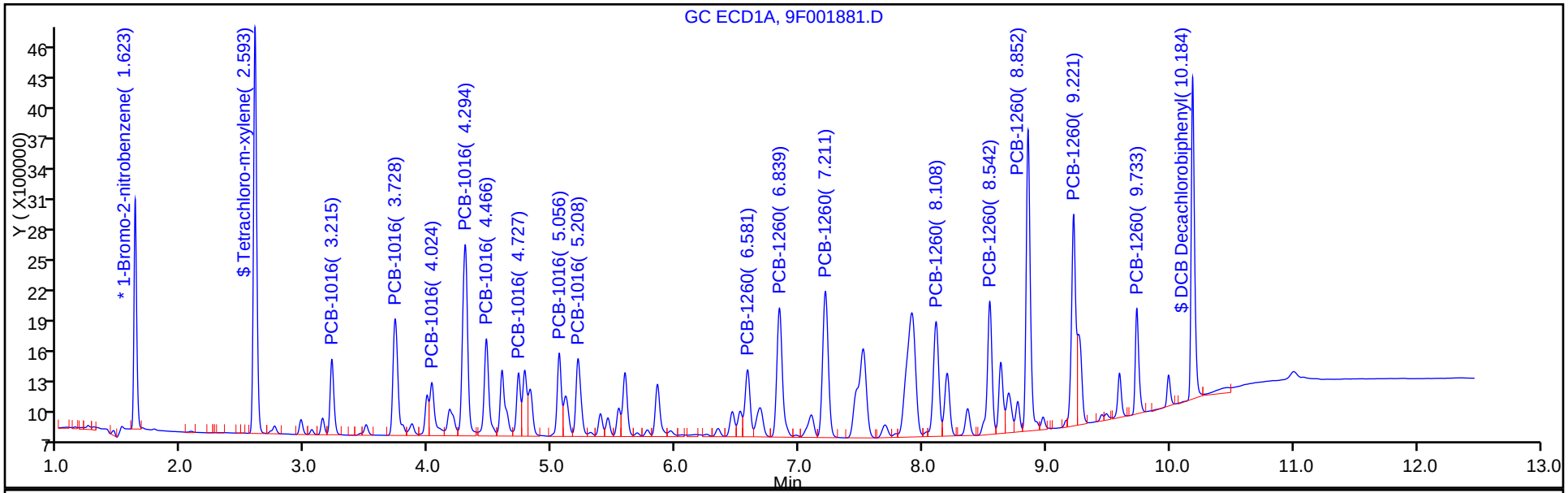
SG1660L2_00022	Amount Added: 1.00	Units: mL	
SGPCBISTD_00006	Amount Added: 20.00	Units: uL	Run Reagent

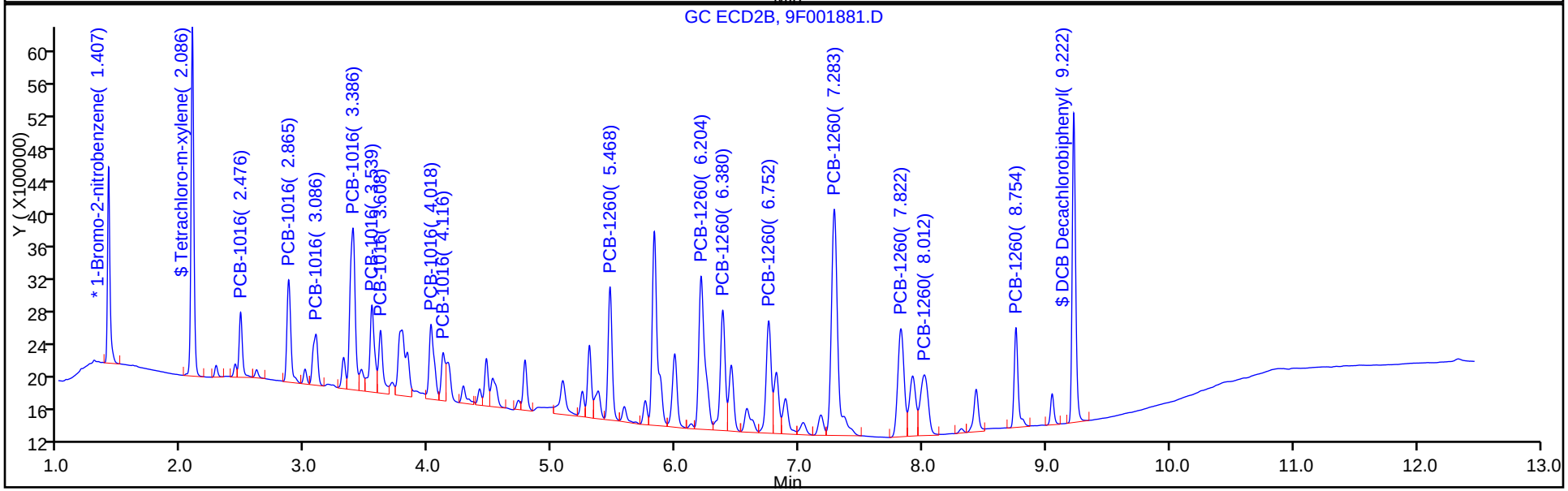
Report Date: 12-May-2016 15:21:08 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001881.D

Injection Date:	12-May-2016 10:32:48	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	IC PCB 2			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		





TestAmerica Edison

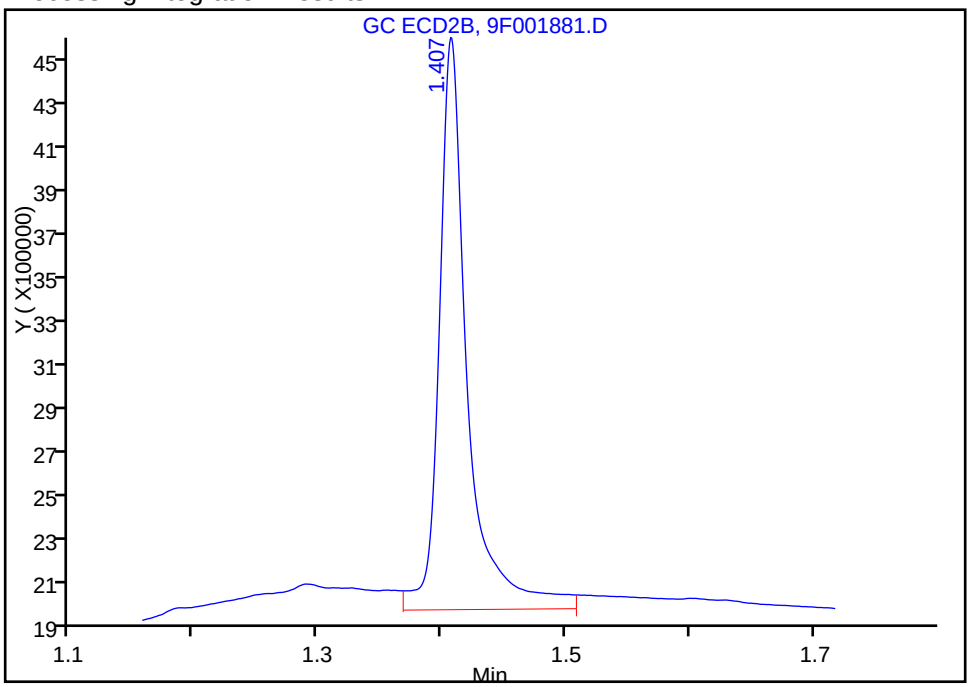
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001881.D				
Injection Date:	12-May-2016 10:32:48	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 2				
Client ID:					
Operator ID:		ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

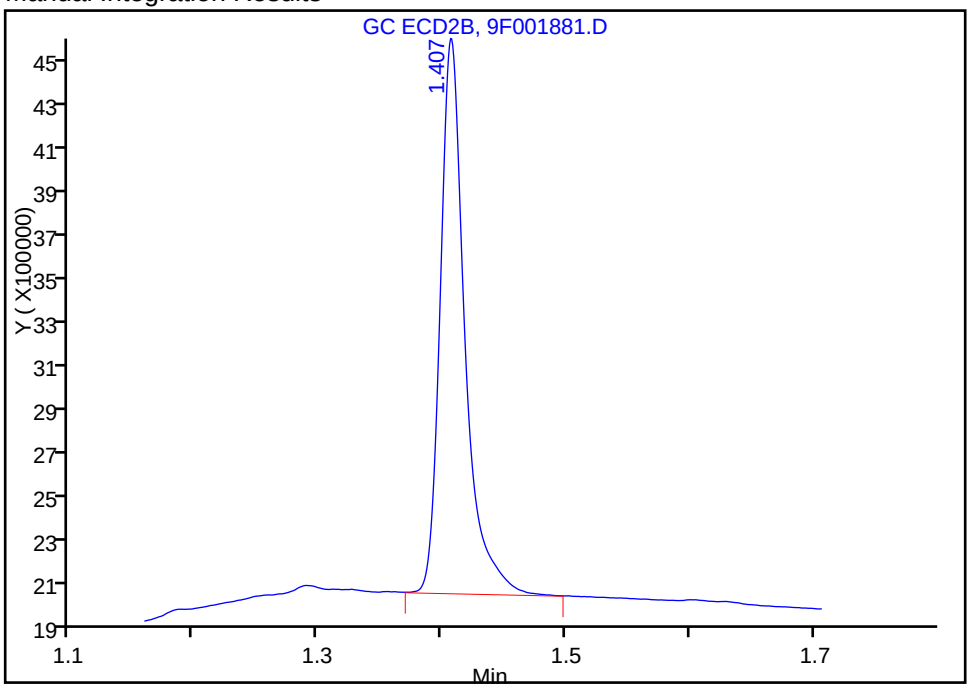
Processing Integration Results

RT: 1.41
Area: 3925152
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.41
Area: 3337301
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 11:27:35
Audit Action: Manually Integrated Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

TestAmerica Edison

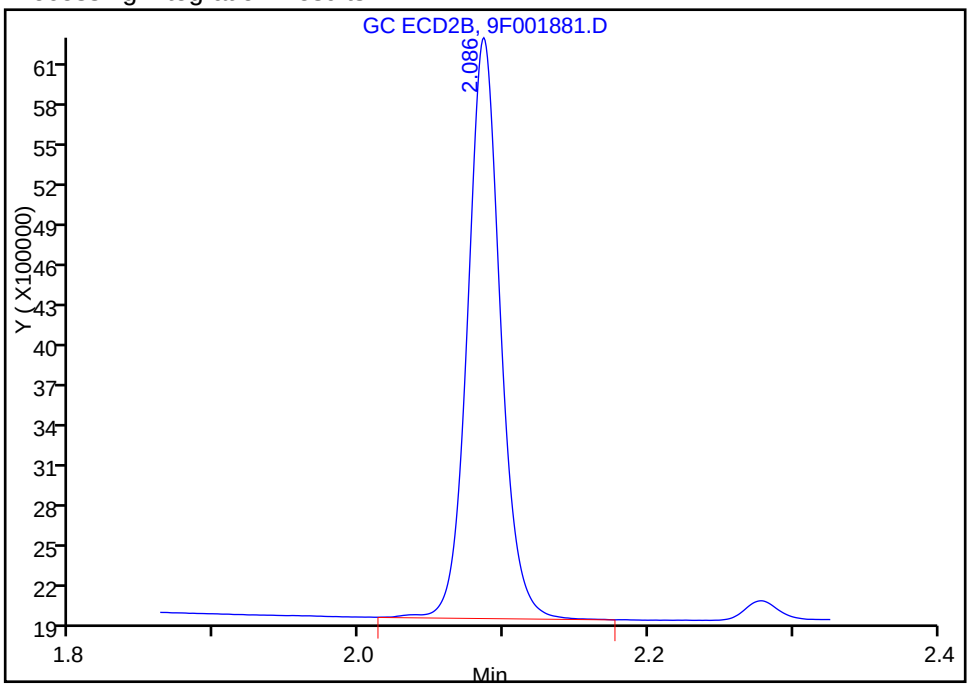
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001881.D				
Injection Date:	12-May-2016 10:32:48	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 2				
Client ID:					
Operator ID:		ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

$ 2 Tetrachloro-m-xylene, CAS: 877-09-8

Signal: 2

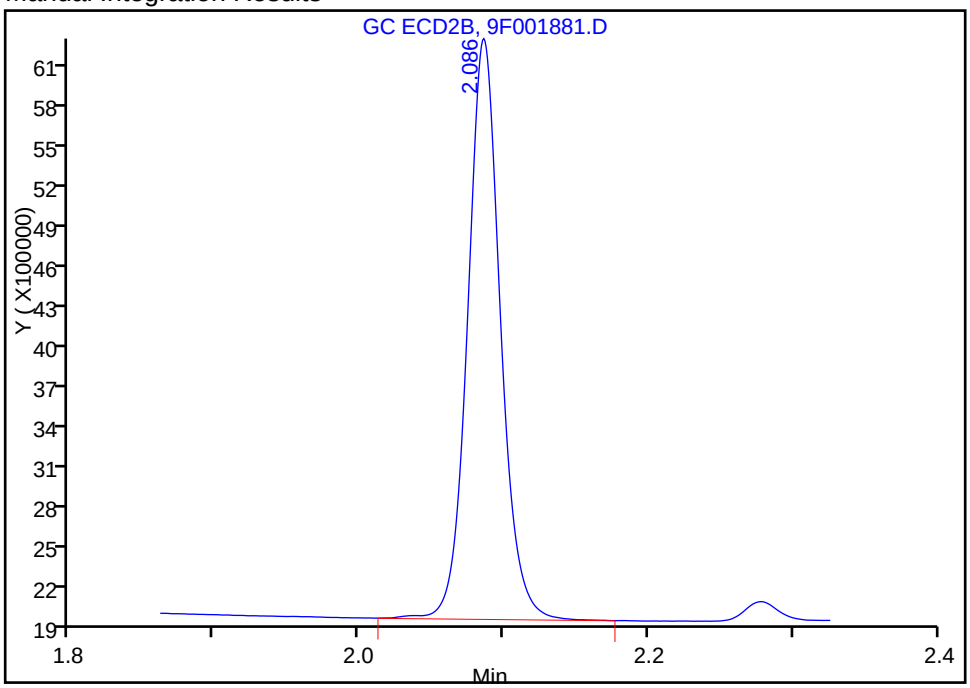
Processing Integration Results

RT: 2.09
Area: 6809468
Amount: 52.680140
Amount Units: ug/l



Manual Integration Results

RT: 2.09
Area: 6750713
Amount: 53.021942
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 11:27:35

Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

Report Date: 12-May-2016 15:21:09 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001881.D

Injection Date: 12-May-2016 10:32:48 Instrument ID: CPESTGC9

Lims ID: IC PCB 2

Client ID:

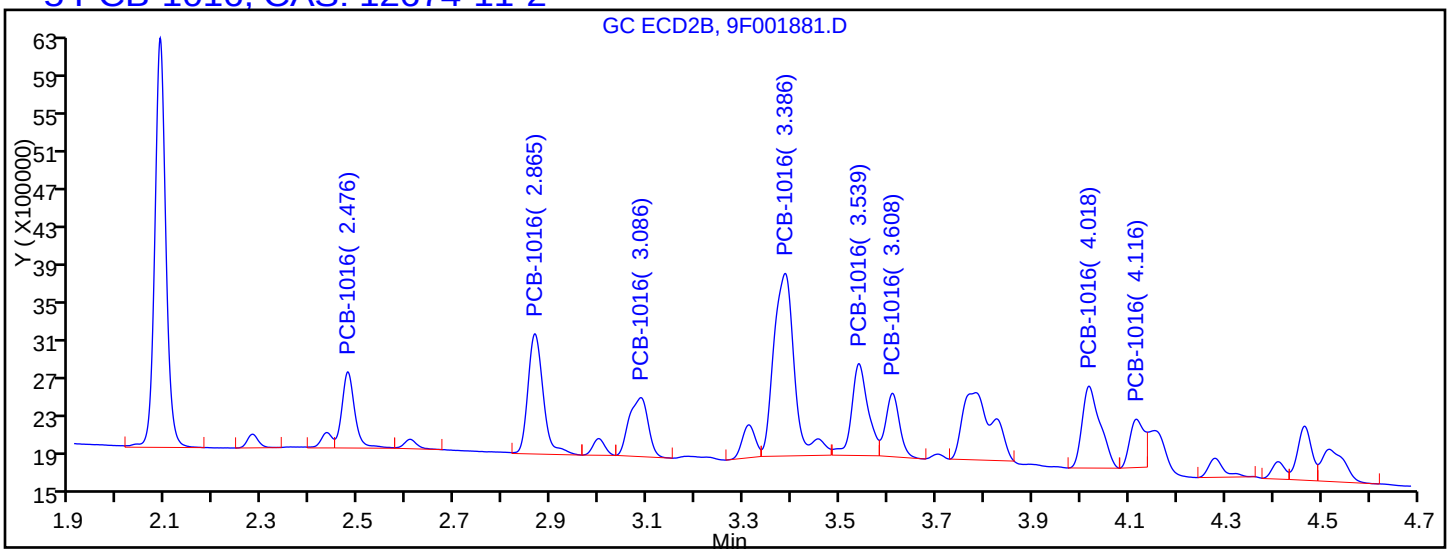
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

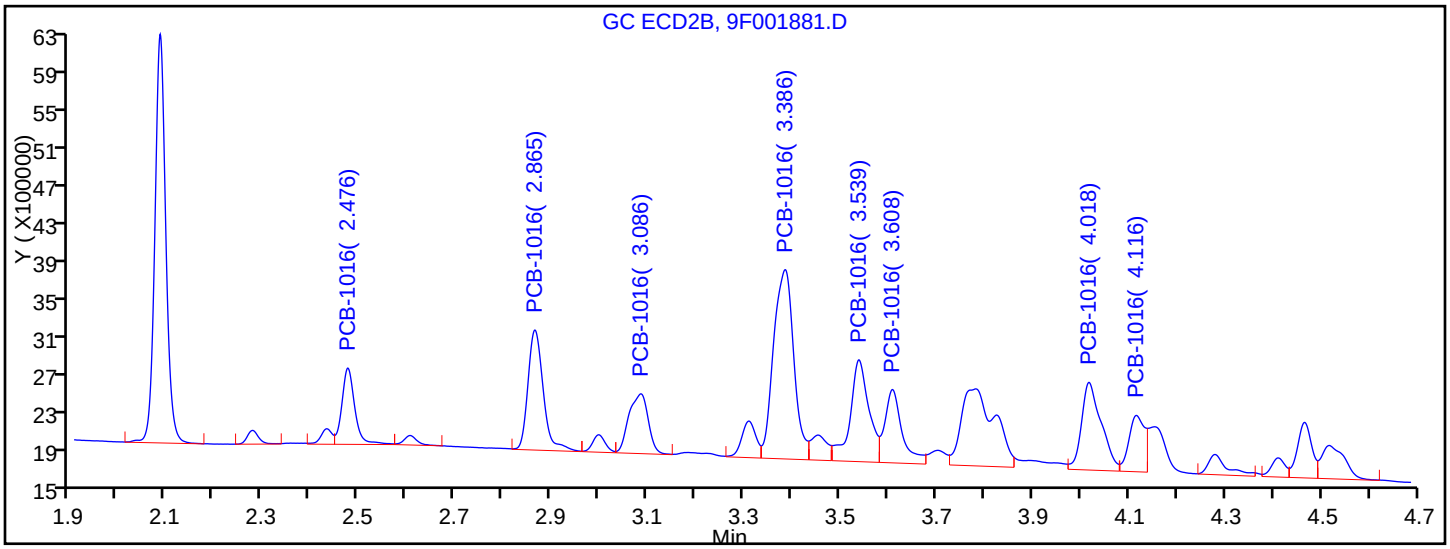
Column: Detector GC ECD2B

5 PCB-1016, CAS: 12674-11-2



Processing Integration Results

RT = 2.476	Response = 1478074	M
RT = 2.865	Response = 2769541	M
RT = 3.086	Response = 1687071	M
RT = 3.386	Response = 5732828	M
RT = 3.539	Response = 2288689	M
RT = 3.608	Response = 1329548	M
RT = 4.018	Response = 2221453	M
RT = 4.116	Response = 1063737	M



Manual Integration Results

RT = 2.476	Response = 1488247	M
RT = 2.865	Response = 2768680	M
RT = 3.086	Response = 1740535	M
RT = 3.386	Response = 5797158	M
RT = 3.539	Response = 2894717	M
RT = 3.608	Response = 1910107	M

Report Date: 12-May-2016 15:21:09 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001881.D

Injection Date: 12-May-2016 10:32:48 Instrument ID: CPESTGC9

Lims ID: IC PCB 2

Client ID:

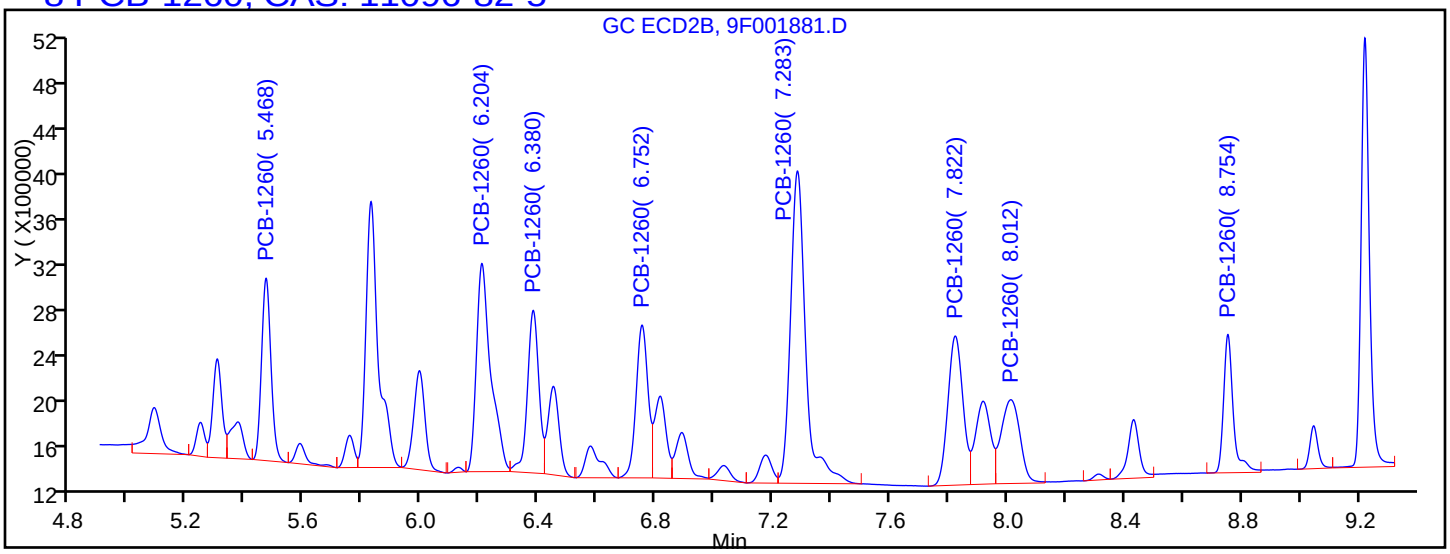
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

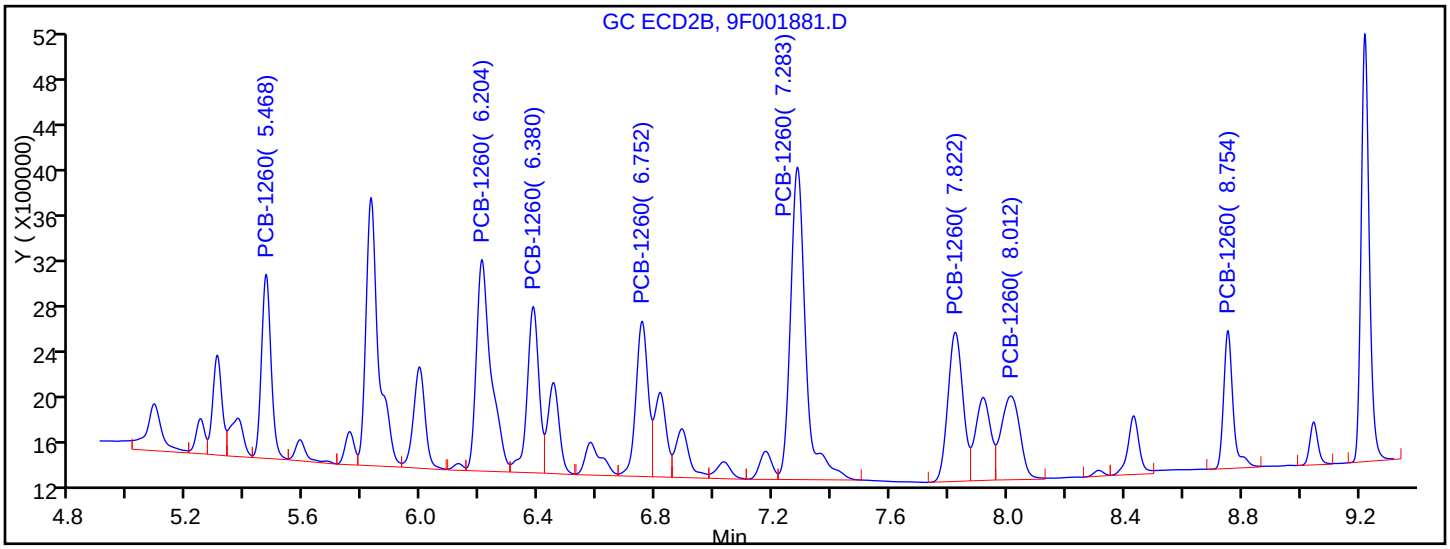
Column: Detector GC ECD2B

8 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 5.468	Response = 3627354	M
RT = 6.204	Response = 6276040	M
RT = 6.380	Response = 3922851	M
RT = 6.752	Response = 3840485	M
RT = 7.283	Response = 10000594	
RT = 7.822	Response = 4729185	
RT = 8.012	Response = 3326716	
RT = 8.754	Response = 2818081	M



Manual Integration Results

RT = 5.468	Response = 3716605	M
RT = 6.204	Response = 6548906	M
RT = 6.380	Response = 4156593	M
RT = 6.752	Response = 3975975	M
RT = 7.283	Response = 10000594	
RT = 7.822	Response = 4729185	

TestAmerica Edison

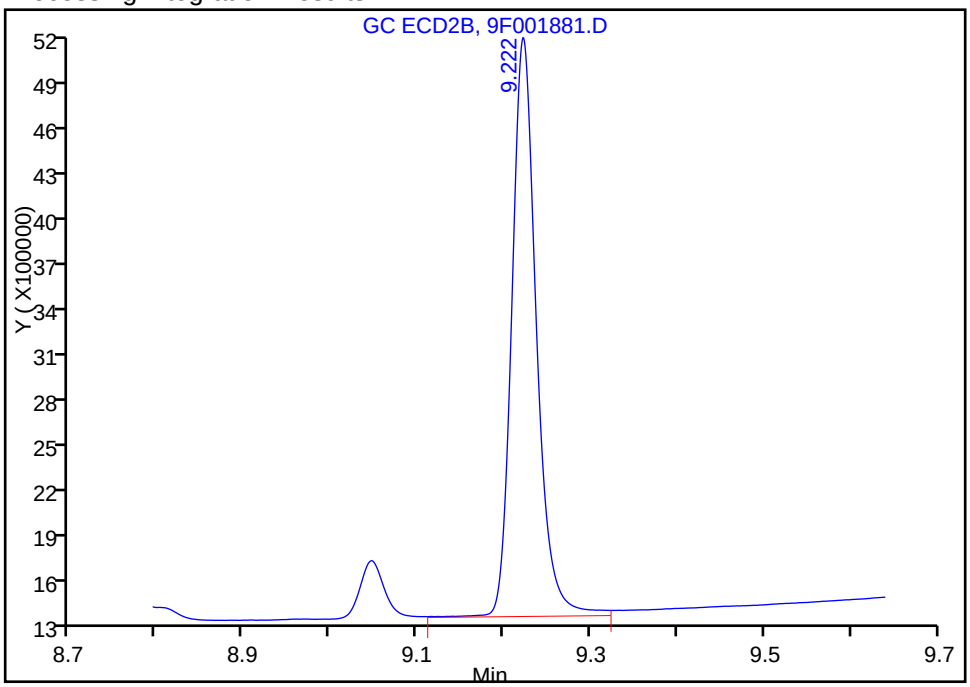
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001881.D				
Injection Date:	12-May-2016 10:32:48	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 2				
Client ID:					
Operator ID:		ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

$ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 2

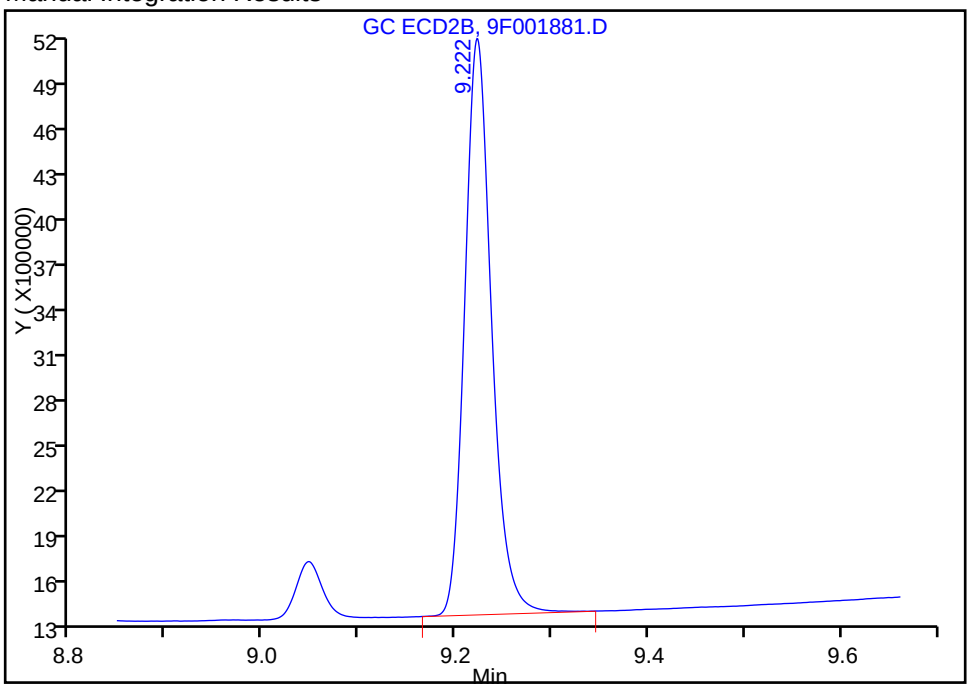
Processing Integration Results

RT: 9.22
Area: 7522992
Amount: 49.785565
Amount Units: ug/l



Manual Integration Results

RT: 9.22
Area: 7326448
Amount: 52.677697
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 11:27:35
Audit Action: Manually Integrated Audit Reason: Peak not integrated

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001882.D
Lims ID: IC PCB 3
Client ID:
Sample Type: ICRT Calib Level: 3
Inject. Date: 12-May-2016 10:50:51 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info:
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub1

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:21:13 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 11:17:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.623	1.623	0.000	3376020	20.0	20.0	M
2	1.408	1.408	0.000	3568353	20.0	20.0	
						RPD = 0.00	
$ 2 Tetrachloro-m-xylene							M
1	2.593	2.593	0.000	13403637	100.0	95.7	M
2	2.087	2.087	0.000	11968377	100.0	87.9	M
						RPD = 8.49	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 PCB-1016							M
1	3.216	3.216	0.000	2924115	1000.0	952.3	
1	3.728	3.728	0.000	6004627	1000.0	952.1	M
1	4.025	4.025	0.000	2519160	1000.0	898.4	M
1	4.296	4.296	0.000	10108992	1000.0	918.4	M
1	4.467	4.467	0.000	4712190	1000.0	934.6	M
1	4.727	4.727	0.000	2537118	1000.0	913.6	M
1	5.057	5.057	0.000	3661187	1000.0	909.5	M
1	5.210	5.210	0.000	4167289	1000.0	948.5	M
		Average of Peak Amounts =				928.4	
2	2.477	2.477	0.000	2665895	1000.0	880.3	M
2	2.866	2.866	0.000	4958047	1000.0	869.7	
2	3.087	3.087	0.000	3370555	1000.0	899.7	M
2	3.387	3.387	0.000	10097178	1000.0	870.1	M
2	3.541	3.541	0.000	4469017	1000.0	859.1	M
2	3.611	3.611	0.000	2715679	1000.0	848.8	M
2	4.020	4.020	0.000	4410039	1000.0	875.6	M
2	4.118	4.118	0.000	2533958	1000.0	983.2	M
		Average of Peak Amounts =				885.8	
						RPD = 4.70	
8 PCB-1260							M
1	6.582	6.582	0.000	3718492	1000.0	933.6	M
1	6.840	6.840	0.000	7549602	1000.0	924.9	M
1	7.212	7.212	0.000	8628437	1000.0	883.0	M
1	8.108	8.108	0.000	6628004	1000.0	913.9	
1	8.541	8.541	0.000	6563297	1000.0	919.8	
1	8.849	8.849	0.000	12889307	1000.0	899.1	
1	9.216	9.216	0.000	9478610	1000.0	901.0	M
1	9.724	9.724	0.000	3951876	1000.0	918.2	
		Average of Peak Amounts =				911.7	
2	5.469	5.469	0.000	6979606	1000.0	905.4	M
2	6.206	6.206	0.000	13004344	1000.0	959.8	M
2	6.382	6.382	0.000	8044868	1000.0	968.4	M
2	6.754	6.754	0.000	7587017	1000.0	904.5	M
2	7.285	7.285	0.000	18435917	1000.0	903.7	M
2	7.824	7.824	0.000	8825536	1000.0	920.1	M
2	8.013	8.013	0.000	6108355	1000.0	922.5	M
2	8.752	8.752	0.000	5247204	1000.0	916.5	
		Average of Peak Amounts =				925.1	
						RPD = 1.46	
$ 11 DCB Decachlorobiphenyl							M
1	10.172	10.172	0.000	10643250	100.0	88.3	M
2	9.217	9.217	0.000	13096920	100.0	88.1	
						RPD = 0.24	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660L3_00028	Amount Added:	1.00	Units: mL	
SGPCBISTD_00006	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:21:18 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001882.D

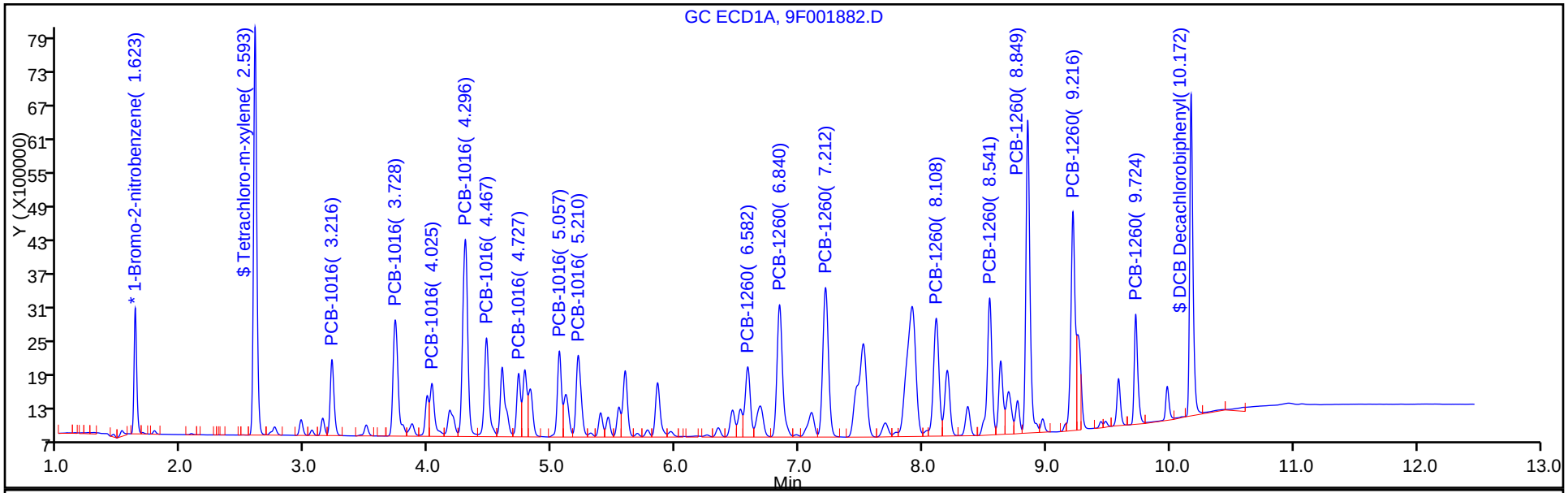
Injection Date: 12-May-2016 10:50:51 Instrument ID: CPESTGC9 Operator ID:

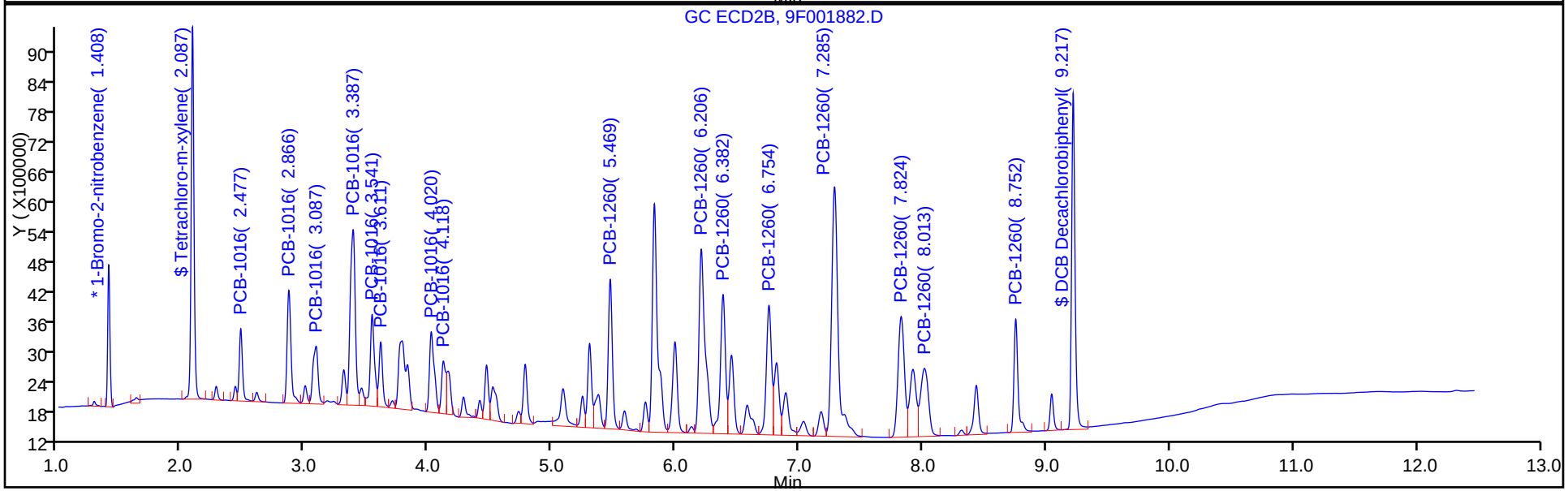
Lims ID: IC PCB 3 Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD





Manual Integration/User Assign Peak Report

TestAmerica Edison

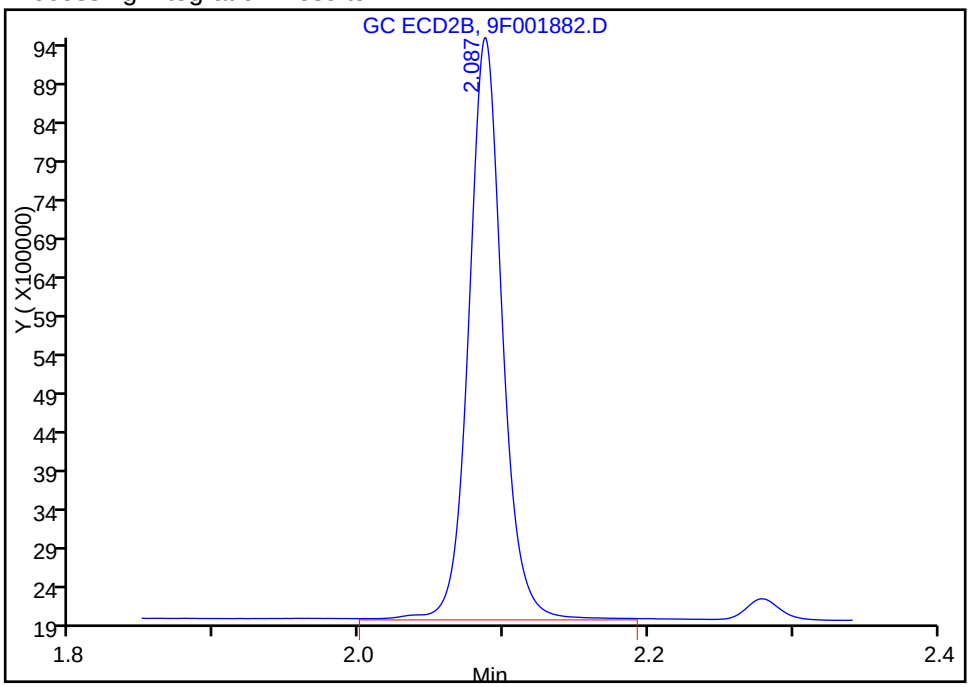
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001882.D				
Injection Date:	12-May-2016 10:50:51	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 3				
Client ID:					
Operator ID:		ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

$ 2 Tetrachloro-m-xylene, CAS: 877-09-8

Signal: 2

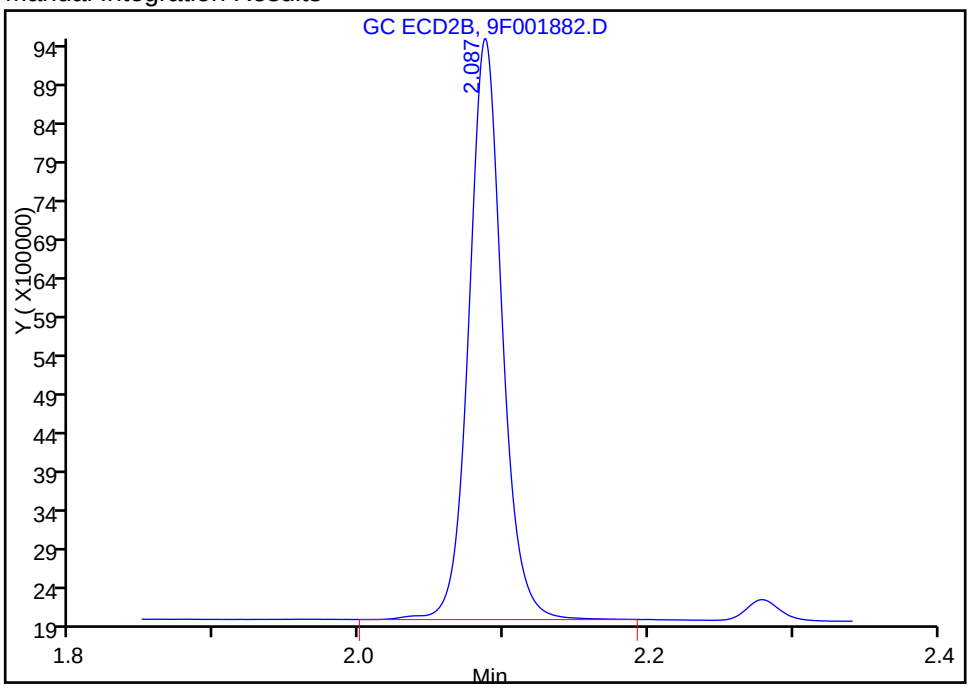
Processing Integration Results

RT: 2.09
Area: 12141563
Amount: 92.725984
Amount Units: ug/l



Manual Integration Results

RT: 2.09
Area: 11968377
Amount: 87.916181
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 11:28:53

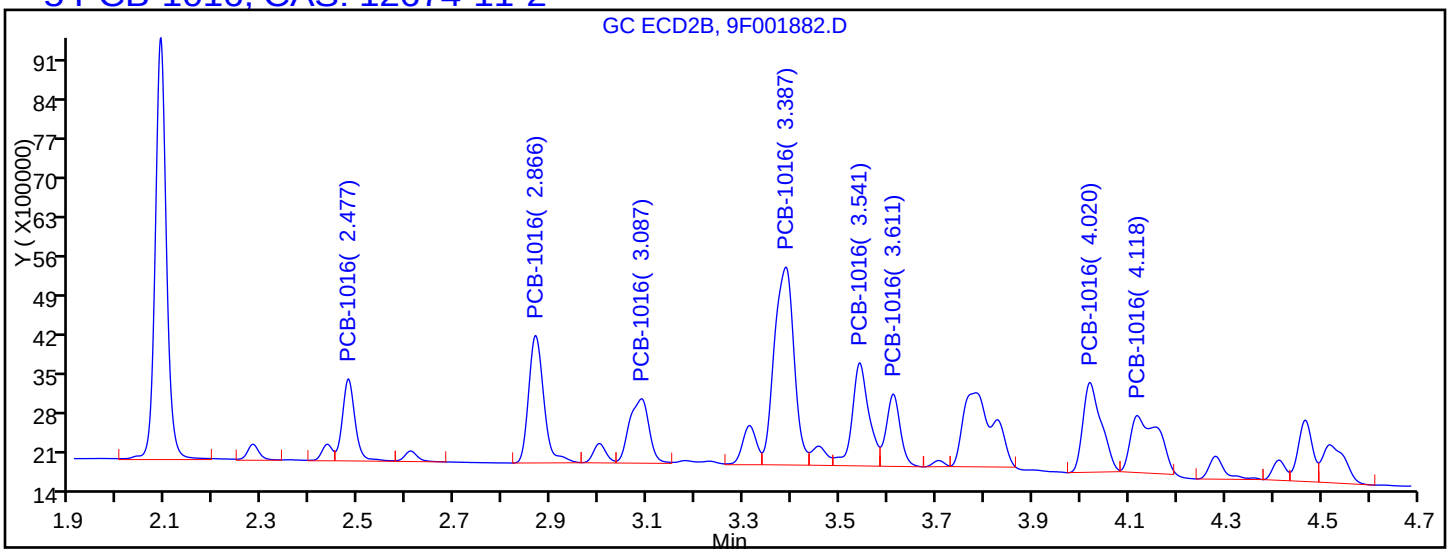
Audit Action: Assigned New Baseline Audit Reason: Sample matrix interference

Report Date: 12-May-2016 15:21:18 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

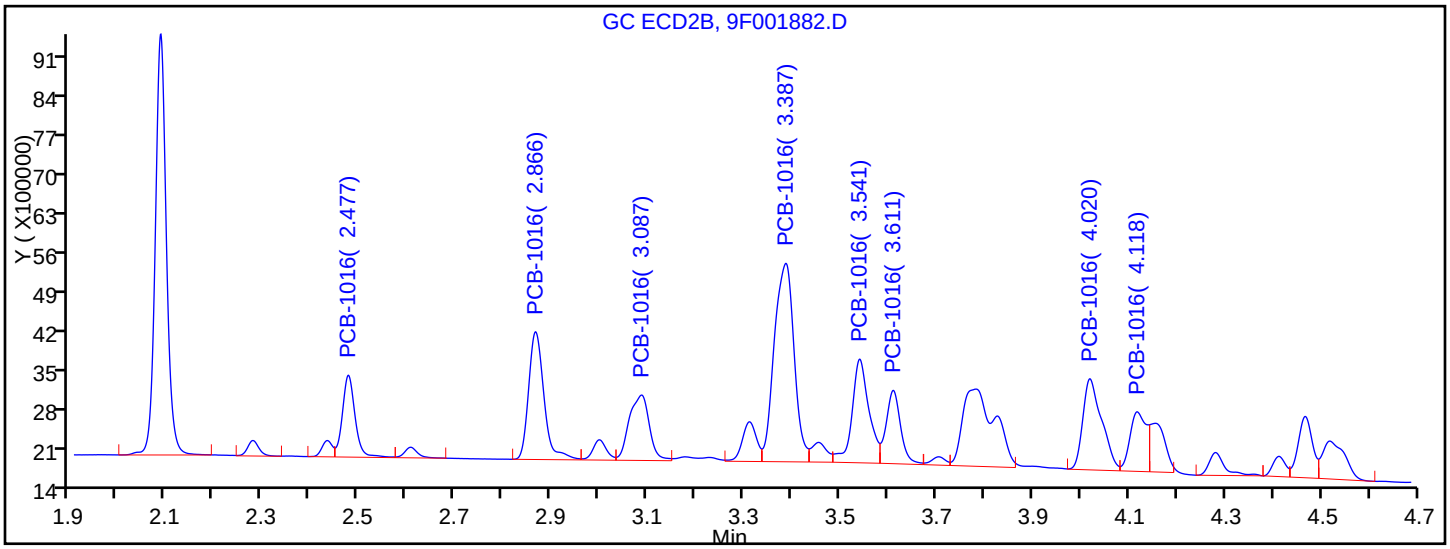
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001882.D
Injection Date: 12-May-2016 10:50:51 Instrument ID: CPESTGC9
Lims ID: IC PCB 3
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD2B

5 PCB-1016, CAS: 12674-11-2



Processing Integration Results

RT = 2.477	Response = 2669429	M
RT = 2.866	Response = 4958047	
RT = 3.087	Response = 3246060	M
RT = 3.387	Response = 10038031	M
RT = 3.541	Response = 4435030	M
RT = 3.611	Response = 2602902	M
RT = 4.020	Response = 4226901	M
RT = 4.118	Response = 4085007	M



Manual Integration Results

RT = 2.477	Response = 2665895	M
RT = 2.866	Response = 4958047	
RT = 3.087	Response = 3370555	M
RT = 3.387	Response = 10097178	M
RT = 3.541	Response = 4469017	M
RT = 3.611	Response = 2715679	M

Report Date: 12-May-2016 15:21:18 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001882.D

Injection Date: 12-May-2016 10:50:51 Instrument ID: CPESTGC9

Lims ID: IC PCB 3

Client ID:

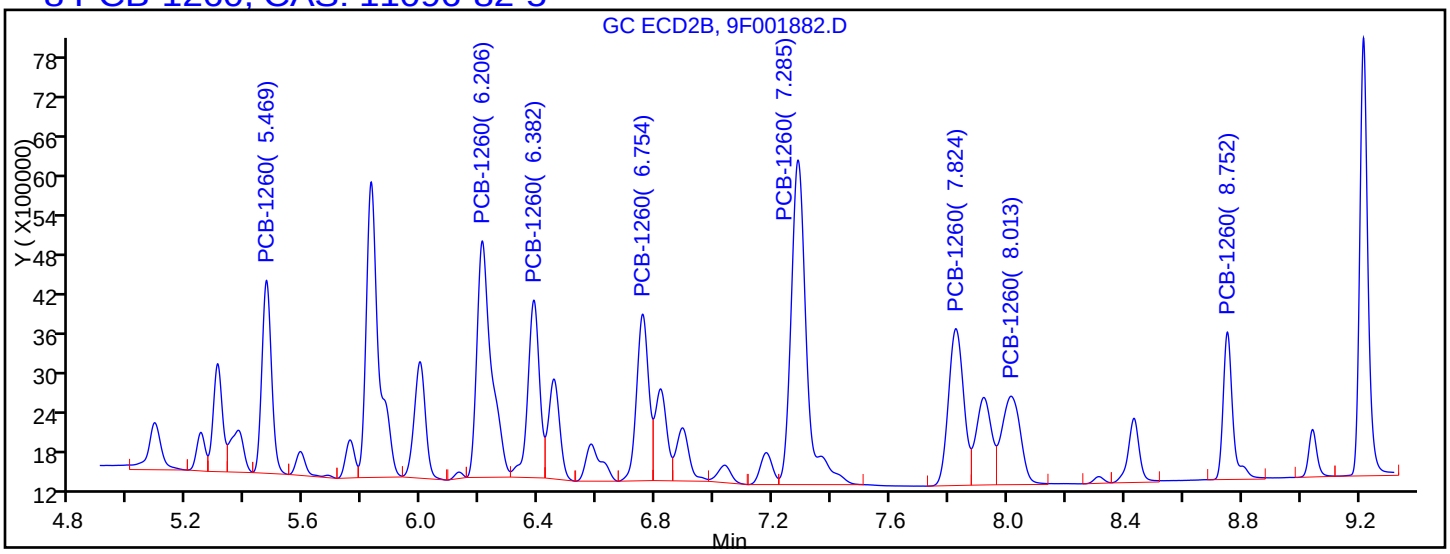
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

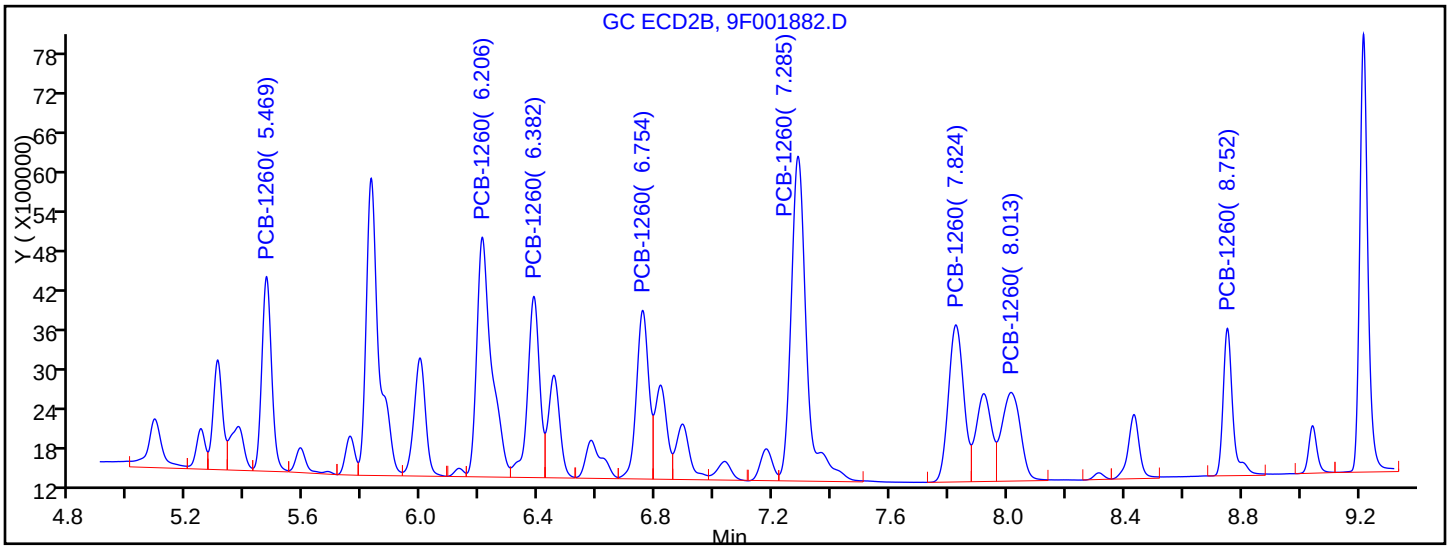
Column: Detector GC ECD2B

8 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 5.469	Response = 6799340	M
RT = 6.206	Response = 12524373	M
RT = 6.382	Response = 7638170	M
RT = 6.754	Response = 7389755	M
RT = 7.285	Response = 18305311	M
RT = 7.824	Response = 8802541	M
RT = 8.013	Response = 6093358	M
RT = 8.752	Response = 5247204	



Manual Integration Results

RT = 5.469	Response = 6979606	M
RT = 6.206	Response = 13004344	M
RT = 6.382	Response = 8044868	M
RT = 6.754	Response = 7587017	M
RT = 7.285	Response = 18435917	M
RT = 7.824	Response = 8825536	M

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001883.D
Lims ID: IC PCB 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 12-May-2016 11:08:53 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info:
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub1

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:21:22 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 11:31:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.624	1.623	0.001	3294505	20.0	20.0	M
2	1.409	1.408	0.001	3368276	20.0	20.0	M
						RPD = 0.00	
$ 2 Tetrachloro-m-xylene							M
1	2.594	2.593	0.001	19604800	150.0	143.5	
2	2.088	2.087	0.001	18362842	150.0	142.9	M
						RPD = 0.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 PCB-1016							M
1	3.216	3.216	0.000	4369736	1500.0	1458.3	
1	3.729	3.728	0.001	8959256	1500.0	1455.7	M
1	4.026	4.025	0.001	3743966	1500.0	1368.2	M
1	4.296	4.296	0.000	15248808	1500.0	1419.6	M
1	4.467	4.467	0.000	7047286	1500.0	1432.3	M
1	4.728	4.727	0.001	3767776	1500.0	1390.3	M
1	5.058	5.057	0.001	5454281	1500.0	1388.5	M
1	5.210	5.210	0.000	6284163	1500.0	1465.8	M
		Average of Peak Amounts =				1422.3	
2	2.478	2.477	0.001	4332530	1500.0	1515.7	
2	2.867	2.866	0.001	8047032	1500.0	1495.3	M
2	3.088	3.087	0.001	5294700	1500.0	1497.3	M
2	3.388	3.387	0.001	15267330	1500.0	1393.8	M
2	3.541	3.541	0.000	6893182	1500.0	1403.9	M
2	3.611	3.611	0.000	4182972	1500.0	1385.1	M
2	4.020	4.020	0.000	6831748	1500.0	1437.0	M
2	4.119	4.118	0.001	3654893	1500.0	1502.3	M
		Average of Peak Amounts =				1453.8	
						RPD = 2.19	
8 PCB-1260							M
1	6.582	6.582	0.000	5566734	1500.0	1432.2	M
1	6.840	6.840	0.000	11169719	1500.0	1402.2	M
1	7.212	7.212	0.000	12780758	1500.0	1340.3	M
1	8.108	8.108	0.000	9904597	1500.0	1399.4	
1	8.542	8.541	0.001	9897151	1500.0	1421.3	
1	8.850	8.849	0.001	19406860	1500.0	1387.2	
1	9.217	9.216	0.001	14338368	1500.0	1396.7	M
1	9.726	9.724	0.002	5922048	1500.0	1410.0	
		Average of Peak Amounts =				1398.7	
2	5.469	5.469	0.000	10236516	1500.0	1406.8	M
2	6.206	6.206	0.000	18837770	1500.0	1472.9	M
2	6.381	6.382	-0.001	11733006	1500.0	1496.3	M
2	6.754	6.754	0.000	11049030	1500.0	1395.5	M
2	7.285	7.285	0.000	27865186	1500.0	1447.1	M
2	7.825	7.824	0.001	12905522	1500.0	1425.4	
2	8.012	8.013	-0.001	9100459	1500.0	1456.1	
2	8.753	8.752	0.001	7933293	1500.0	1468.0	
		Average of Peak Amounts =				1446.0	
						RPD = 3.33	
$ 11 DCB Decachlorobiphenyl							M
1	10.175	10.172	0.003	15101165	150.0	128.4	M
2	9.219	9.217	0.002	18159335	150.0	129.4	M
						RPD = 0.78	
S 12 Polychlorinated biphenyls, Total							
1						2821.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660L4_00021	Amount Added: 1.00	Units: mL	
SGPCBISTD_00006	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:21:29 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001883.D

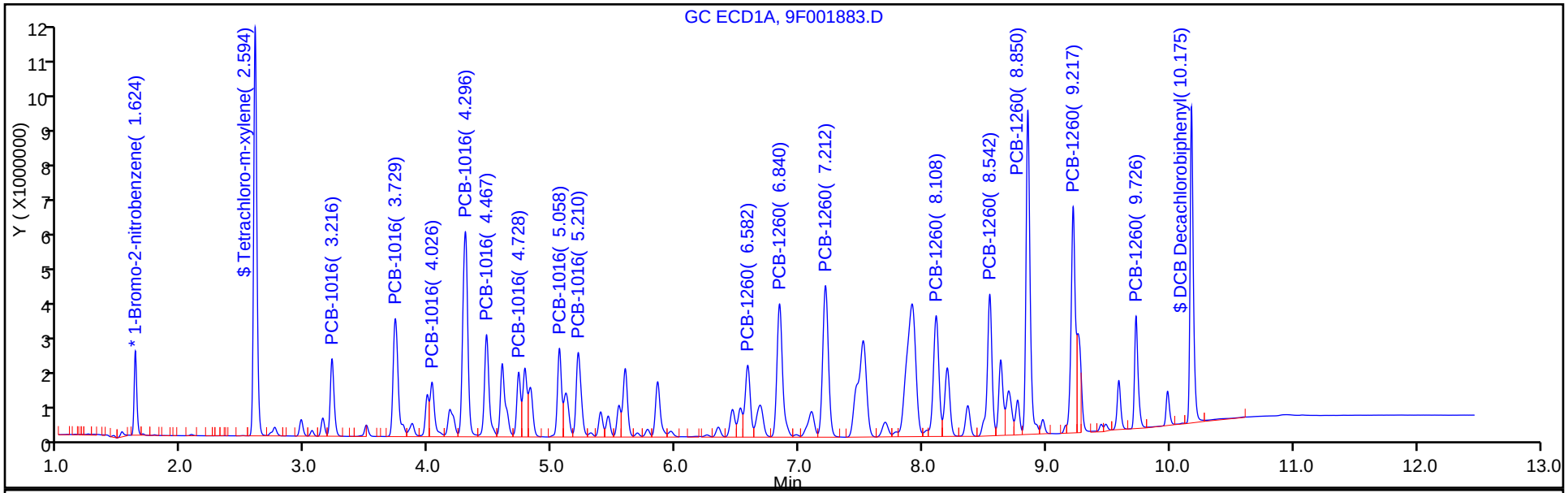
Injection Date: 12-May-2016 11:08:53 Instrument ID: CPESTGC9 Operator ID:

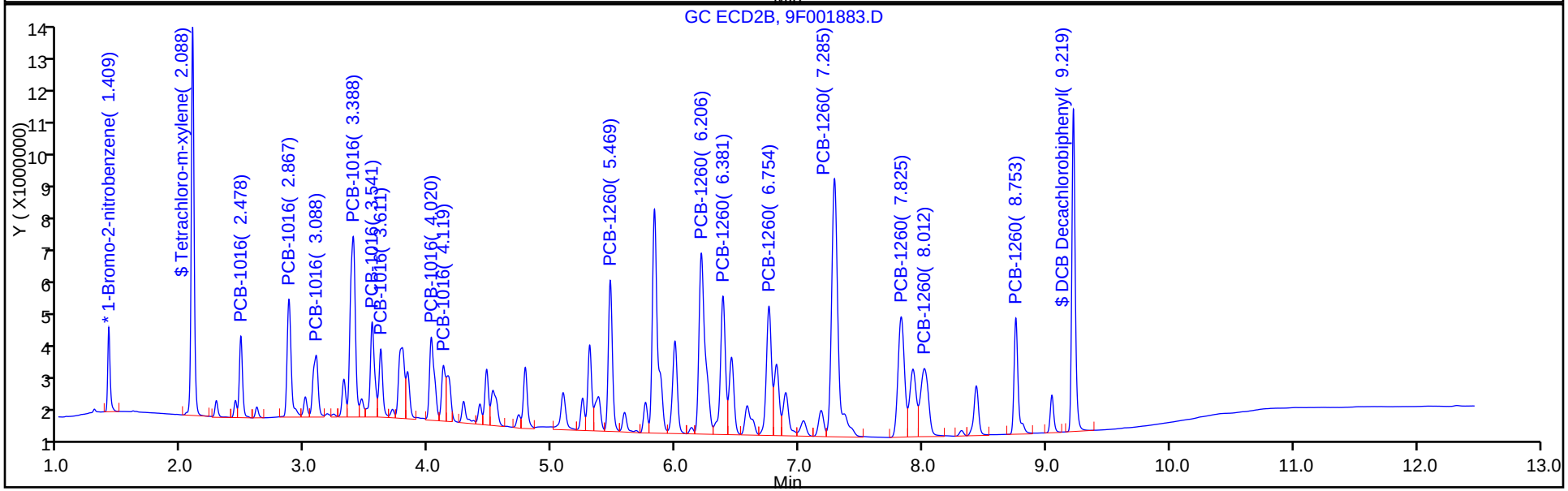
Lims ID: IC PCB 4 Worklist Smp#: 5

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 5

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD





Manual Integration/User Assign Peak Report

TestAmerica Edison

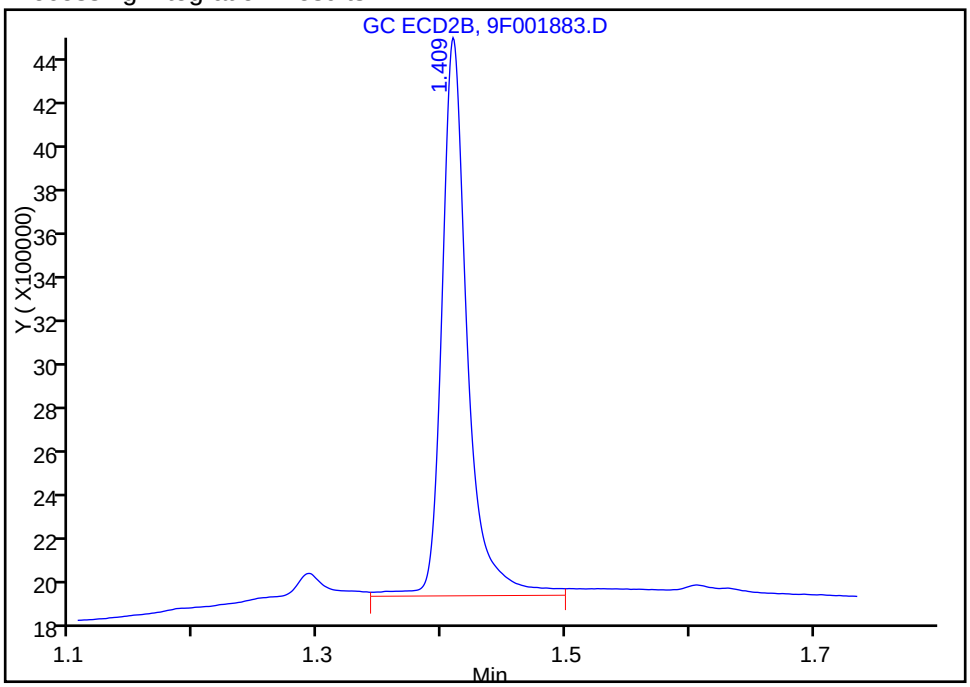
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001883.D				
Injection Date:	12-May-2016 11:08:53	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 4				
Client ID:					
Operator ID:		ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

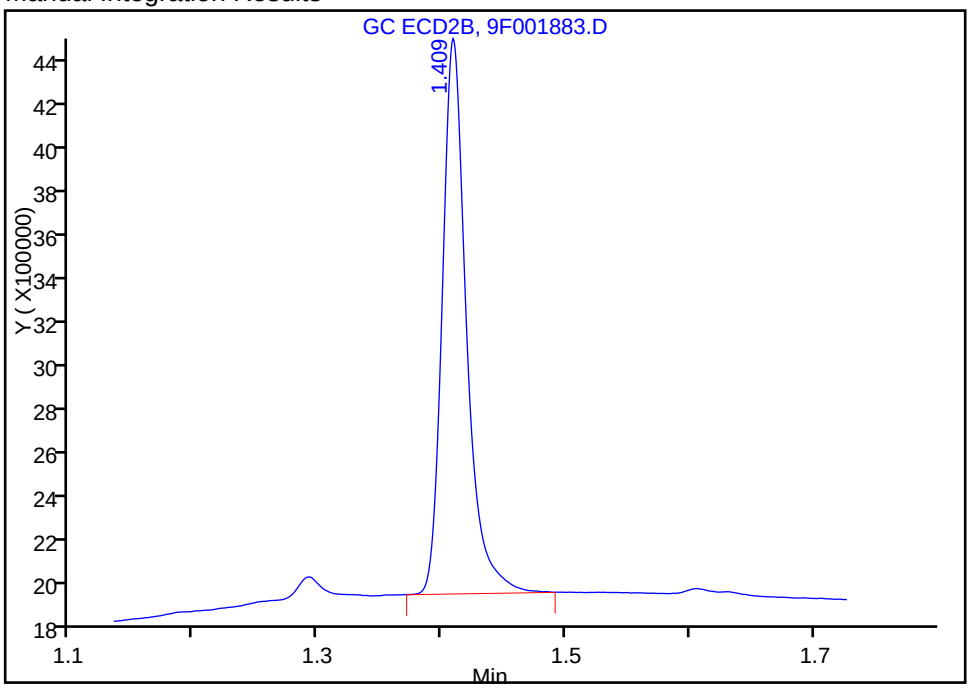
Processing Integration Results

RT: 1.41
Area: 3604224
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.41
Area: 3368276
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 11:31:02

Audit Action: Manually Integrated Audit Reason: Peak not integrated

TestAmerica Edison

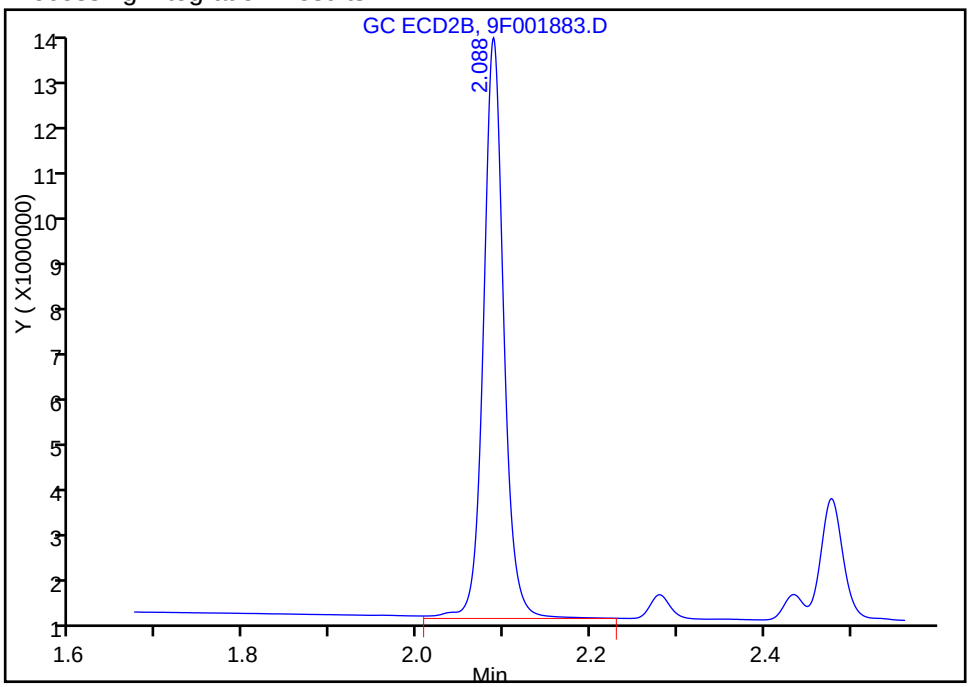
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001883.D				
Injection Date:	12-May-2016 11:08:53	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 4				
Client ID:					
Operator ID:		ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

$ 2 Tetrachloro-m-xylene, CAS: 877-09-8

Signal: 2

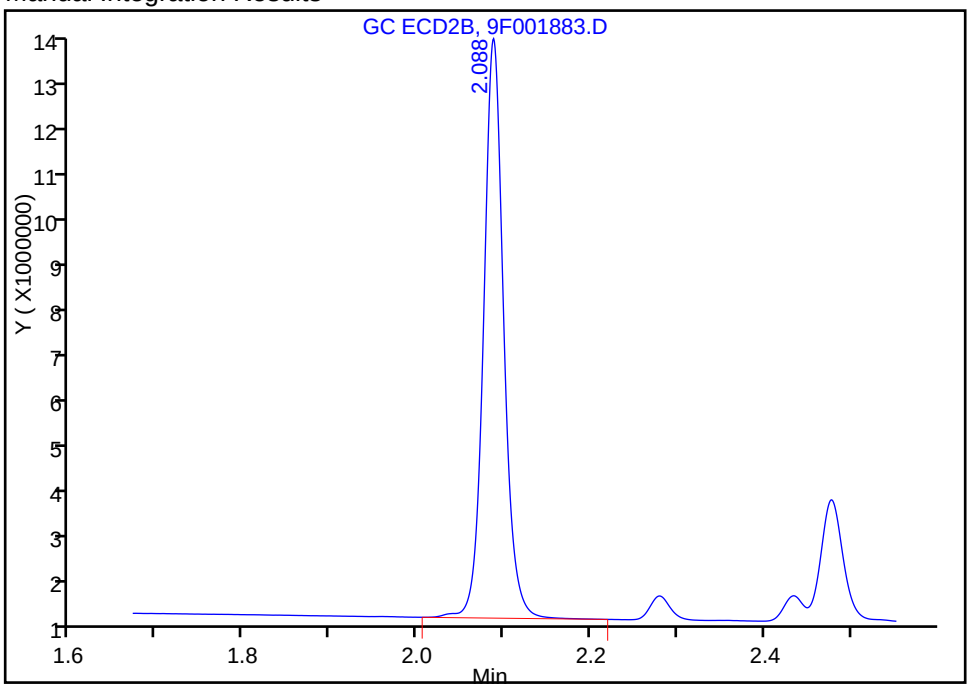
Processing Integration Results

RT: 2.09
Area: 18703645
Amount: 145.7660
Amount Units: ug/l



Manual Integration Results

RT: 2.09
Area: 18362842
Amount: 142.9004
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 11:31:02
Audit Action: Manually Integrated Audit Reason: Peak not integrated

Report Date: 12-May-2016 15:21:29 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001883.D

Injection Date: 12-May-2016 11:08:53 Instrument ID: CPESTGC9

Lims ID: IC PCB 4

Client ID:

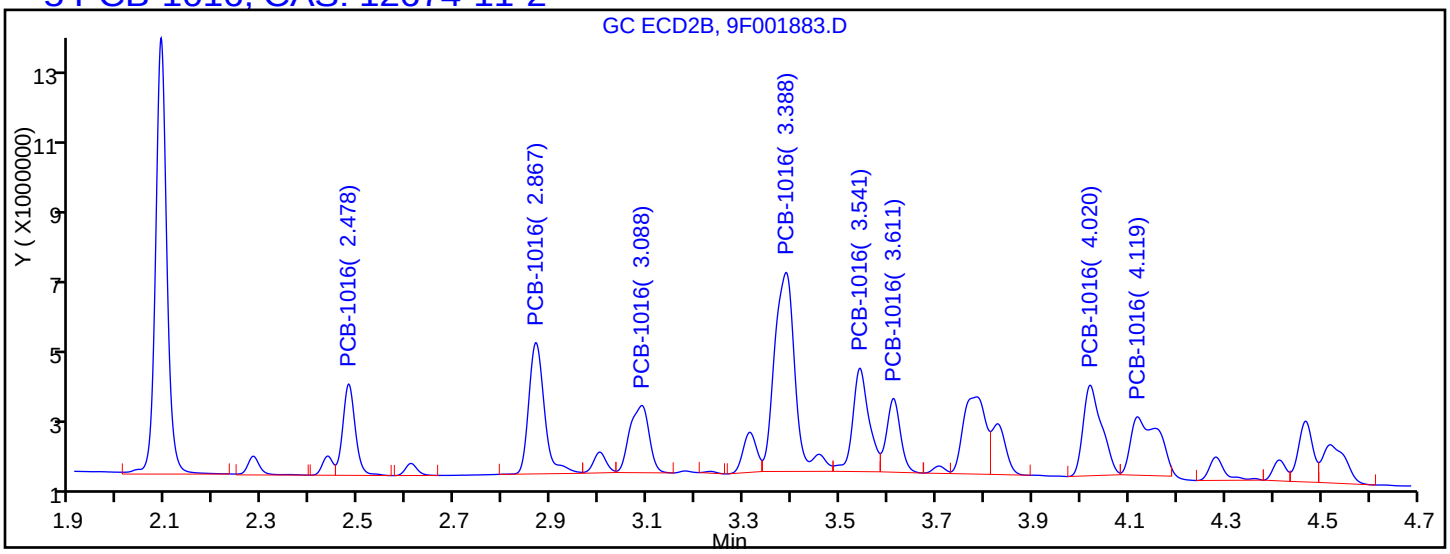
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

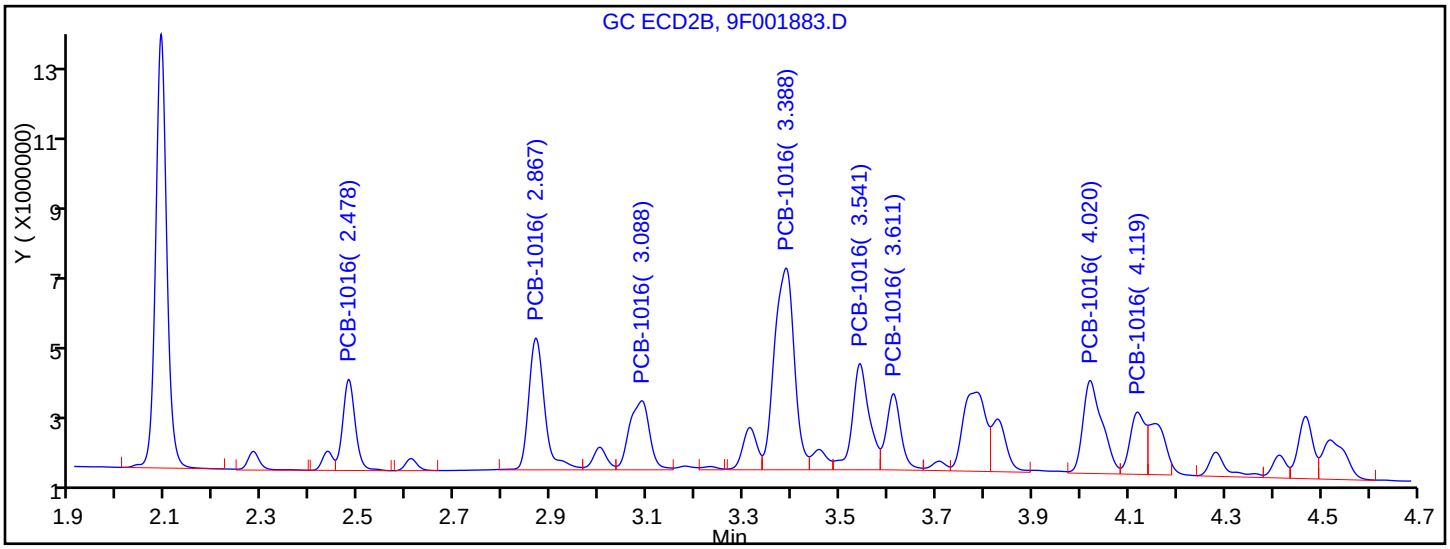
Column: Detector GC ECD2B

5 PCB-1016, CAS: 12674-11-2



Processing Integration Results

RT = 2.478	Response = 4332530	
RT = 2.867	Response = 7807005	M
RT = 3.088	Response = 4929049	M
RT = 3.388	Response = 15680414	M
RT = 3.541	Response = 6419881	M
RT = 3.611	Response = 3877982	M
RT = 4.020	Response = 6356169	M
RT = 4.119	Response = 6127481	M



Manual Integration Results

RT = 2.478	Response = 4332530	
RT = 2.867	Response = 8047032	M
RT = 3.088	Response = 5294700	M
RT = 3.388	Response = 15267330	M
RT = 3.541	Response = 6893182	M
RT = 3.611	Response = 4182972	M

Report Date: 12-May-2016 15:21:29 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001883.D

Injection Date: 12-May-2016 11:08:53 Instrument ID: CPESTGC9

Lims ID: IC PCB 4

Client ID:

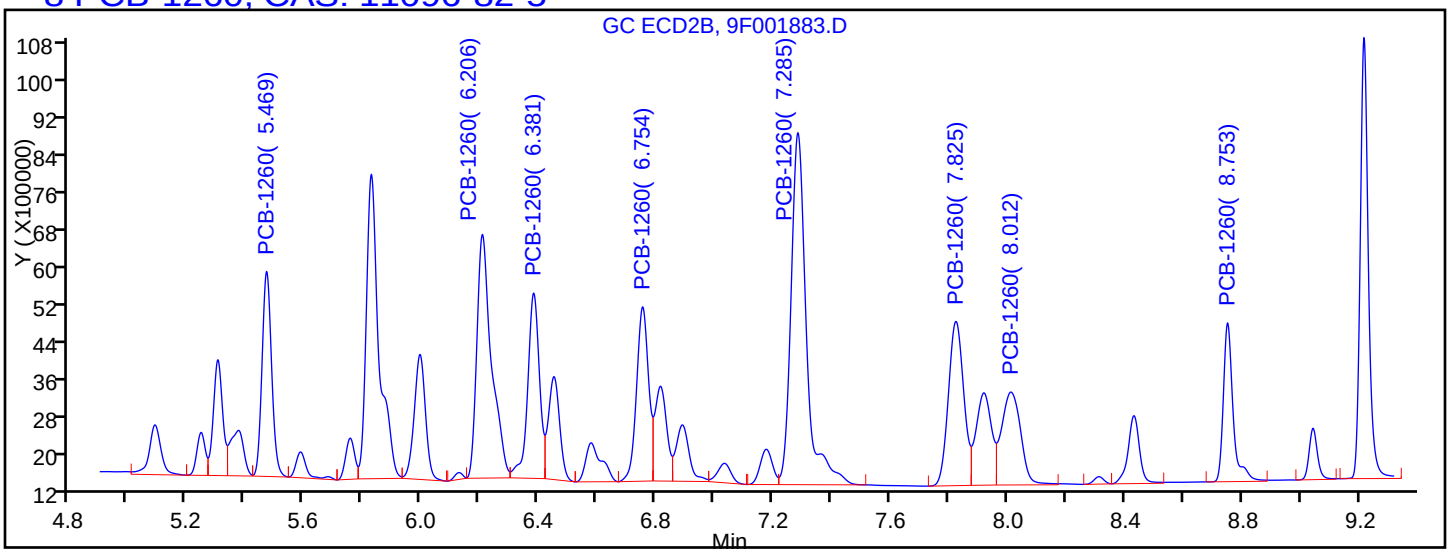
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

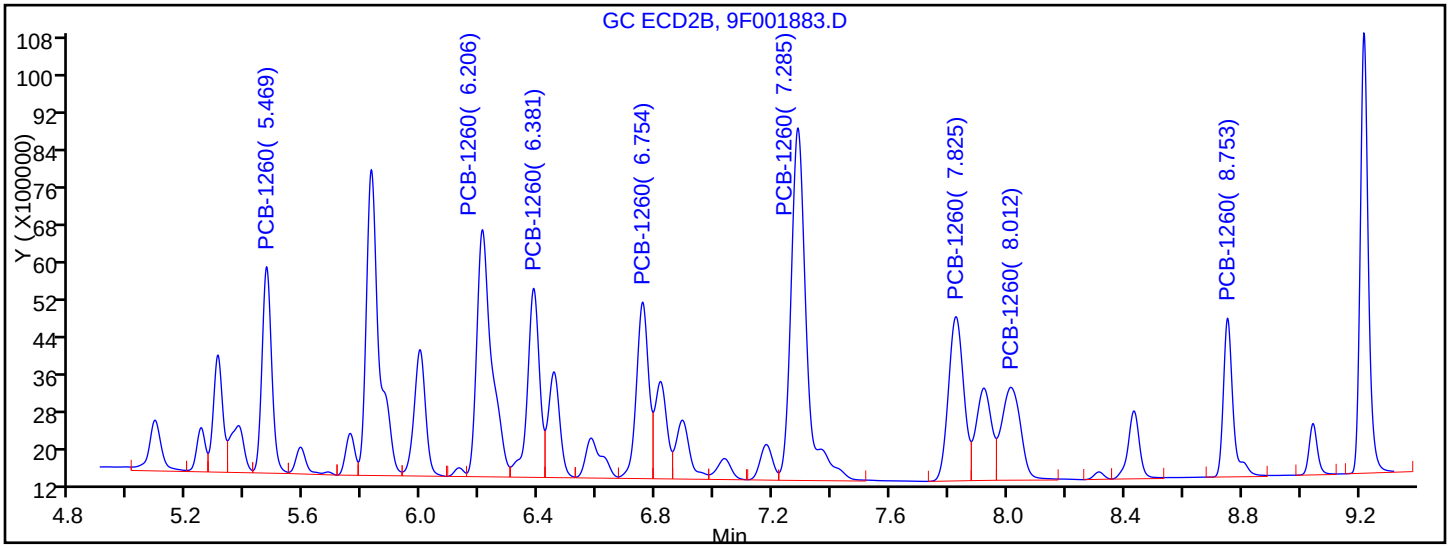
Column: Detector GC ECD2B

8 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 5.469	Response = 10021177	M
RT = 6.206	Response = 18160389	M
RT = 6.381	Response = 11148340	M
RT = 6.754	Response = 10751036	M
RT = 7.285	Response = 27609244	M
RT = 7.825	Response = 12905522	
RT = 8.012	Response = 9100459	
RT = 8.753	Response = 7933293	



Manual Integration Results

RT = 5.469	Response = 10236516	M
RT = 6.206	Response = 18837770	M
RT = 6.381	Response = 11733006	M
RT = 6.754	Response = 11049030	M
RT = 7.285	Response = 27865186	M
RT = 7.825	Response = 12905522	

TestAmerica Edison

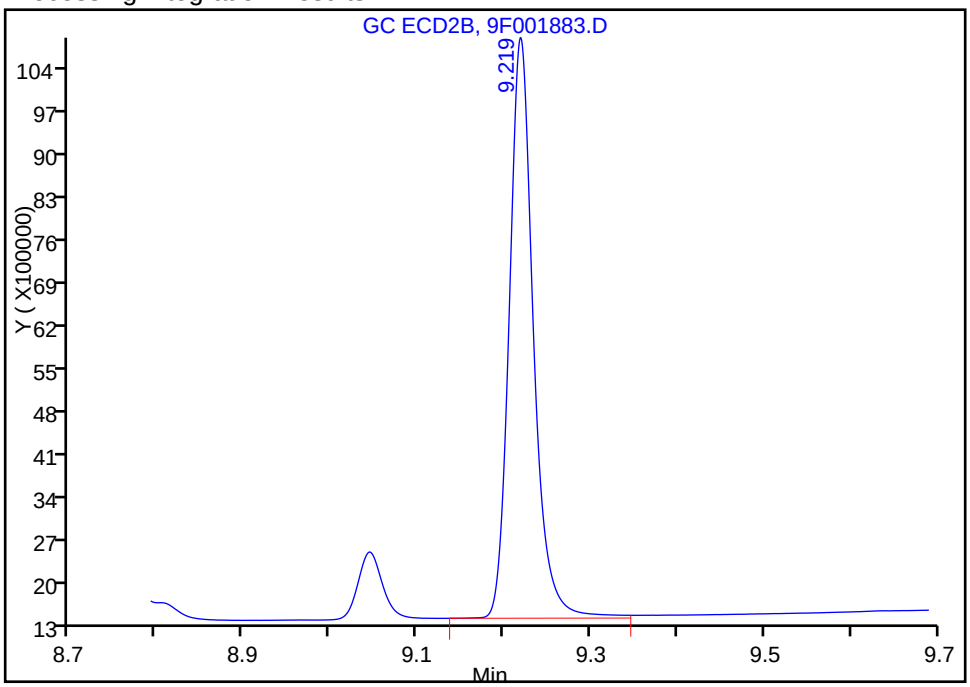
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001883.D				
Injection Date:	12-May-2016 11:08:53	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 4				
Client ID:					
Operator ID:		ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

$ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 2

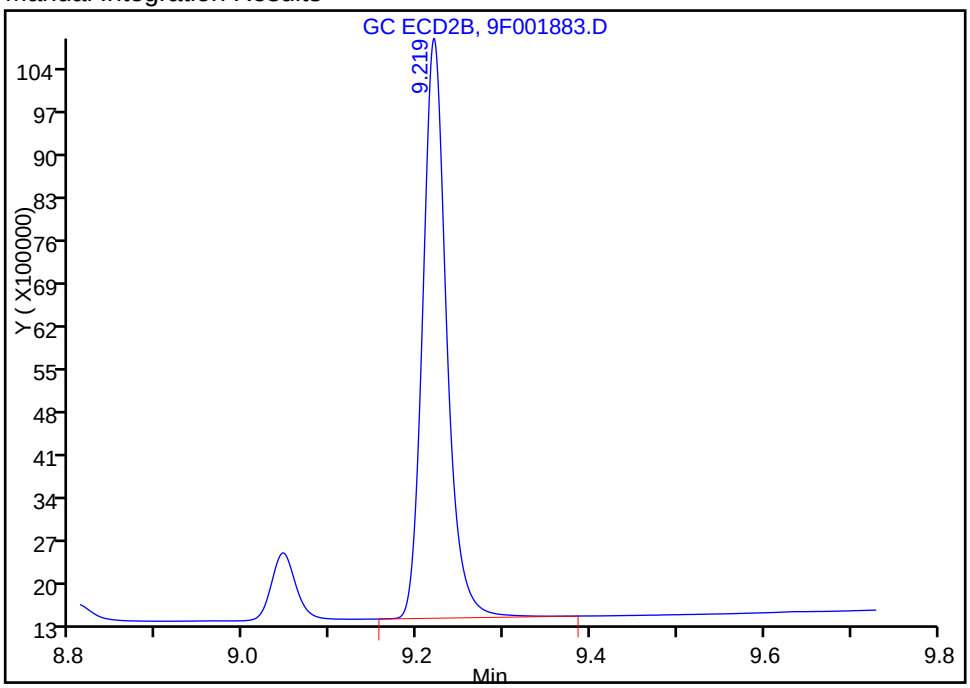
Processing Integration Results

RT: 9.22
Area: 18372428
Amount: 127.5760
Amount Units: ug/l



Manual Integration Results

RT: 9.22
Area: 18159335
Amount: 129.3662
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 11:31:02
Audit Action: Manually Integrated Audit Reason: Peak not integrated

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001884.D
Lims ID: IC PCB 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 12-May-2016 11:53:46 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0040924-006
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub1

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:21:35 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 12:13:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.626	1.623	0.003	2790017	20.0	20.0	
2	1.409	1.408	0.001	2912960	20.0	20.0	M
						RPD = 0.00	
$ 2 Tetrachloro-m-xylene							
1	2.598	2.593	0.005	23087417	200.0	199.5	
2	2.087	2.087	0.000	23173590	200.0	208.5	
						RPD = 4.43	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 PCB-1016							M
1	3.219	3.216	0.003	6155311	2500.0	2425.7	
1	3.733	3.728	0.005	12678388	2500.0	2432.4	M
1	4.029	4.025	0.004	5687774	2500.0	2454.4	M
1	4.300	4.296	0.004	23551614	2500.0	2589.0	M
1	4.471	4.467	0.004	10582390	2500.0	2539.7	M
1	4.731	4.727	0.004	5513465	2500.0	2402.2	M
1	5.061	5.057	0.004	8344979	2500.0	2508.6	M
1	5.214	5.210	0.004	9519974	2500.0	2622.0	M
		Average of Peak Amounts =				2496.8	
2	2.477	2.477	0.000	6321901	2500.0	2557.3	
2	2.866	2.866	0.000	12079146	2500.0	2595.4	M
2	3.086	3.087	-0.001	8241089	2500.0	2694.8	M
2	3.386	3.387	-0.001	24327282	2500.0	2568.1	M
2	3.539	3.541	-0.002	10903573	2500.0	2567.8	M
2	3.609	3.611	-0.002	6838644	2500.0	2618.4	M
2	4.019	4.020	-0.001	10798811	2500.0	2626.4	M
2	4.117	4.118	-0.001	5650740	2500.0	2685.7	M
		Average of Peak Amounts =				2614.2	
						RPD = 4.60	
8 PCB-1260							M
1	6.586	6.582	0.004	8682406	2500.0	2637.7	M
1	6.844	6.840	0.004	17248720	2500.0	2556.9	M
1	7.216	7.212	0.004	19940336	2500.0	2469.3	M
1	8.112	8.108	0.004	15454420	2500.0	2578.4	
1	8.547	8.541	0.006	15657966	2500.0	2655.3	M
1	8.858	8.849	0.009	31010518	2500.0	2617.4	M
1	9.229	9.216	0.013	22497806	2500.0	2587.8	M
1	9.744	9.724	0.020	9261706	2500.0	2603.9	
		Average of Peak Amounts =				2588.3	
2	5.467	5.469	-0.002	15299719	2500.0	2431.2	M
2	6.204	6.206	-0.002	26680357	2500.0	2412.2	M
2	6.380	6.382	-0.002	17239840	2500.0	2542.2	M
2	6.752	6.754	-0.002	16391658	2500.0	2393.9	M
2	7.282	7.285	-0.003	40568730	2500.0	2436.1	M
2	7.822	7.824	-0.002	19903783	2500.0	2541.9	
2	8.010	8.013	-0.003	13949576	2500.0	2580.8	
2	8.757	8.752	0.005	12173148	2500.0	2604.6	M
		Average of Peak Amounts =				2492.9	
						RPD = 3.76	
$ 11 DCB Decachlorobiphenyl							M
1	10.200	10.172	0.028	19430254	200.0	195.0	M
2	9.229	9.217	0.012	23388934	200.0	192.7	M
						RPD = 1.21	
S 12 Polychlorinated biphenyls, Total							
1						5085.1	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660L5_00021	Amount Added:	1.00	Units: mL	
SGPCBISTD_00006	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:21:40 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001884.D

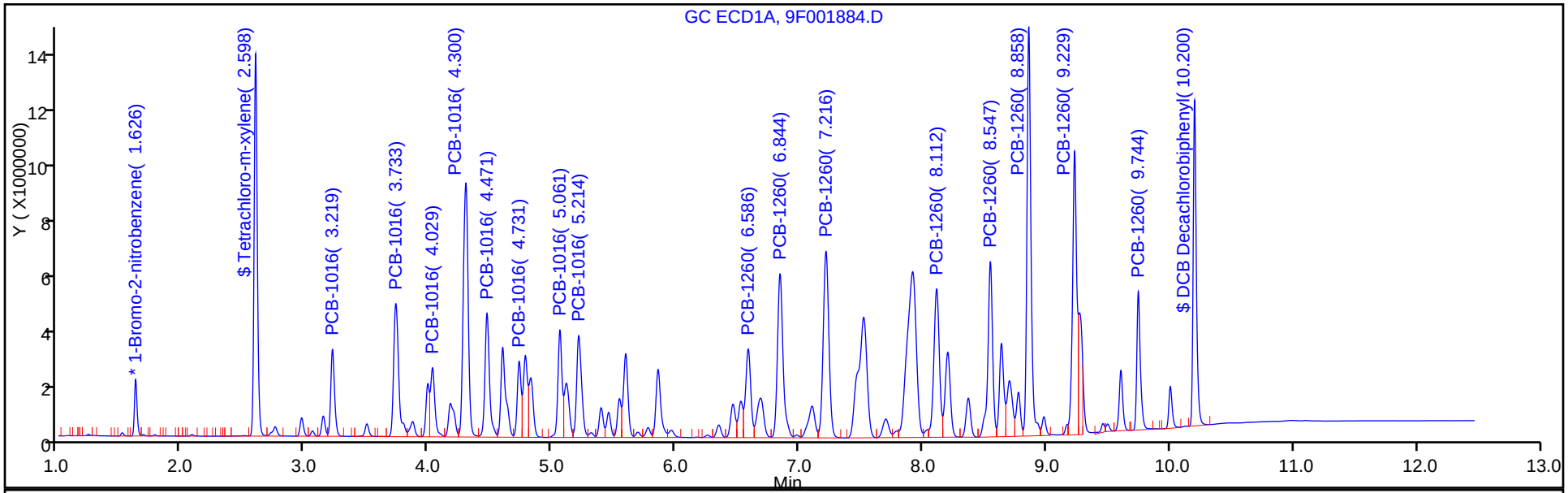
Injection Date: 12-May-2016 11:53:46 Instrument ID: CPESTGC9 Operator ID:

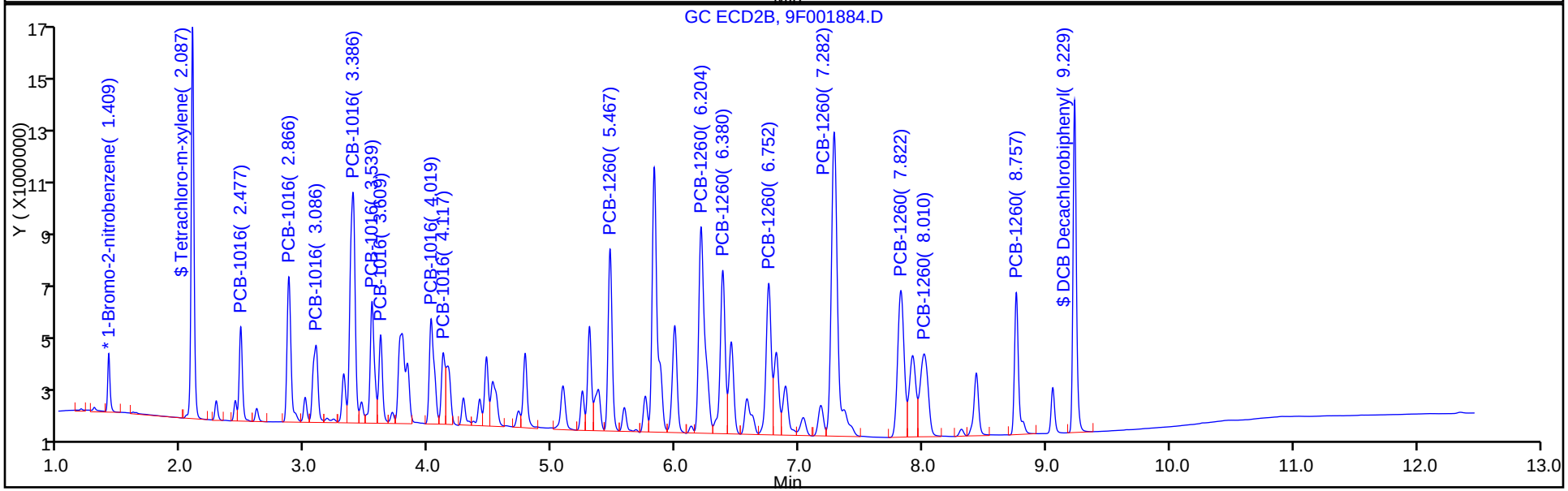
Lims ID: IC PCB 5 Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 6

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD





Manual Integration/User Assign Peak Report

TestAmerica Edison

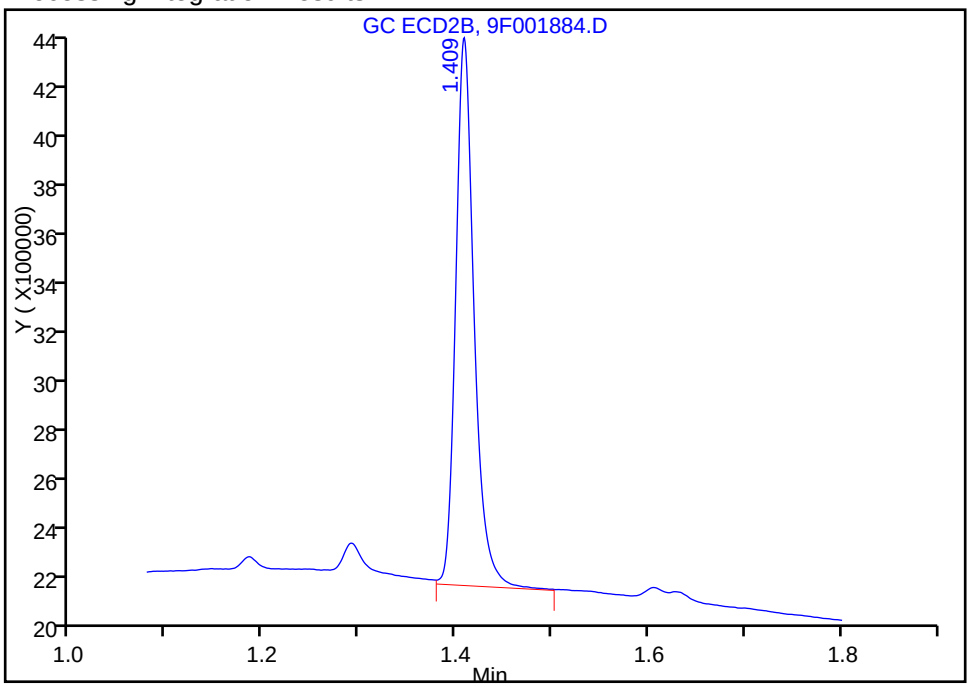
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001884.D				
Injection Date:	12-May-2016 11:53:46	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 5				
Client ID:					
Operator ID:		ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

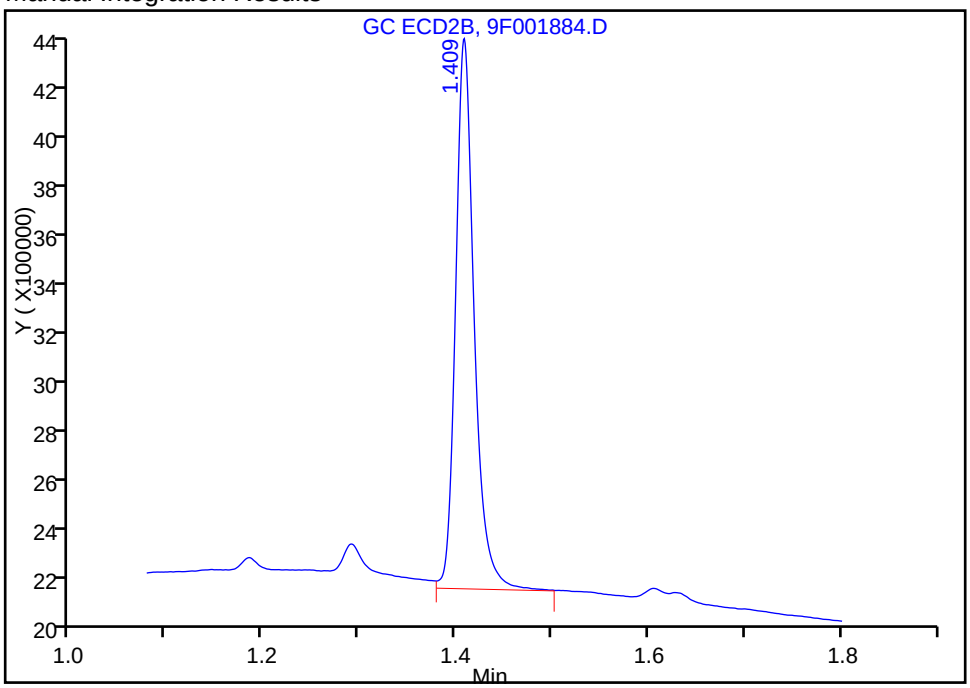
Processing Integration Results

RT: 1.41
Area: 2871054
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.41
Area: 2912960
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 12:13:35

Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

Report Date: 12-May-2016 15:21:40 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001884.D

Injection Date: 12-May-2016 11:53:46 Instrument ID: CPESTGC9

Lims ID: IC PCB 5

Client ID:

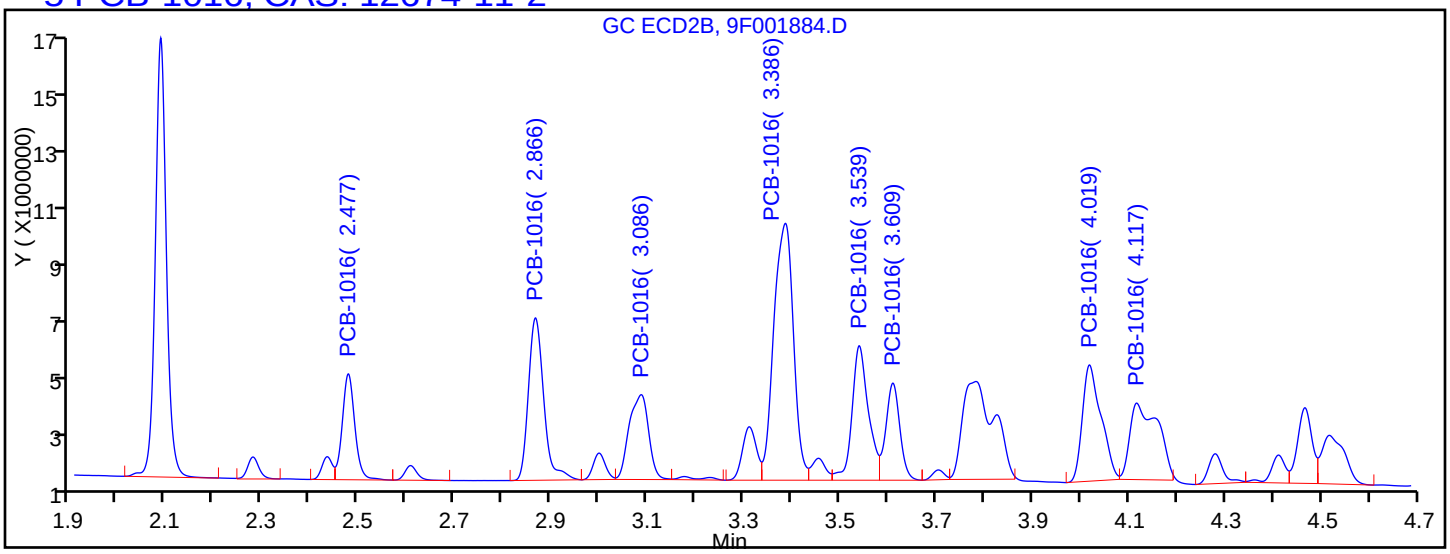
Operator ID: ALS Bottle#: 6 Worklist Smp#: 6

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

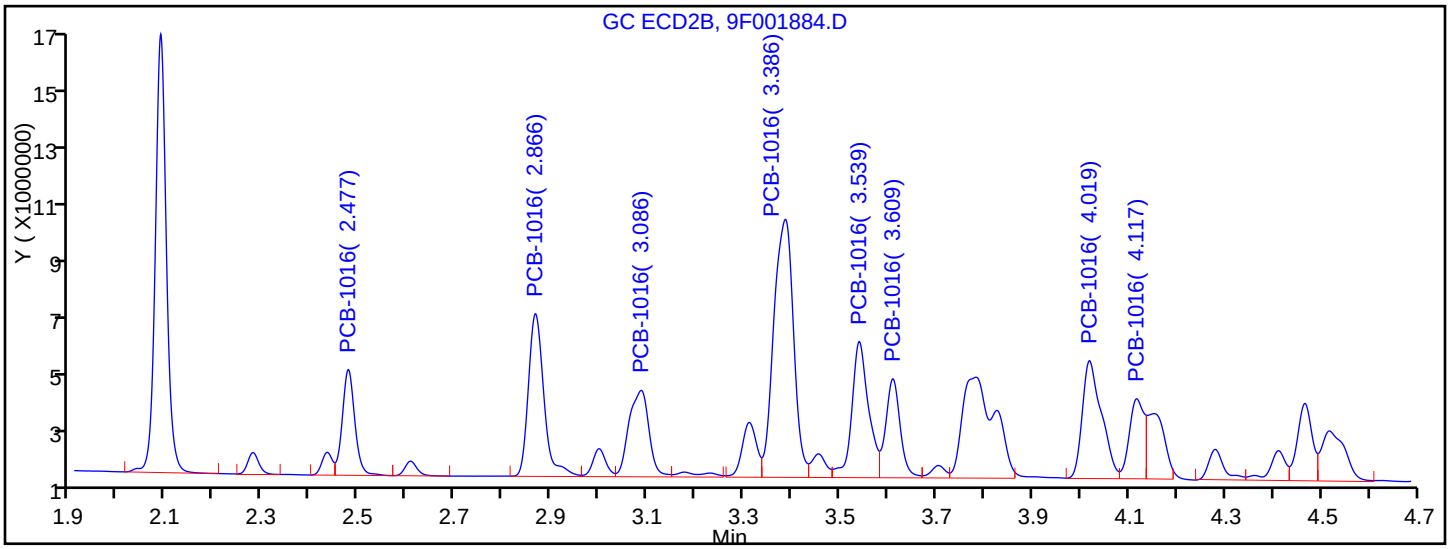
Column: Detector GC ECD2B

5 PCB-1016, CAS: 12674-11-2



Processing Integration Results

RT = 2.477	Response = 6321901	
RT = 2.866	Response = 11876747	M
RT = 3.086	Response = 7843944	M
RT = 3.386	Response = 24018543	M
RT = 3.539	Response = 10539516	M
RT = 3.609	Response = 6481583	M
RT = 4.019	Response = 10352523	M
RT = 4.117	Response = 10217872	M



Manual Integration Results

RT = 2.477	Response = 6321901	
RT = 2.866	Response = 12079146	M
RT = 3.086	Response = 8241089	M
RT = 3.386	Response = 24327282	M
RT = 3.539	Response = 10903573	M
RT = 3.609	Response = 6838644	M

Report Date: 12-May-2016 15:21:40 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001884.D

Injection Date: 12-May-2016 11:53:46 Instrument ID: CPESTGC9

Lims ID: IC PCB 5

Client ID:

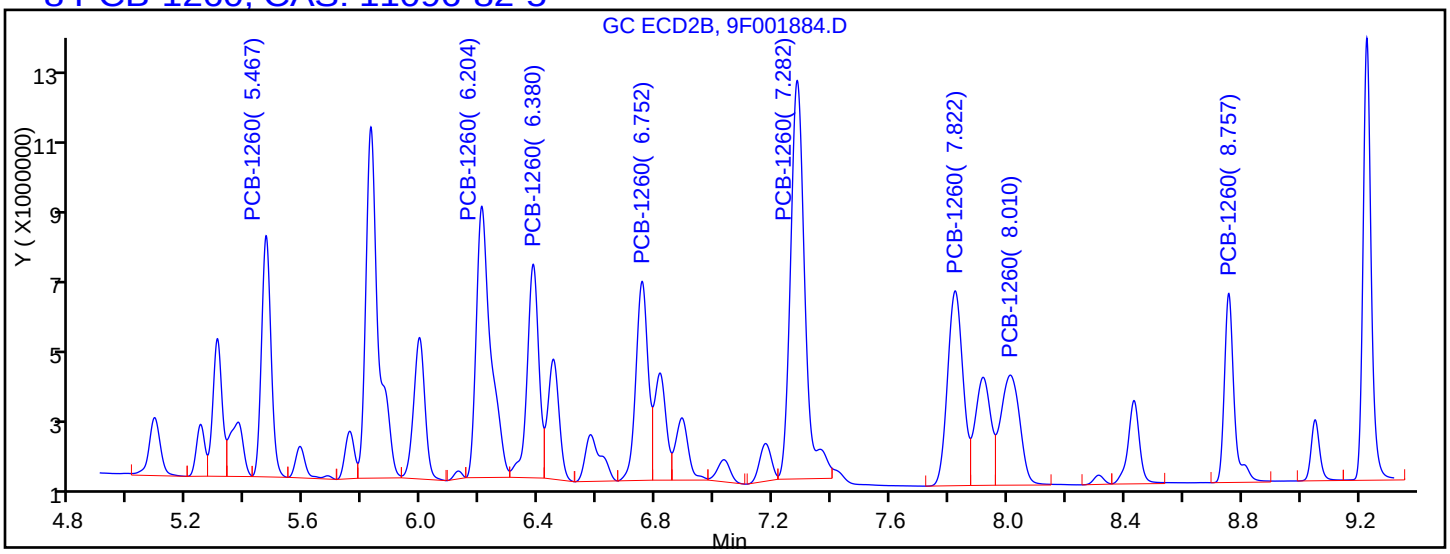
Operator ID: ALS Bottle#: 6 Worklist Smp#: 6

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

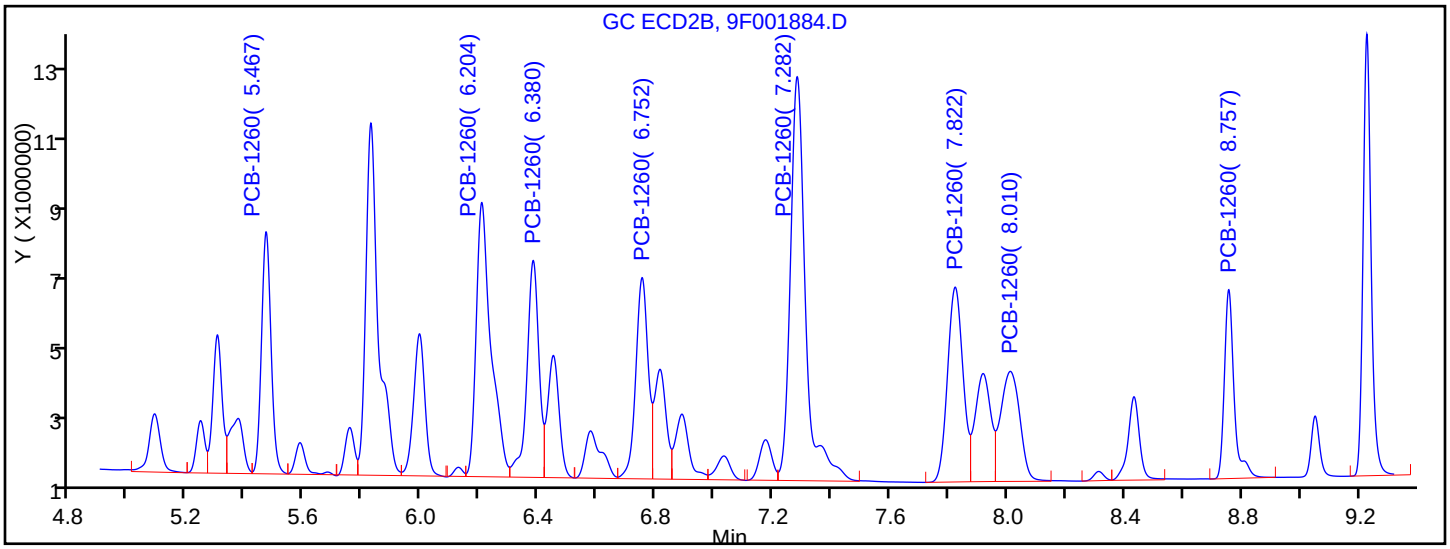
Column: Detector GC ECD2B

8 PCB-1260, CAS: 11096-82-5



Processing Integration Results

RT = 5.467	Response = 15164398	M
RT = 6.204	Response = 25928578	M
RT = 6.380	Response = 16581947	M
RT = 6.752	Response = 15992810	M
RT = 7.282	Response = 37724604	M
RT = 7.822	Response = 19903783	
RT = 8.010	Response = 13949576	
RT = 8.757	Response = 12296338	M



Manual Integration Results

RT = 5.467	Response = 15299719	M
RT = 6.204	Response = 26680357	M
RT = 6.380	Response = 17239840	M
RT = 6.752	Response = 16391658	M
RT = 7.282	Response = 40568730	M
RT = 7.822	Response = 19903783	

TestAmerica Edison

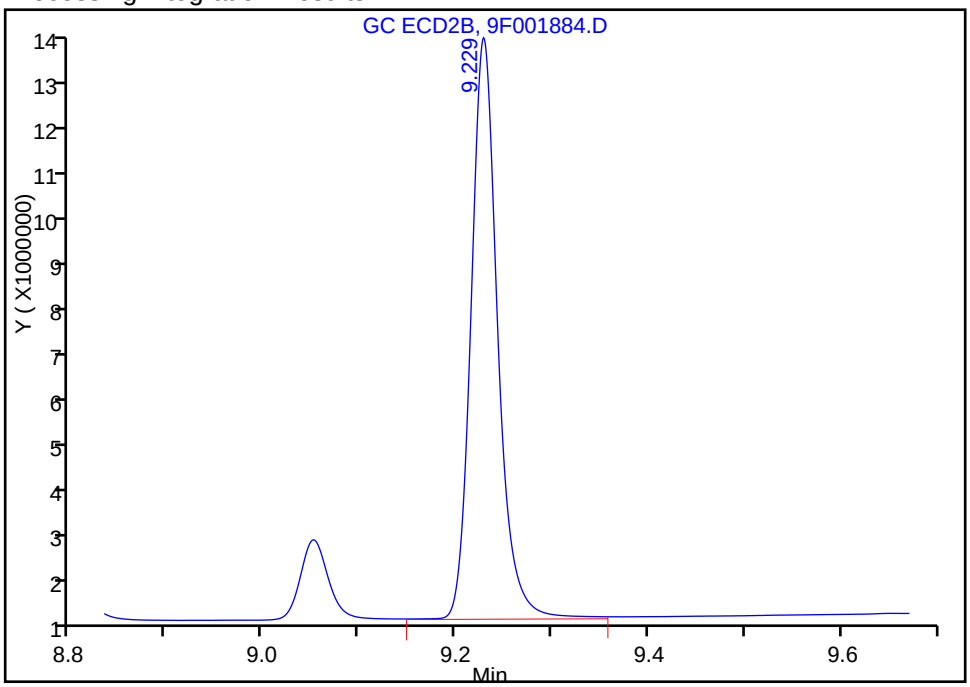
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001884.D				
Injection Date:	12-May-2016 11:53:46	Instrument ID:	CPESTGC9		
Lims ID:	IC PCB 5				
Client ID:					
Operator ID:		ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

$ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 2

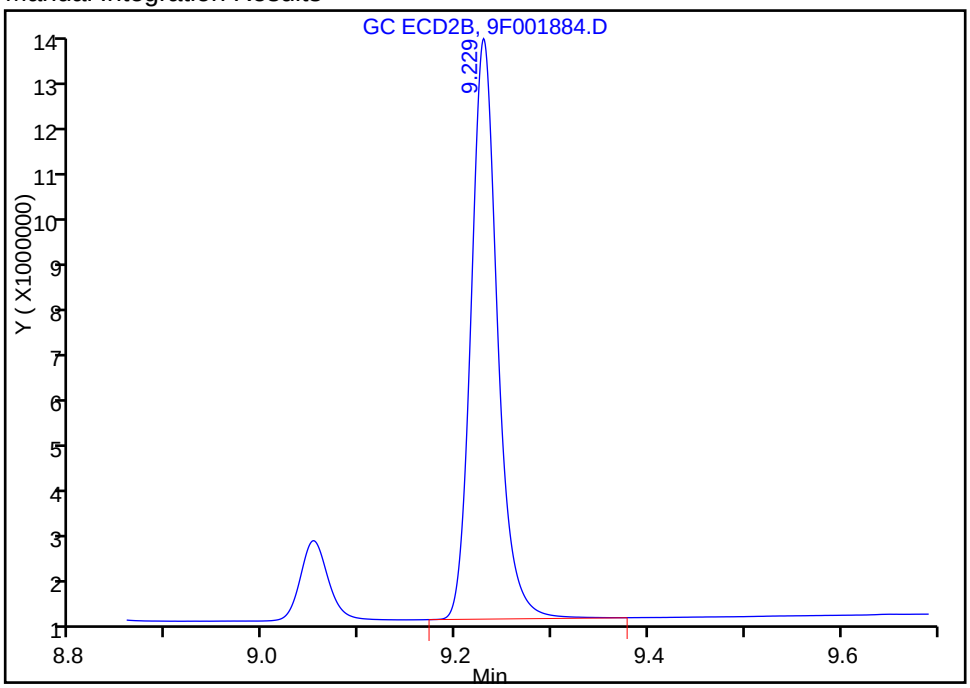
Processing Integration Results

RT: 9.23
Area: 23677306
Amount: 194.3657
Amount Units: ug/l



Manual Integration Results

RT: 9.23
Area: 23388934
Amount: 192.6658
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 12:13:35
Audit Action: Manually Integrated Audit Reason: Peak not integrated

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 12:41 Calibration End Date: 05/12/2016 12:41 Calibration ID: 55700

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/8	9F001886.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1						B	M1	M2								
PCB-1221 Peak 1	0.0082					Ave		0.0082						20.0			0.9900
PCB-1221 Peak 2	0.0104					Ave		0.0104						20.0			0.9900
PCB-1221 Peak 3	0.0071					Ave		0.0071						20.0			0.9900
PCB-1221 Peak 4	0.0250					Ave		0.0250						20.0			0.9900
PCB-1221 Peak 5	0.0039					Ave		0.0039						20.0			0.9900
PCB-1221 Peak 6	0.0046					Ave		0.0046						20.0			0.9900
PCB-1221 Peak 7	0.0025					Ave		0.0025						20.0			0.9900
PCB-1221 Peak 8	0.0013					Ave		0.0013						20.0			0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 12:41 Calibration End Date: 05/12/2016 12:41 Calibration ID: 55700

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/8	9F001886.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1					LVL 1				
PCB-1221 Peak 1	BNB	Ave	1253530					1000				
PCB-1221 Peak 2	BNB	Ave	1578654					1000				
PCB-1221 Peak 3	BNB	Ave	1075627					1000				
PCB-1221 Peak 4	BNB	Ave	3809804					1000				
PCB-1221 Peak 5	BNB	Ave	600867					1000				
PCB-1221 Peak 6	BNB	Ave	700061					1000				
PCB-1221 Peak 7	BNB	Ave	381560					1000				
PCB-1221 Peak 8	BNB	Ave	196424					1000				

Curve Type Legend:

Ave = Average ISTD

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001886.D
Lims ID: IC 1221
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-May-2016 12:41:14 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0040924-008
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub2

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:21:55 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 13:50:05

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.626	1.626	0.000	3043405	20.0	20.0	
2	1.407	1.407	0.000	3237245	20.0	20.0	M
						RPD = 0.00	
1 PCB-1221							M
1	2.081	2.081	0.000	1253530	1000.0	1000.0	a
1	2.970	2.970	0.000	1578654	1000.0	1000.0	a
1	3.145	3.145	0.000	1075627	1000.0	1000.0	a
1	3.220	3.220	0.000	3809804	1000.0	1000.0	a
1	3.795	3.795	0.000	600867	1000.0	1000.0	a
1	4.299	4.299	0.000	700061	1000.0	1000.0	M
1	4.471	4.471	0.000	381560	1000.0	1000.0	M
1	4.596	4.596	0.000	196424	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
2	1.606	1.606	0.000	1029221	1000.0	1000.0	M
2	2.278	2.278	0.000	1463695	1000.0	1000.0	a
2	2.432	2.432	0.000	883624	1000.0	1000.0	a
2	2.476	2.476	0.000	3731421	1000.0	1000.0	a
2	2.866	2.866	0.000	360802	1000.0	1000.0	a
2	2.999	2.999	0.000	547966	1000.0	1000.0	a
2	3.386	3.386	0.000	711694	1000.0	1000.0	M
2	3.538	3.538	0.000	312378	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
						RPD = 0.00	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1221L3_00025	Amount Added: 1.00	Units: mL	
SGPCBISTD_00006	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:22:00 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001886.D

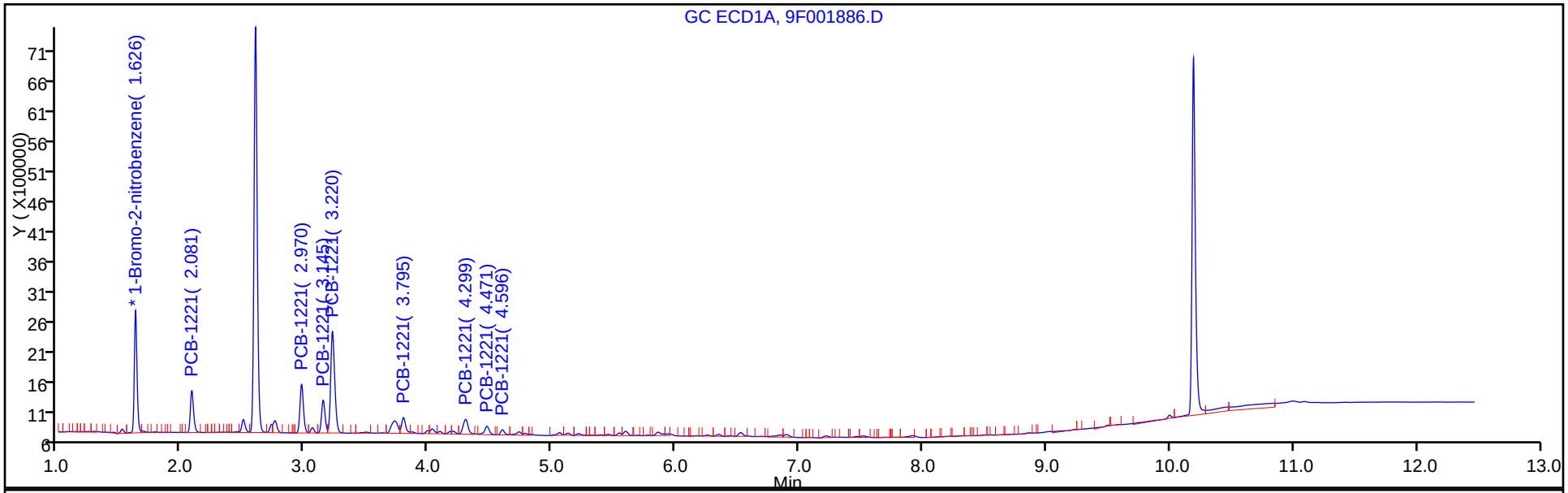
Injection Date: 12-May-2016 12:41:14 Instrument ID: CPESTGC9 Operator ID:

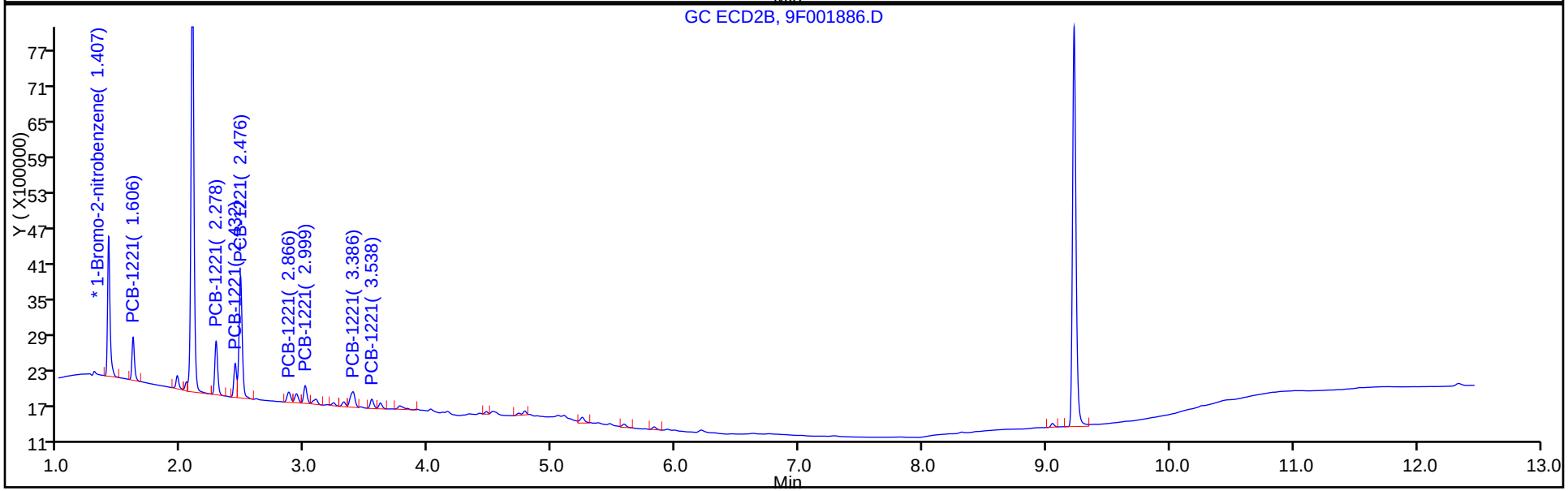
Lims ID: IC 1221 Worklist Smp#: 8

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 8

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD





Report Date: 12-May-2016 15:22:00 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001886.D

Injection Date: 12-May-2016 12:41:14 Instrument ID: CPESTGC9

Lims ID: IC 1221

Client ID:

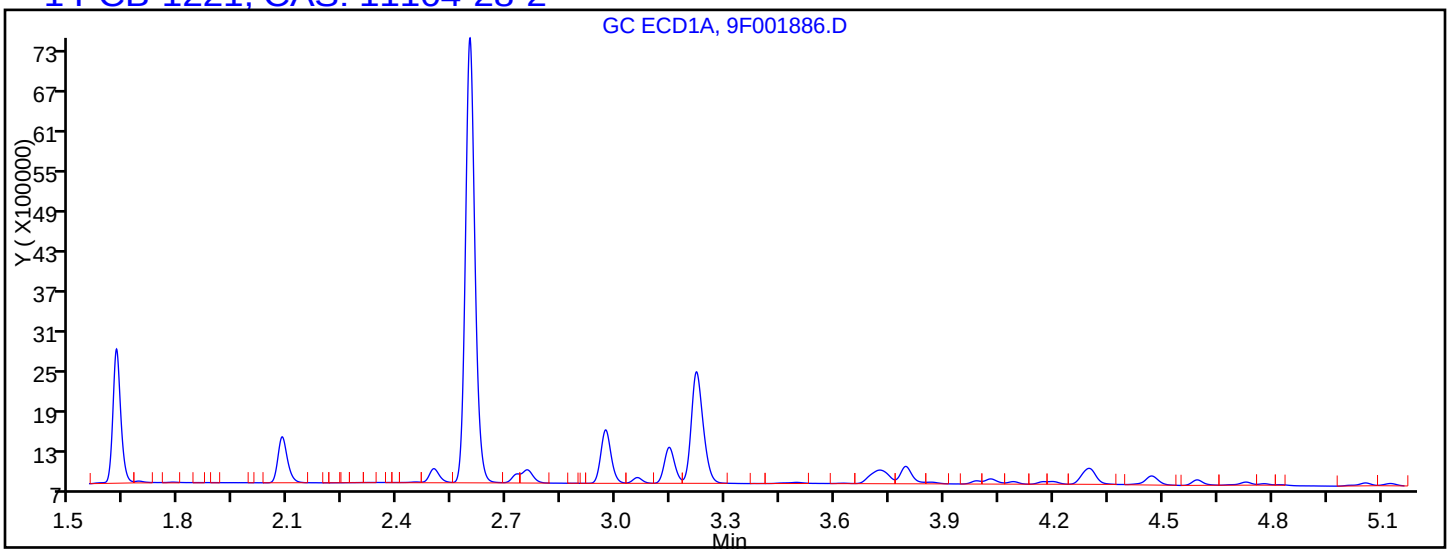
Operator ID: ALS Bottle#: 8 Worklist Smp#: 8

Injection Vol: 1.0 ul Dil. Factor: 1.0000

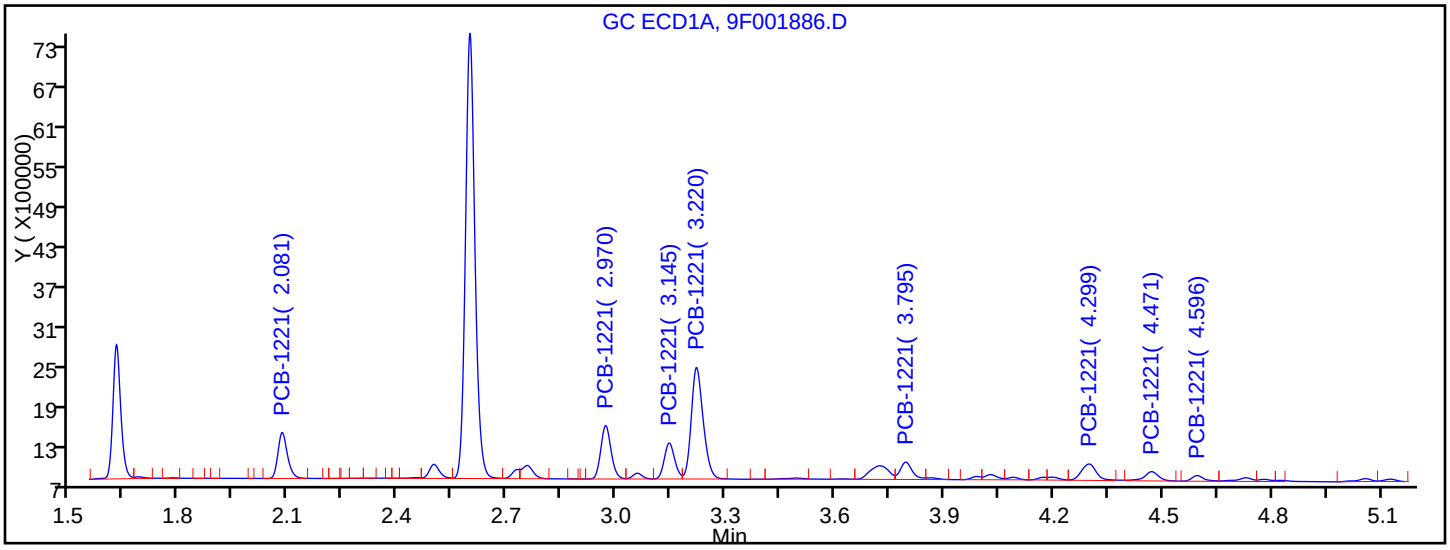
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

Column: Detector GC ECD1A

1 PCB-1221, CAS: 11104-28-2



Processing Integration Results



Manual Integration Results

RT = 2.081	Response = 1253530	M
RT = 2.970	Response = 1578654	M
RT = 3.145	Response = 1075627	M
RT = 3.220	Response = 3809804	M
RT = 3.795	Response = 600867	M
RT = 4.299	Response = 700061	M
RT = 4.471	Response = 381560	M
RT = 4.596	Response = 196424	M

Reviewer: patelji, 12-May-2016 13:51:52

Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 12:41 Calibration End Date: 05/12/2016 12:41 Calibration ID: 55701

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/8	9F001886.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1						B	M1	M2								
PCB-1221 Peak 1	0.0064					Ave		0.0064						20.0			0.9900
PCB-1221 Peak 2	0.0090					Ave		0.0090						20.0			0.9900
PCB-1221 Peak 3	0.0055					Ave		0.0055						20.0			0.9900
PCB-1221 Peak 4	0.0231					Ave		0.0231						20.0			0.9900
PCB-1221 Peak 5	0.0022					Ave		0.0022						20.0			0.9900
PCB-1221 Peak 6	0.0034					Ave		0.0034						20.0			0.9900
PCB-1221 Peak 7	0.0044					Ave		0.0044						20.0			0.9900
PCB-1221 Peak 8	0.0019					Ave		0.0019						20.0			0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 12:41 Calibration End Date: 05/12/2016 12:41 Calibration ID: 55701

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/8	9F001886.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1					LVL 1				
PCB-1221 Peak 1	BNB	Ave	1029221					1000				
PCB-1221 Peak 2	BNB	Ave	1463695					1000				
PCB-1221 Peak 3	BNB	Ave	883624					1000				
PCB-1221 Peak 4	BNB	Ave	3731421					1000				
PCB-1221 Peak 5	BNB	Ave	360802					1000				
PCB-1221 Peak 6	BNB	Ave	547966					1000				
PCB-1221 Peak 7	BNB	Ave	711694					1000				
PCB-1221 Peak 8	BNB	Ave	312378					1000				

Curve Type Legend:

Ave = Average ISTD

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001886.D
Lims ID: IC 1221
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-May-2016 12:41:14 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0040924-008
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub2

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:21:55 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 13:50:05

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.626	1.626	0.000	3043405	20.0	20.0	
2	1.407	1.407	0.000	3237245	20.0	20.0	M
						RPD = 0.00	
1 PCB-1221							M
1	2.081	2.081	0.000	1253530	1000.0	1000.0	a
1	2.970	2.970	0.000	1578654	1000.0	1000.0	a
1	3.145	3.145	0.000	1075627	1000.0	1000.0	a
1	3.220	3.220	0.000	3809804	1000.0	1000.0	a
1	3.795	3.795	0.000	600867	1000.0	1000.0	a
1	4.299	4.299	0.000	700061	1000.0	1000.0	M
1	4.471	4.471	0.000	381560	1000.0	1000.0	M
1	4.596	4.596	0.000	196424	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
2	1.606	1.606	0.000	1029221	1000.0	1000.0	M
2	2.278	2.278	0.000	1463695	1000.0	1000.0	a
2	2.432	2.432	0.000	883624	1000.0	1000.0	a
2	2.476	2.476	0.000	3731421	1000.0	1000.0	a
2	2.866	2.866	0.000	360802	1000.0	1000.0	a
2	2.999	2.999	0.000	547966	1000.0	1000.0	a
2	3.386	3.386	0.000	711694	1000.0	1000.0	M
2	3.538	3.538	0.000	312378	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
						RPD = 0.00	

QC Flag Legend

Review Flags

M - Manually Integrated

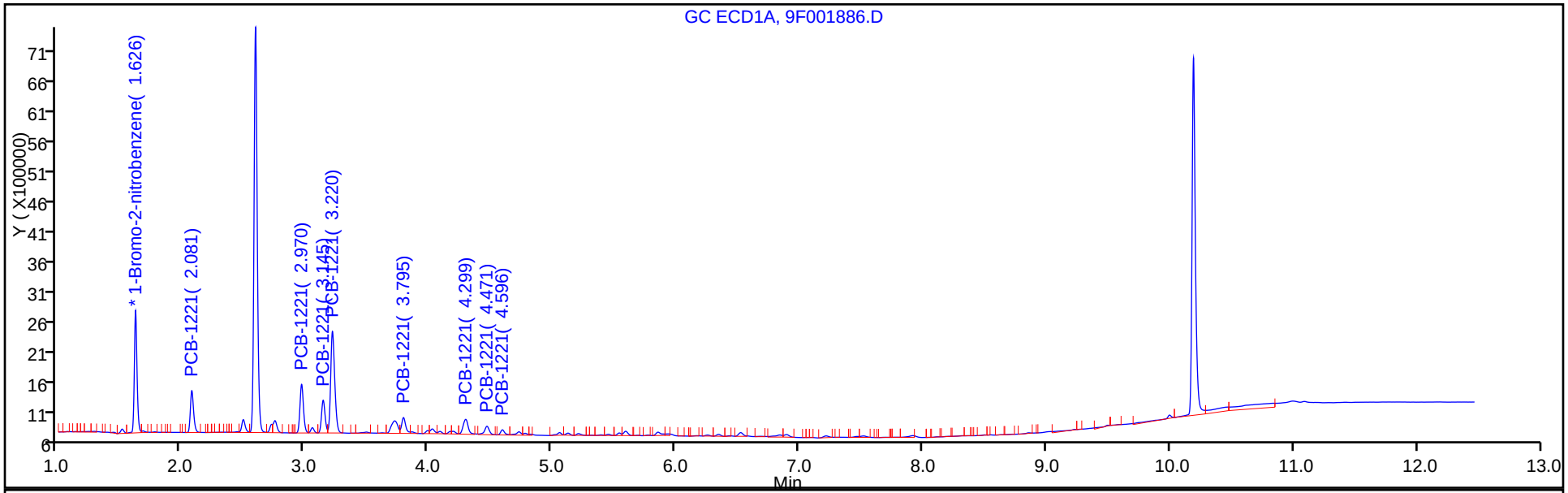
Reagents:

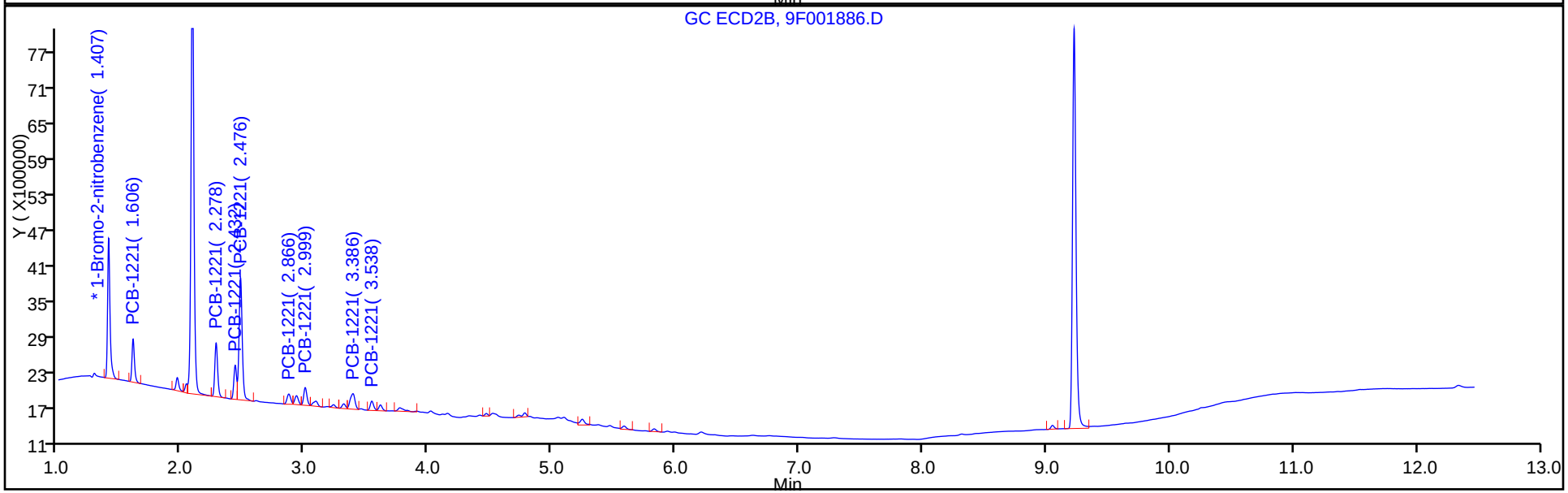
SG1221L3_00025	Amount Added:	1.00	Units: mL	
SGPCBISTD_00006	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:22:00 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001886.D				
Injection Date:	12-May-2016 12:41:14	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	IC 1221			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		





TestAmerica Edison

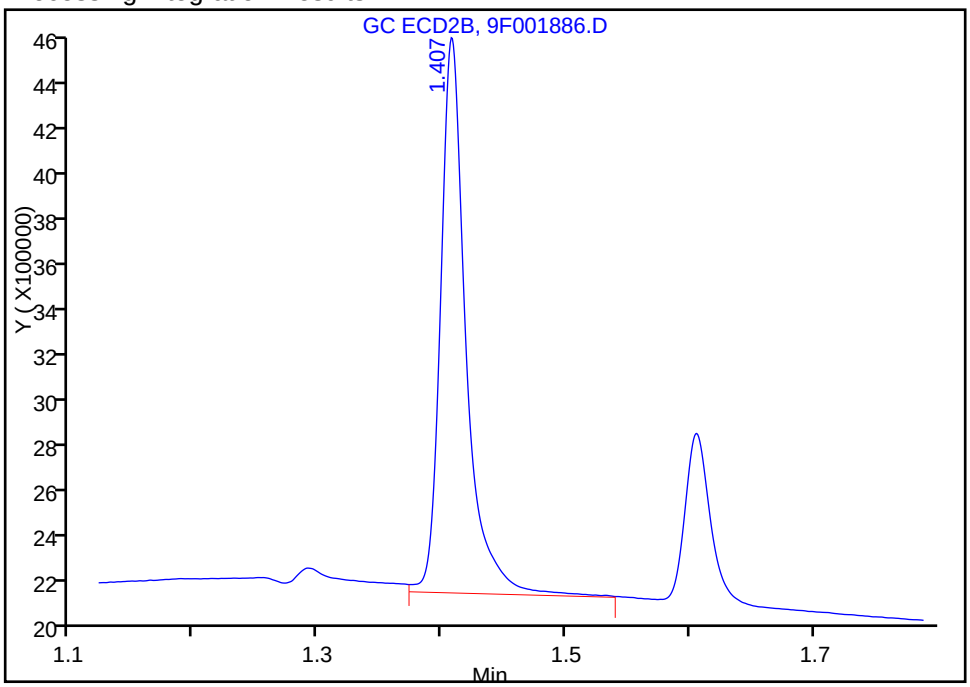
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001886.D				
Injection Date:	12-May-2016 12:41:14	Instrument ID:	CPESTGC9		
Lims ID:	IC 1221				
Client ID:					
Operator ID:		ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

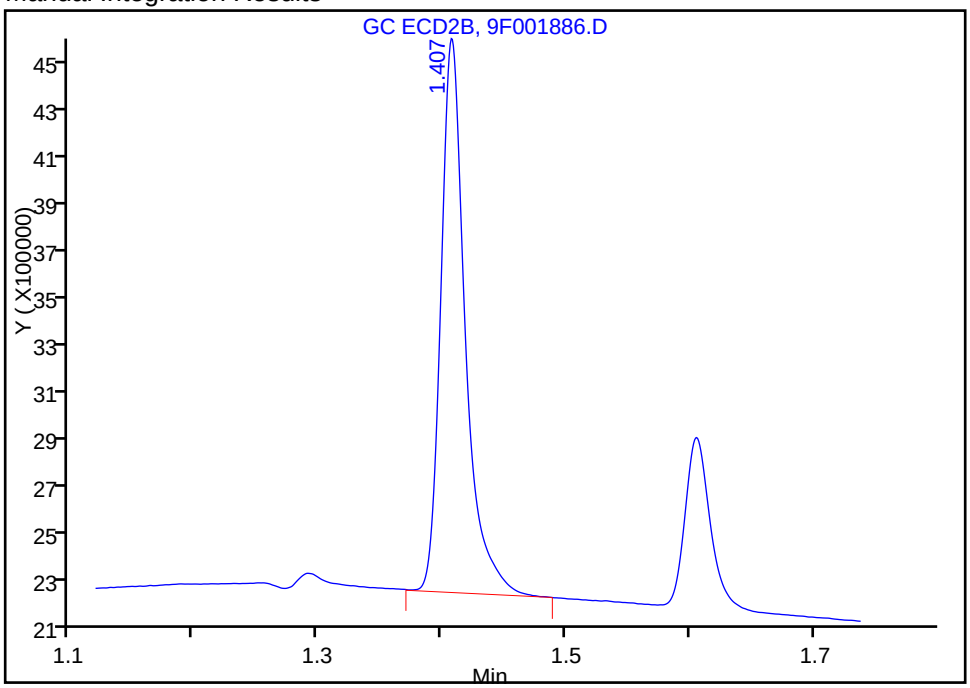
Processing Integration Results

RT: 1.41
Area: 3417636
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.41
Area: 3237245
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 13:51:52
Audit Action: Manually Integrated Audit Reason: Peak not integrated

Report Date: 12-May-2016 15:22:00 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001886.D

Injection Date: 12-May-2016 12:41:14 Instrument ID: CPESTGC9

Lims ID: IC 1221

Client ID:

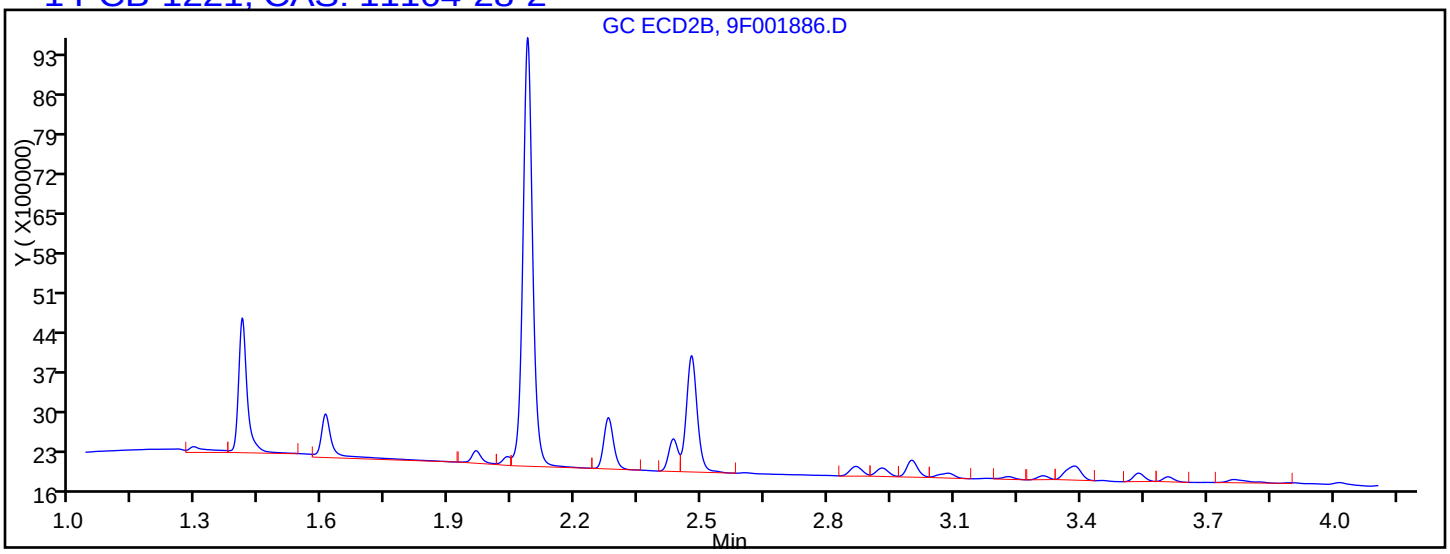
Operator ID: ALS Bottle#: 8 Worklist Smp#: 8

Injection Vol: 1.0 ul Dil. Factor: 1.0000

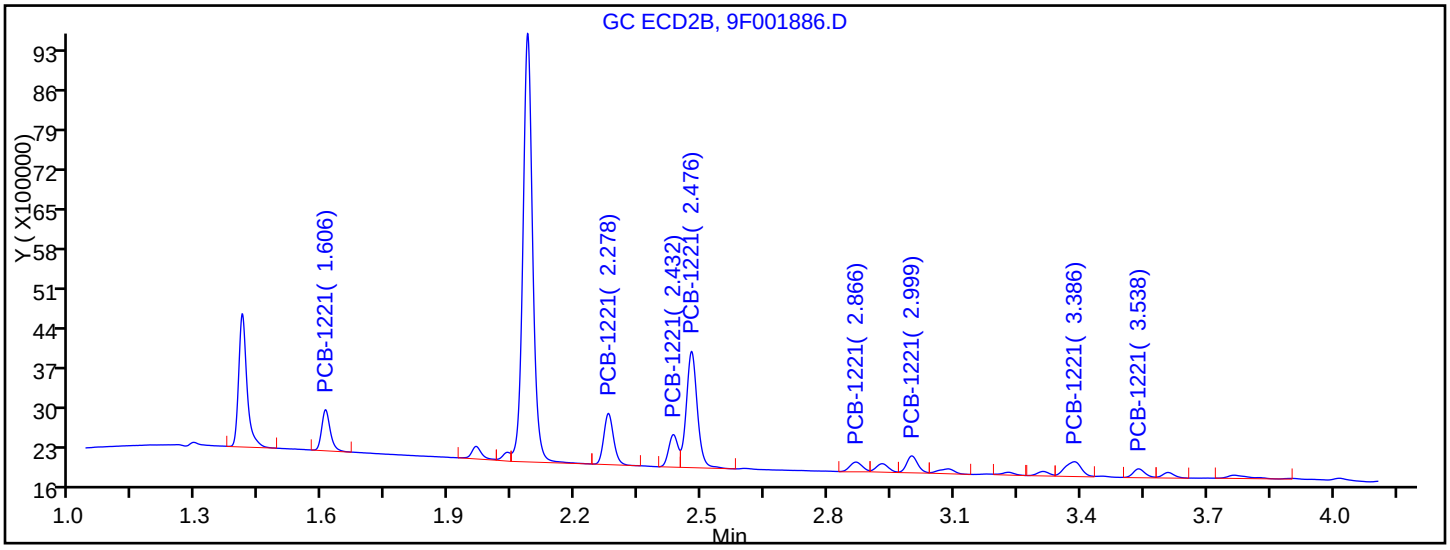
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

Column: Detector GC ECD2B

1 PCB-1221, CAS: 11104-28-2



Processing Integration Results



Manual Integration Results

RT = 1.606	Response = 1029221	M
RT = 2.278	Response = 1463695	M
RT = 2.432	Response = 883624	M
RT = 2.476	Response = 3731421	M
RT = 2.866	Response = 360802	M
RT = 2.999	Response = 547966	M
RT = 3.386	Response = 711694	M
RT = 3.538	Response = 312378	M

Reviewer: patelji, 12-May-2016 13:51:52

Audit Action: Manually Integrated Audit Reason: Peak not integrated

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 12:59 Calibration End Date: 05/12/2016 12:59 Calibration ID: 55706

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/9	9F001887.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1						B	M1	M2								
PCB-1232 Peak 1	0.0230					Ave		0.0230						20.0			0.9900
PCB-1232 Peak 2	0.0194					Ave		0.0194						20.0			0.9900
PCB-1232 Peak 3	0.0094					Ave		0.0094						20.0			0.9900
PCB-1232 Peak 4	0.0320					Ave		0.0320						20.0			0.9900
PCB-1232 Peak 5	0.0151					Ave		0.0151						20.0			0.9900
PCB-1232 Peak 6	0.0107					Ave		0.0107						20.0			0.9900
PCB-1232 Peak 7	0.0097					Ave		0.0097						20.0			0.9900
PCB-1232 Peak 8	0.0113					Ave		0.0113						20.0			0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 12:59 Calibration End Date: 05/12/2016 12:59 Calibration ID: 55706

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/9	9F001887.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1					LVL 1				
PCB-1232 Peak 1	BNB	Ave	3780044					1000				
PCB-1232 Peak 2	BNB	Ave	3193175					1000				
PCB-1232 Peak 3	BNB	Ave	1543150					1000				
PCB-1232 Peak 4	BNB	Ave	5251334					1000				
PCB-1232 Peak 5	BNB	Ave	2483680					1000				
PCB-1232 Peak 6	BNB	Ave	1765958					1000				
PCB-1232 Peak 7	BNB	Ave	1590210					1000				
PCB-1232 Peak 8	BNB	Ave	1861464					1000				

Curve Type Legend:

Ave = Average ISTD

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001887.D
Lims ID: IC 1232
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-May-2016 12:59:16 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0040924-009
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub3

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:22:03 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 13:45:19

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.623	1.623	0.000	3286649	20.0	20.0	M
2	1.408	1.408	0.000	3173814	20.0	20.0	M
						RPD = 0.00	
3 PCB-1232							M
1	3.215	3.215	0.000	3780044	1000.0	1000.0	a
1	3.727	3.727	0.000	3193175	1000.0	1000.0	M
1	4.024	4.024	0.000	1543150	1000.0	1000.0	M
1	4.294	4.294	0.000	5251334	1000.0	1000.0	M
1	4.466	4.466	0.000	2483680	1000.0	1000.0	M
1	5.056	5.056	0.000	1765958	1000.0	1000.0	M
1	5.538	5.538	0.000	1590210	1000.0	1000.0	M
1	5.594	5.594	0.000	1861464	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
2	2.476	2.476	0.000	3650253	1000.0	1000.0	a
2	2.866	2.866	0.000	2725211	1000.0	1000.0	M
2	3.086	3.086	0.000	1838610	1000.0	1000.0	M
2	3.386	3.386	0.000	5530016	1000.0	1000.0	M
2	3.539	3.539	0.000	2682294	1000.0	1000.0	M
2	4.019	4.019	0.000	2232099	1000.0	1000.0	M
2	4.541	4.541	0.000	3308880	1000.0	1000.0	M
2	4.775	4.775	0.000	1255924	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
						RPD = 0.00	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1232L3_00024	Amount Added:	1.00	Units: mL	
SGPCBISTD_00006	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:22:06 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001887.D

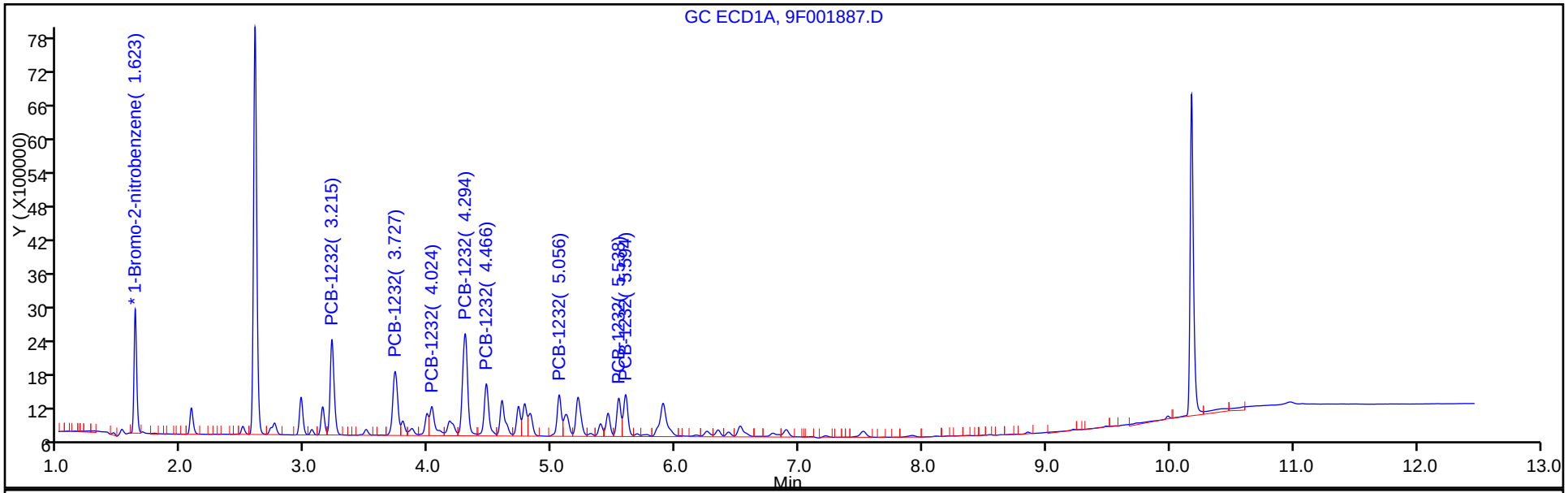
Injection Date: 12-May-2016 12:59:16 Instrument ID: CPESTGC9 Operator ID:

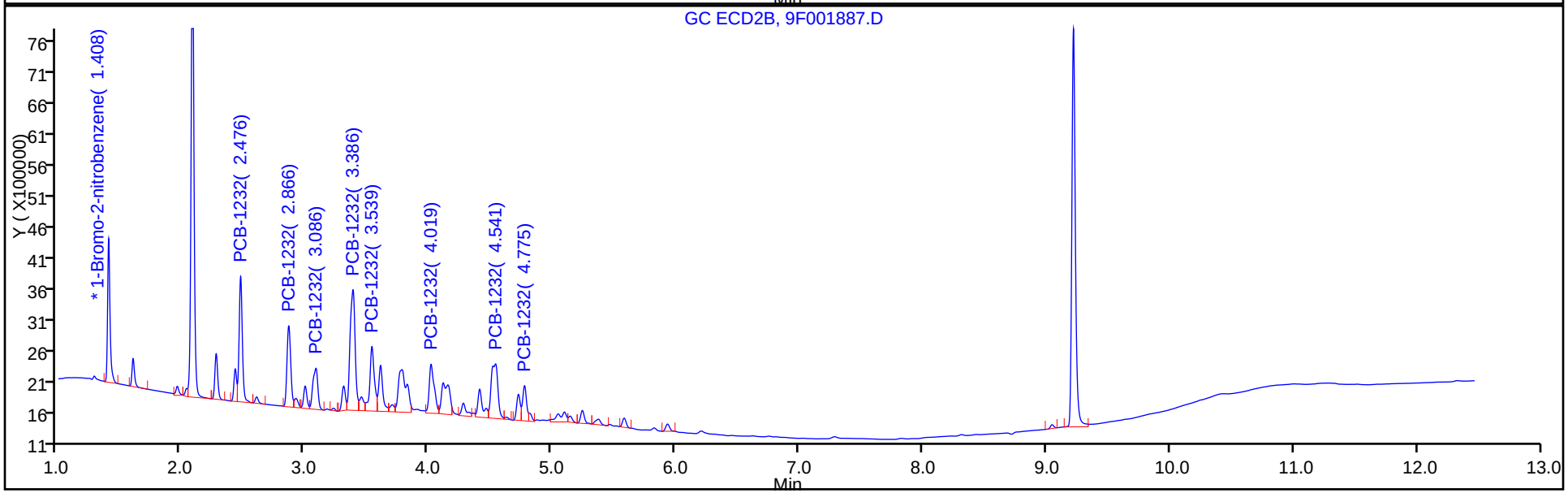
Lims ID: IC 1232 Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 9

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD





Manual Integration/User Assign Peak Report

TestAmerica Edison

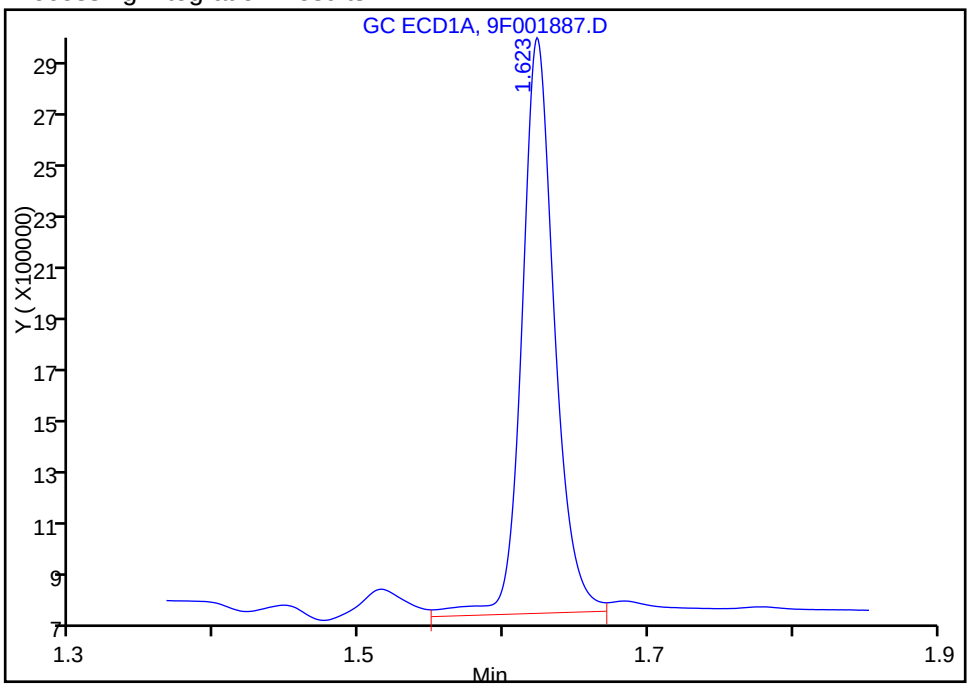
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001887.D				
Injection Date:	12-May-2016 12:59:16	Instrument ID:	CPESTGC9		
Lims ID:	IC 1232				
Client ID:					
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 1

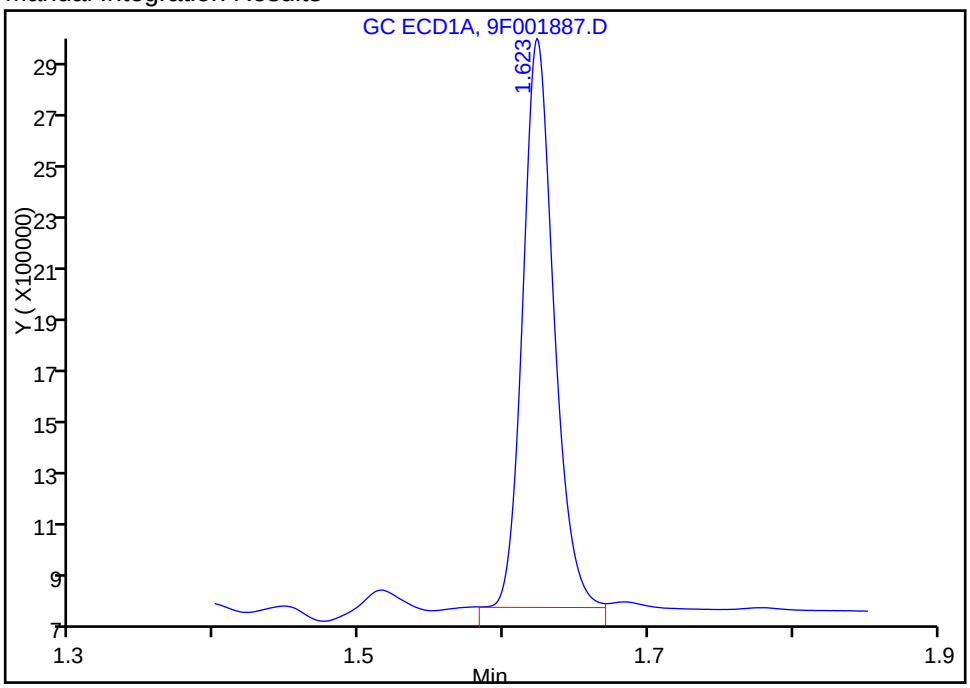
Processing Integration Results

RT: 1.62
Area: 3485216
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.62
Area: 3286649
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 13:45:19

Audit Action: Manually Integrated Audit Reason: Peak not integrated

Report Date: 12-May-2016 15:22:07 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001887.D

Injection Date: 12-May-2016 12:59:16 Instrument ID: CPESTGC9

Lims ID: IC 1232

Client ID:

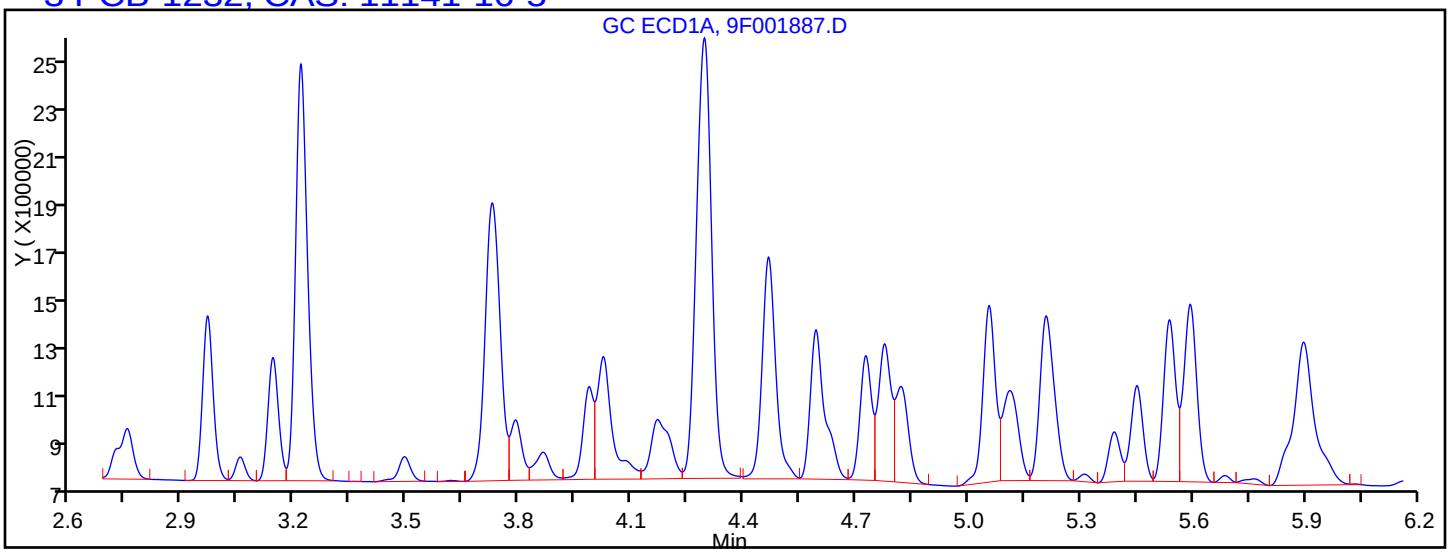
Operator ID: ALS Bottle#: 9 Worklist Smp#: 9

Injection Vol: 1.0 ul Dil. Factor: 1.0000

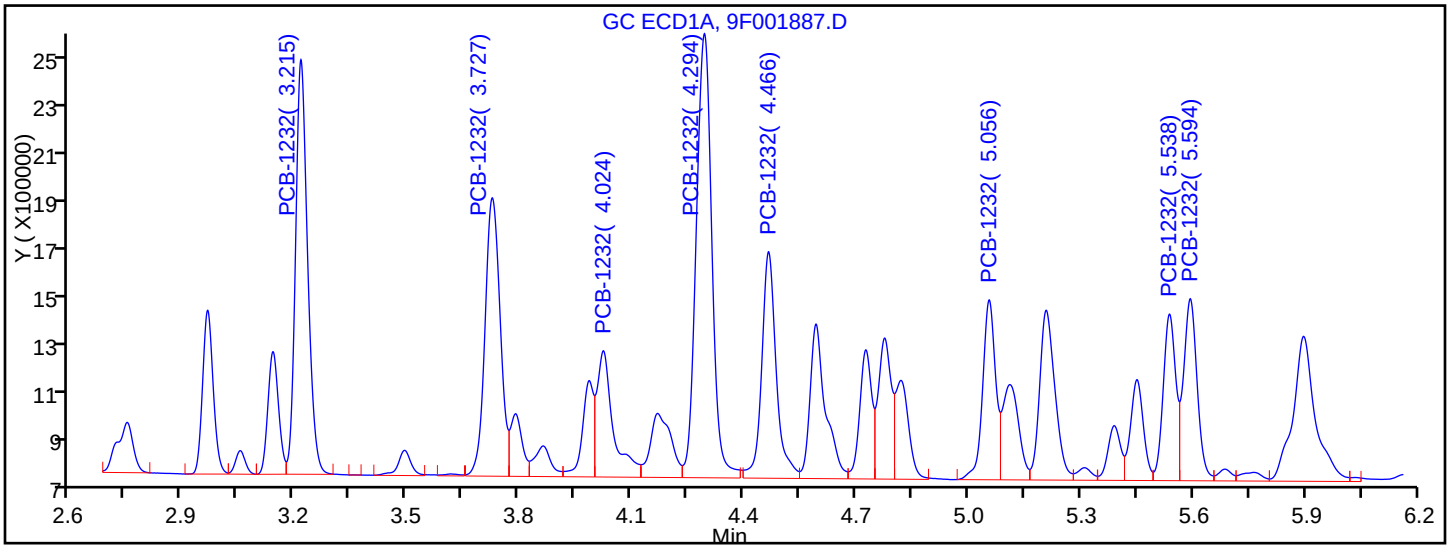
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

Column: Detector GC ECD1A

3 PCB-1232, CAS: 11141-16-5



Processing Integration Results



Manual Integration Results

RT = 3.215	Response = 3780044	M
RT = 3.727	Response = 3193175	M
RT = 4.024	Response = 1543150	M
RT = 4.294	Response = 5251334	M
RT = 4.466	Response = 2483680	M
RT = 5.056	Response = 1765958	M
RT = 5.538	Response = 1590210	M
RT = 5.594	Response = 1861464	M

Reviewer: patelji, 12-May-2016 13:45:19

Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 12:59 Calibration End Date: 05/12/2016 12:59 Calibration ID: 55707

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/9	9F001887.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1						B	M1	M2								
PCB-1232 Peak 1	0.0230					Ave		0.0230						20.0			0.9900
PCB-1232 Peak 2	0.0172					Ave		0.0172						20.0			0.9900
PCB-1232 Peak 3	0.0116					Ave		0.0116						20.0			0.9900
PCB-1232 Peak 4	0.0348					Ave		0.0348						20.0			0.9900
PCB-1232 Peak 5	0.0169					Ave		0.0169						20.0			0.9900
PCB-1232 Peak 6	0.0141					Ave		0.0141						20.0			0.9900
PCB-1232 Peak 7	0.0209					Ave		0.0209						20.0			0.9900
PCB-1232 Peak 8	0.0079					Ave		0.0079						20.0			0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 12:59 Calibration End Date: 05/12/2016 12:59 Calibration ID: 55707

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/9	9F001887.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1					LVL 1				
PCB-1232 Peak 1	BNB	Ave	3650253					1000				
PCB-1232 Peak 2	BNB	Ave	2725211					1000				
PCB-1232 Peak 3	BNB	Ave	1838610					1000				
PCB-1232 Peak 4	BNB	Ave	5530016					1000				
PCB-1232 Peak 5	BNB	Ave	2682294					1000				
PCB-1232 Peak 6	BNB	Ave	2232099					1000				
PCB-1232 Peak 7	BNB	Ave	3308880					1000				
PCB-1232 Peak 8	BNB	Ave	1255924					1000				

Curve Type Legend:

Ave = Average ISTD

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001887.D
Lims ID: IC 1232
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-May-2016 12:59:16 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0040924-009
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub3

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:22:03 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 13:45:19

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.623	1.623	0.000	3286649	20.0	20.0	M
2	1.408	1.408	0.000	3173814	20.0	20.0	M
						RPD = 0.00	
3 PCB-1232							M
1	3.215	3.215	0.000	3780044	1000.0	1000.0	a
1	3.727	3.727	0.000	3193175	1000.0	1000.0	M
1	4.024	4.024	0.000	1543150	1000.0	1000.0	M
1	4.294	4.294	0.000	5251334	1000.0	1000.0	M
1	4.466	4.466	0.000	2483680	1000.0	1000.0	M
1	5.056	5.056	0.000	1765958	1000.0	1000.0	M
1	5.538	5.538	0.000	1590210	1000.0	1000.0	M
1	5.594	5.594	0.000	1861464	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
2	2.476	2.476	0.000	3650253	1000.0	1000.0	a
2	2.866	2.866	0.000	2725211	1000.0	1000.0	M
2	3.086	3.086	0.000	1838610	1000.0	1000.0	M
2	3.386	3.386	0.000	5530016	1000.0	1000.0	M
2	3.539	3.539	0.000	2682294	1000.0	1000.0	M
2	4.019	4.019	0.000	2232099	1000.0	1000.0	M
2	4.541	4.541	0.000	3308880	1000.0	1000.0	M
2	4.775	4.775	0.000	1255924	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
						RPD = 0.00	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1232L3_00024	Amount Added:	1.00	Units: mL	
SGPCBISTD_00006	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:22:07 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001887.D

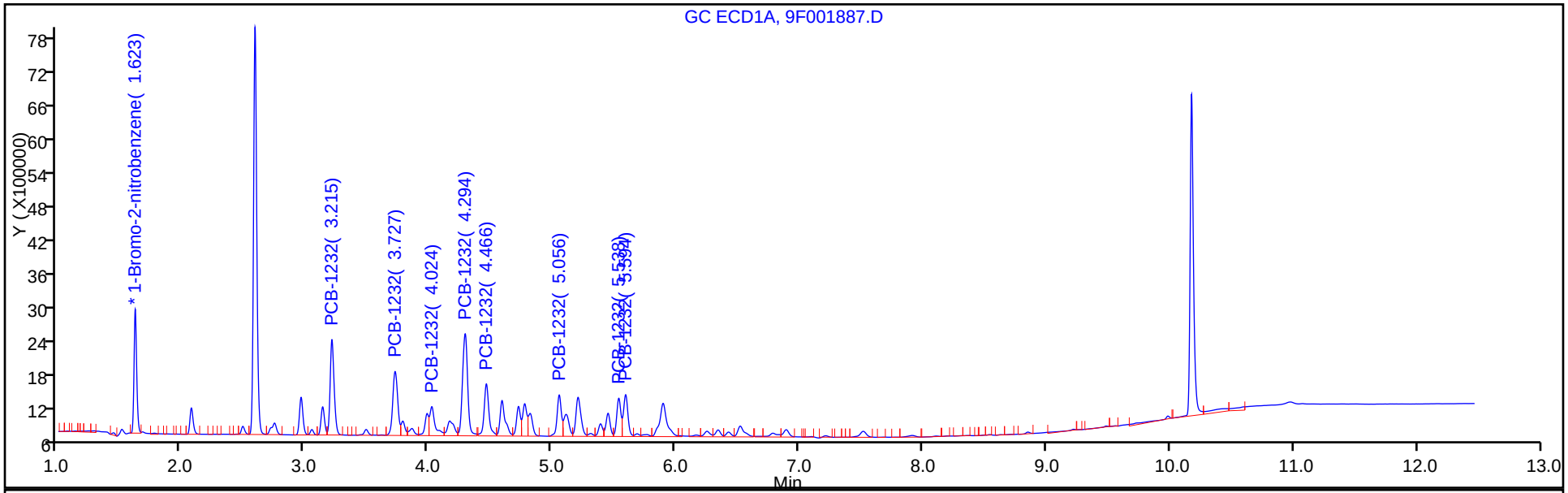
Injection Date: 12-May-2016 12:59:16 Instrument ID: CPESTGC9 Operator ID:

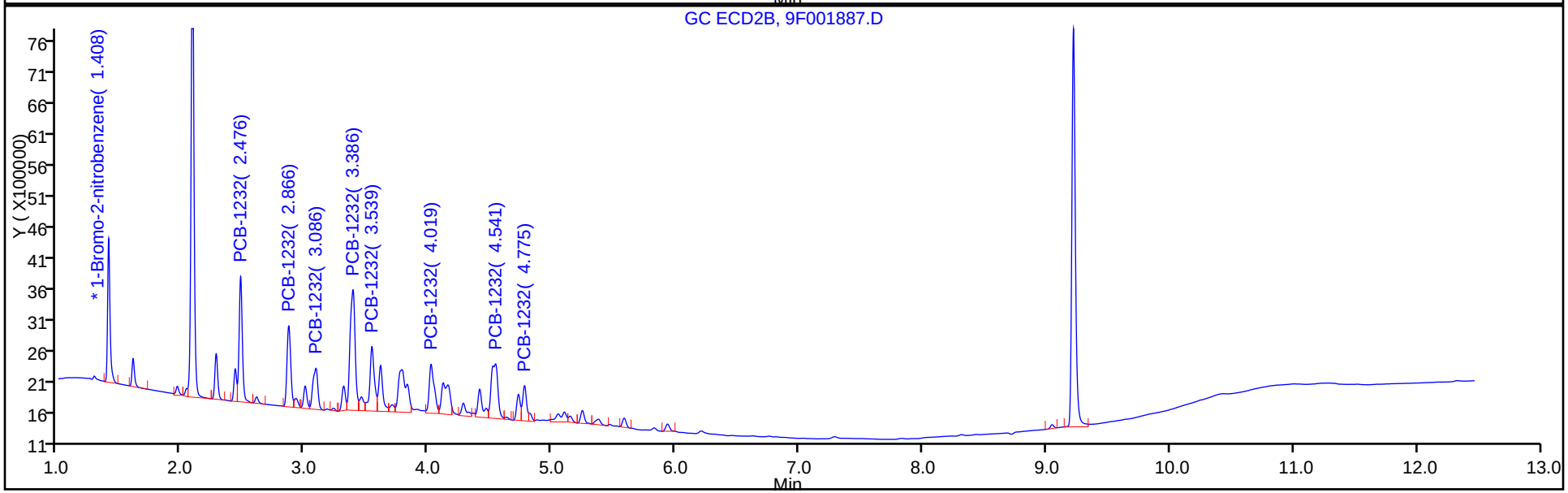
Lims ID: IC 1232 Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 9

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD





TestAmerica Edison

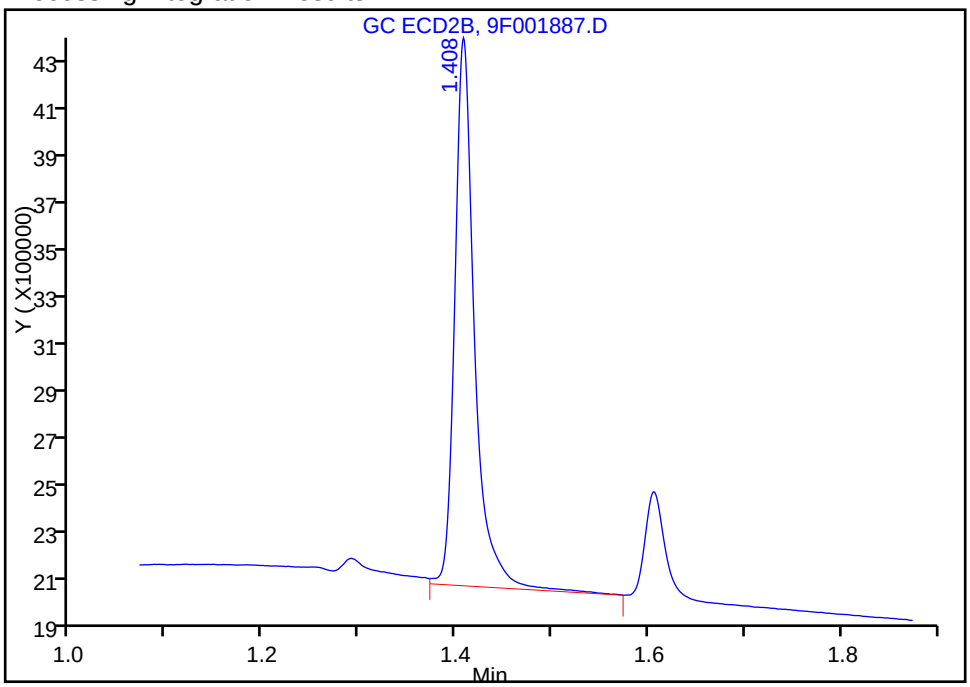
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001887.D				
Injection Date:	12-May-2016 12:59:16	Instrument ID:	CPESTGC9		
Lims ID:	IC 1232				
Client ID:					
Operator ID:		ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

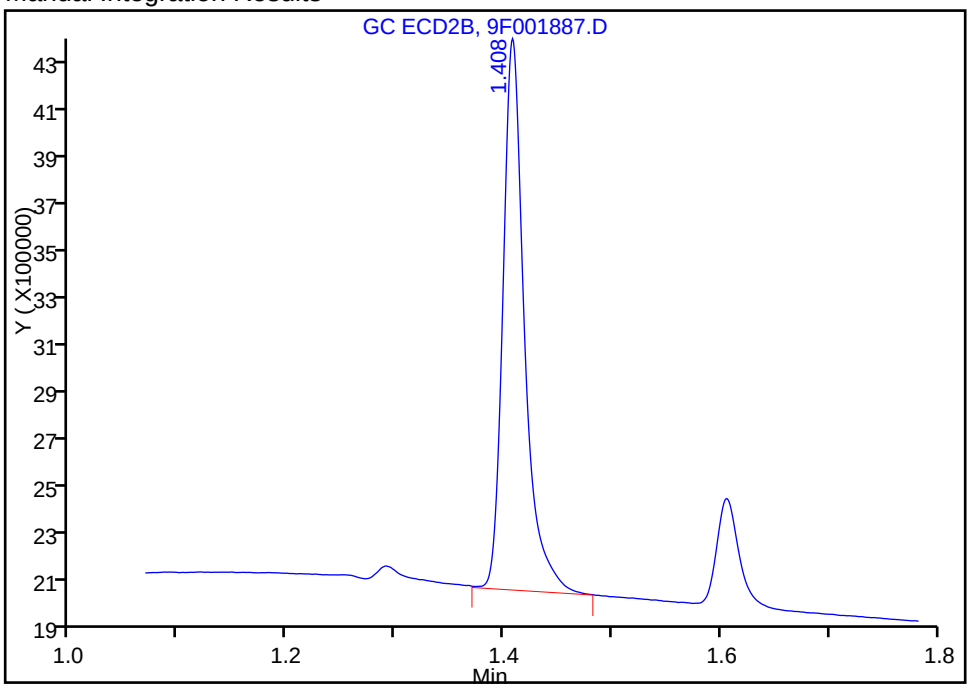
Processing Integration Results

RT: 1.41
Area: 3307930
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.41
Area: 3173814
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 13:45:19
Audit Action: Manually Integrated Audit Reason: Peak not integrated

Report Date: 12-May-2016 15:22:07 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001887.D

Injection Date: 12-May-2016 12:59:16 Instrument ID: CPESTGC9

Lims ID: IC 1232

Client ID:

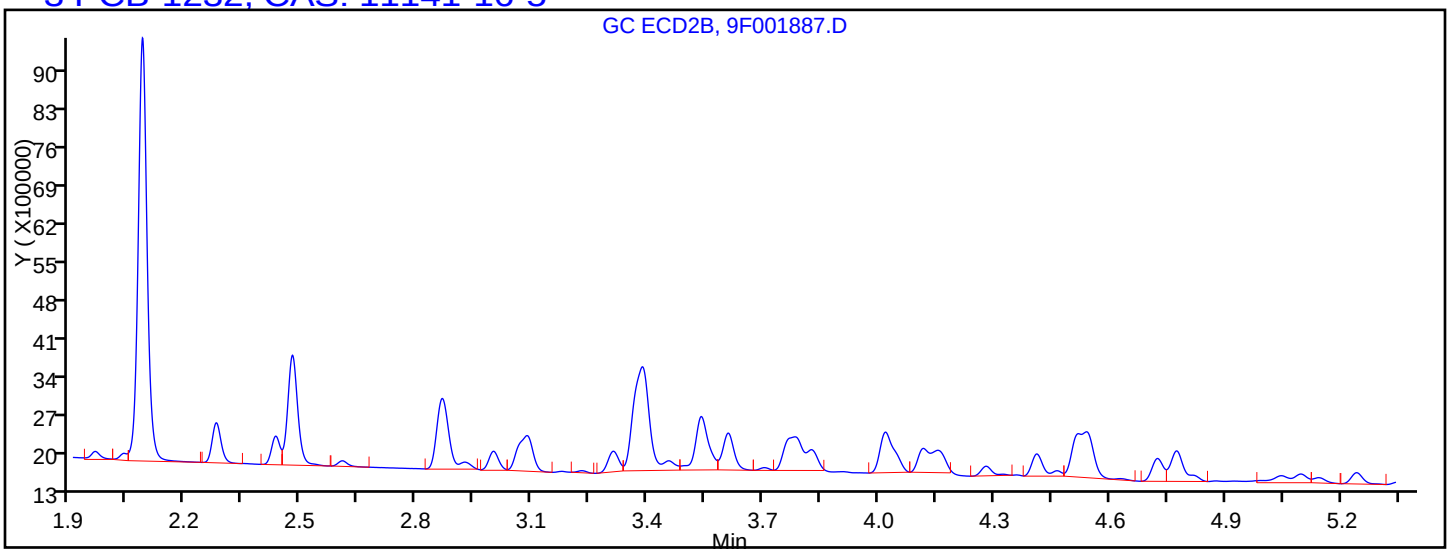
Operator ID: ALS Bottle#: 9 Worklist Smp#: 9

Injection Vol: 1.0 ul Dil. Factor: 1.0000

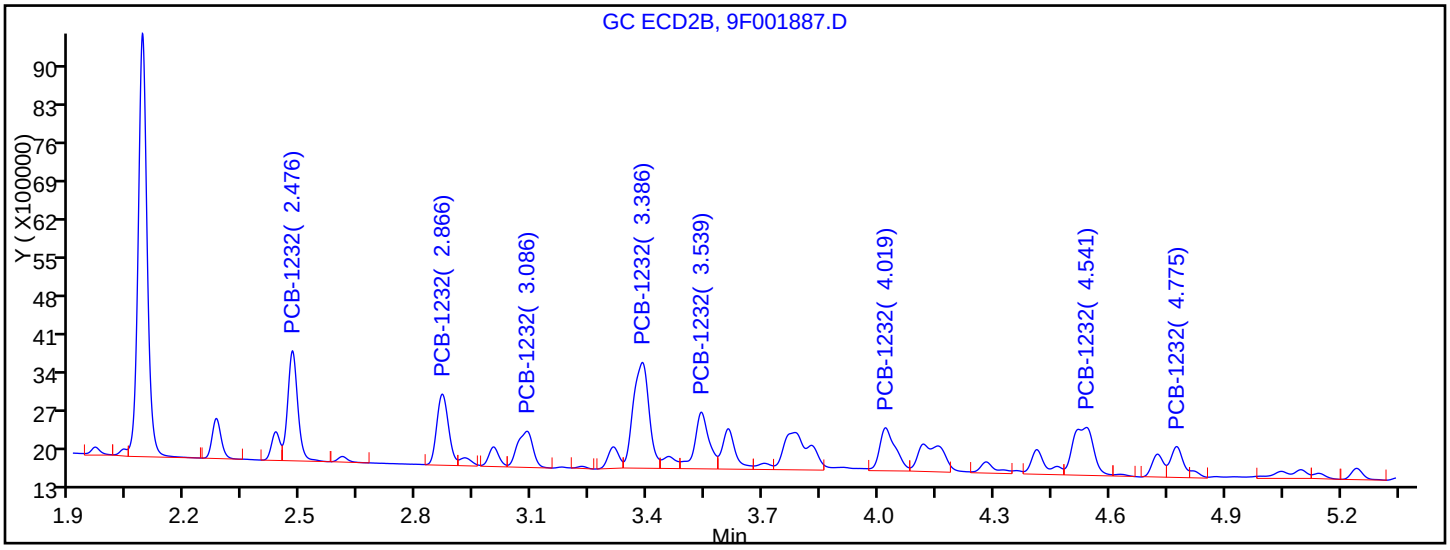
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

Column: Detector GC ECD2B

3 PCB-1232, CAS: 11141-16-5



Processing Integration Results



Manual Integration Results

RT = 2.476	Response = 3650253	M
RT = 2.866	Response = 2725211	M
RT = 3.086	Response = 1838610	M
RT = 3.386	Response = 5530016	M
RT = 3.539	Response = 2682294	M
RT = 4.019	Response = 2232099	M
RT = 4.541	Response = 3308880	M
RT = 4.775	Response = 1255924	M

Reviewer: patelji, 12-May-2016 13:45:19

Audit Action: Split an Integrated Peak Audit Reason: Peak not integrated

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 13:17 Calibration End Date: 05/12/2016 13:17 Calibration ID: 55712

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/10	9F001888.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1						B	M1	M2								
PCB-1242 Peak 1	0.0170					Ave		0.0170						20.0			0.9900
PCB-1242 Peak 2	0.0350					Ave		0.0350						20.0			0.9900
PCB-1242 Peak 3	0.0145					Ave		0.0145						20.0			0.9900
PCB-1242 Peak 4	0.0582					Ave		0.0582						20.0			0.9900
PCB-1242 Peak 5	0.0270					Ave		0.0270						20.0			0.9900
PCB-1242 Peak 6	0.0249					Ave		0.0249						20.0			0.9900
PCB-1242 Peak 7	0.0203					Ave		0.0203						20.0			0.9900
PCB-1242 Peak 8	0.0241					Ave		0.0241						20.0			0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 13:17 Calibration End Date: 05/12/2016 13:17 Calibration ID: 55712

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/10	9F001888.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1					LVL 1				
PCB-1242 Peak 1	BNB	Ave	2897555					1000				
PCB-1242 Peak 2	BNB	Ave	5972306					1000				
PCB-1242 Peak 3	BNB	Ave	2478362					1000				
PCB-1242 Peak 4	BNB	Ave	9925764					1000				
PCB-1242 Peak 5	BNB	Ave	4602033					1000				
PCB-1242 Peak 6	BNB	Ave	4246622					1000				
PCB-1242 Peak 7	BNB	Ave	3464440					1000				
PCB-1242 Peak 8	BNB	Ave	4112778					1000				

Curve Type Legend:

Ave = Average ISTD

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001888.D
Lims ID: IC 1242
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-May-2016 13:17:20 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0040924-010
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub4

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:22:09 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 13:39:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.624	1.624	0.000	3411220	20.0	20.0	M
2	1.409	1.409	0.000	3782023	20.0	20.0	M
						RPD = 0.00	
4 PCB-1242							M
1	3.215	3.215	0.000	2897555	1000.0	1000.0	a
1	3.728	3.728	0.000	5972306	1000.0	1000.0	M
1	4.025	4.025	0.000	2478362	1000.0	1000.0	M
1	4.295	4.295	0.000	9925764	1000.0	1000.0	M
1	4.466	4.466	0.000	4602033	1000.0	1000.0	M
1	5.210	5.210	0.000	4246622	1000.0	1000.0	M
1	5.539	5.539	0.000	3464440	1000.0	1000.0	M
1	5.595	5.595	0.000	4112778	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
2	2.477	2.477	0.000	2589130	1000.0	1000.0	M
2	2.866	2.866	0.000	4994026	1000.0	1000.0	M
2	3.087	3.087	0.000	3182135	1000.0	1000.0	M
2	3.386	3.386	0.000	9710696	1000.0	1000.0	M
2	3.540	3.540	0.000	4428430	1000.0	1000.0	M
2	4.019	4.019	0.000	4316359	1000.0	1000.0	M
2	4.543	4.543	0.000	7133657	1000.0	1000.0	M
2	4.776	4.776	0.000	2852460	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
						RPD = 0.00	

QC Flag Legend

Review Flags

M - Manually Integrated

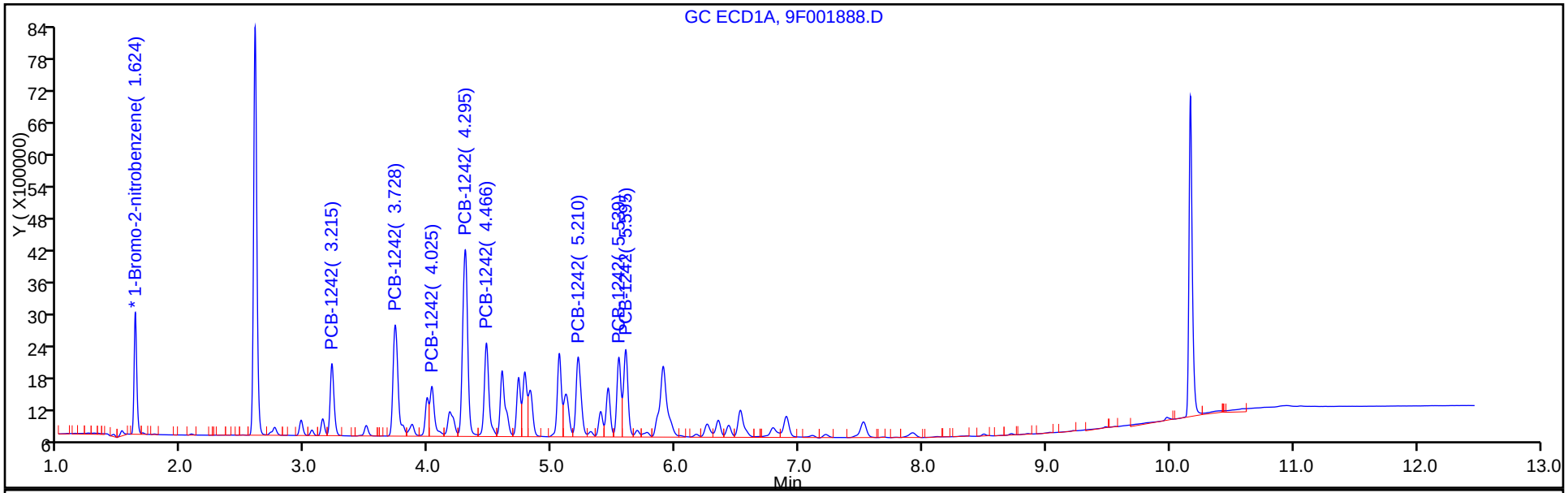
Reagents:

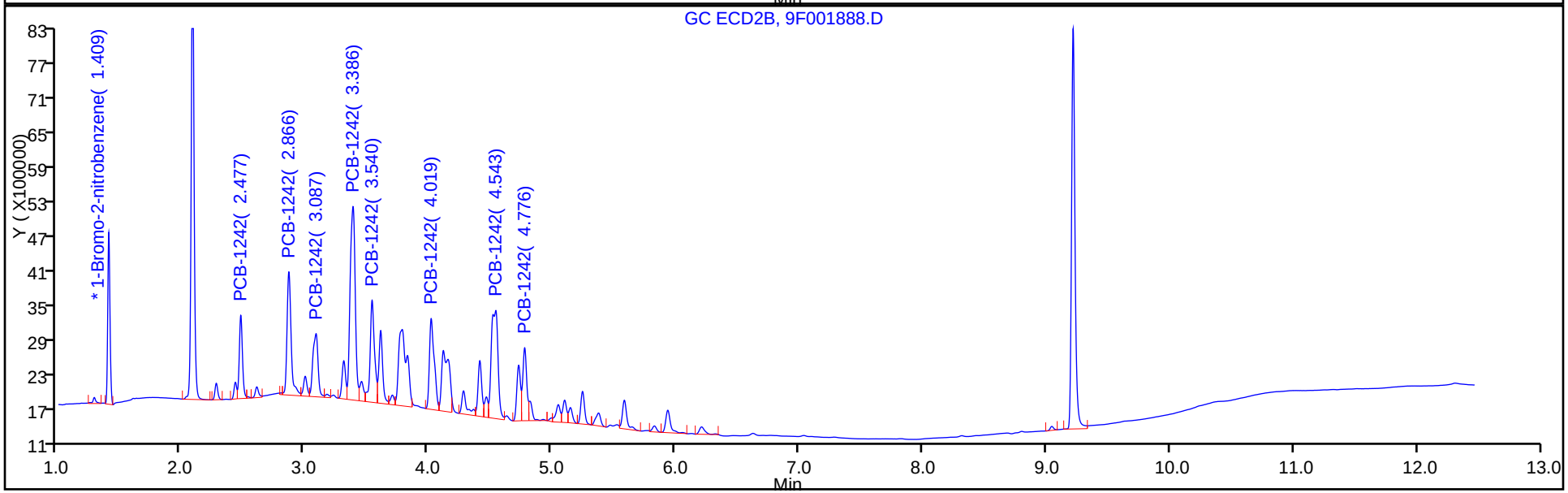
SG1242L3_00026	Amount Added:	1.00	Units: mL	
SGPCBISTD_00006	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:22:13 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001888.D				
Injection Date:	12-May-2016 13:17:20	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	IC 1242			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		





TestAmerica Edison

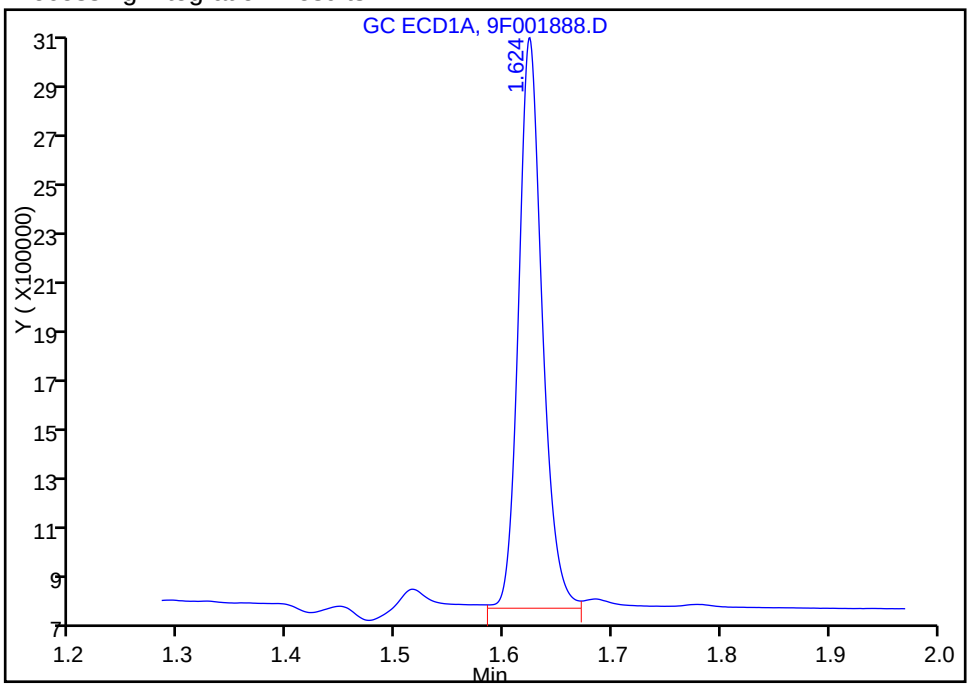
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001888.D				
Injection Date:	12-May-2016 13:17:20	Instrument ID:	CPESTGC9		
Lims ID:	IC 1242				
Client ID:					
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 1

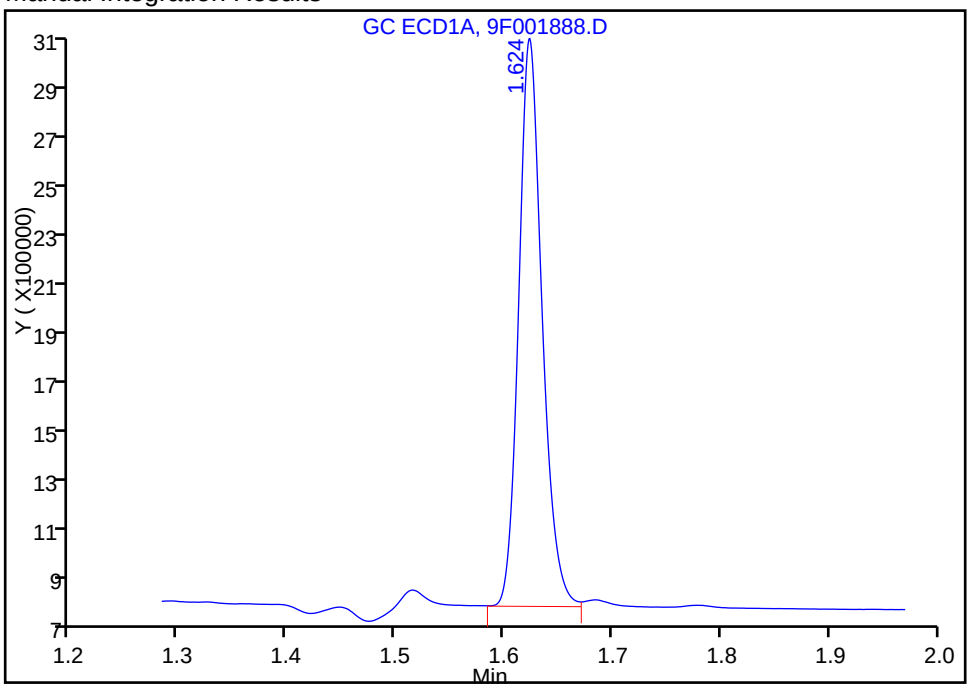
Processing Integration Results

RT: 1.62
Area: 3466665
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.62
Area: 3411220
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 13:39:36
Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

Report Date: 12-May-2016 15:22:13 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001888.D

Injection Date: 12-May-2016 13:17:20 Instrument ID: CPESTGC9

Lims ID: IC 1242

Client ID:

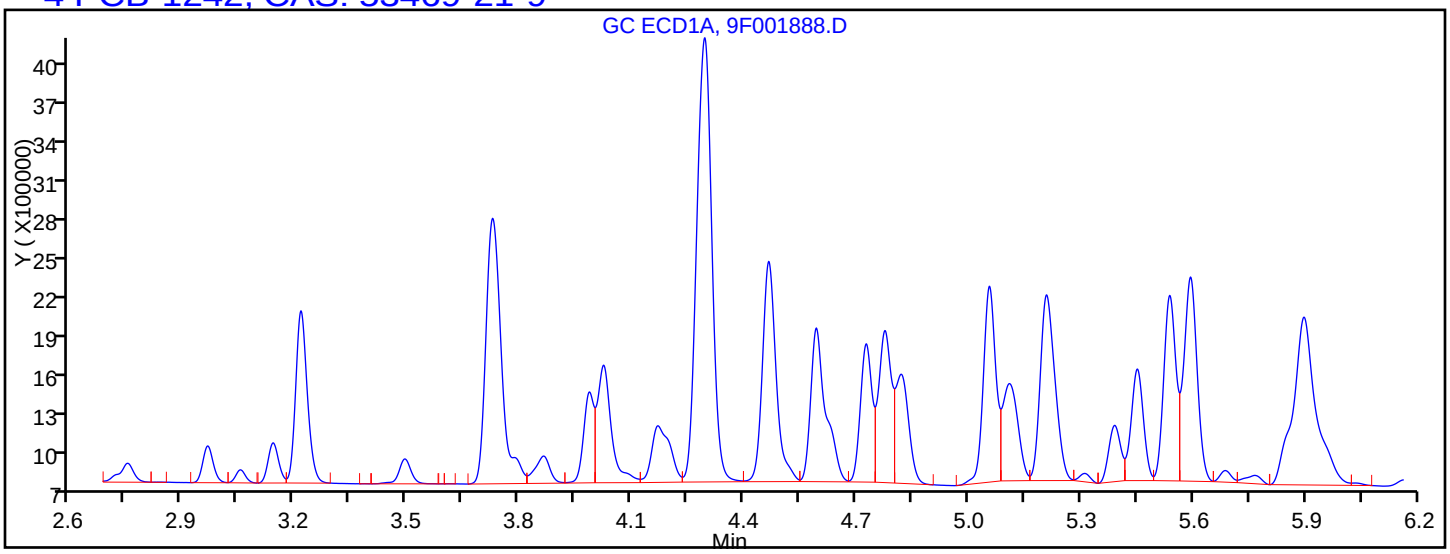
Operator ID: ALS Bottle#: 10 Worklist Smp#: 10

Injection Vol: 1.0 ul Dil. Factor: 1.0000

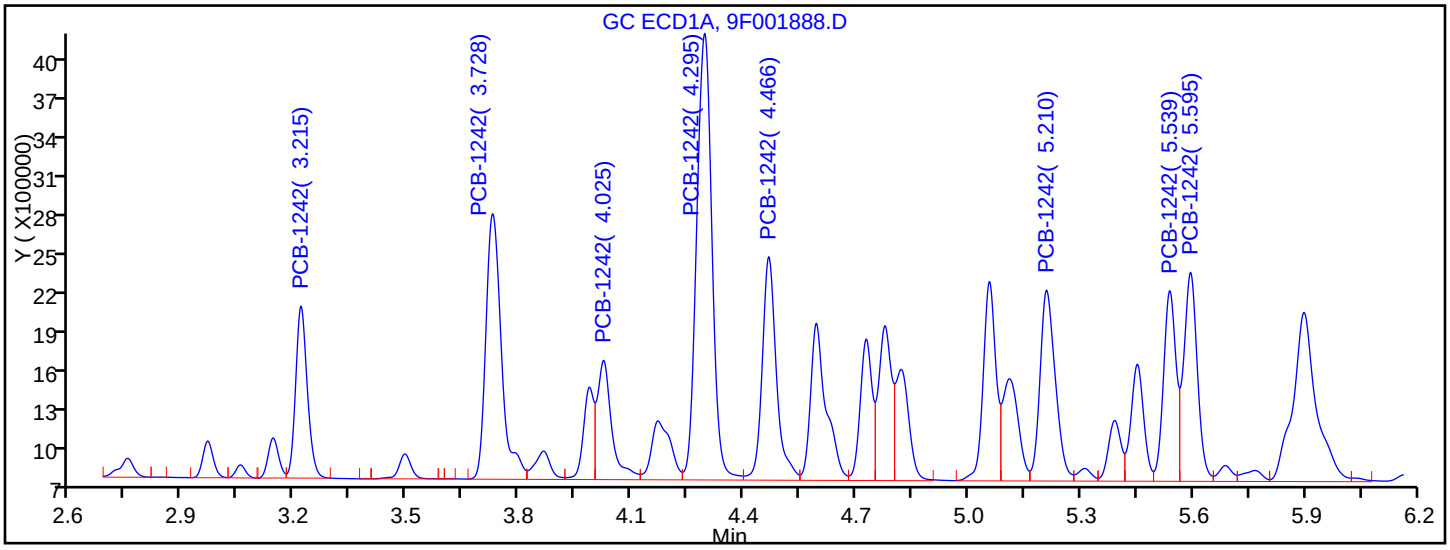
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

Column: Detector GC ECD1A

4 PCB-1242, CAS: 53469-21-9



Processing Integration Results



Manual Integration Results

RT = 3.215	Response = 2897555	M
RT = 3.728	Response = 5972306	M
RT = 4.025	Response = 2478362	M
RT = 4.295	Response = 9925764	M
RT = 4.466	Response = 4602033	M
RT = 5.210	Response = 4246622	M
RT = 5.539	Response = 3464440	M
RT = 5.595	Response = 4112778	M

Reviewer: patelji, 12-May-2016 13:42:02

Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 13:17 Calibration End Date: 05/12/2016 13:17 Calibration ID: 55713

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/10	9F001888.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1						B	M1	M2								
PCB-1242 Peak 1	0.0137					Ave		0.0137						20.0			0.9900
PCB-1242 Peak 2	0.0264					Ave		0.0264						20.0			0.9900
PCB-1242 Peak 3	0.0168					Ave		0.0168						20.0			0.9900
PCB-1242 Peak 4	0.0514					Ave		0.0514						20.0			0.9900
PCB-1242 Peak 5	0.0234					Ave		0.0234						20.0			0.9900
PCB-1242 Peak 6	0.0228					Ave		0.0228						20.0			0.9900
PCB-1242 Peak 7	0.0377					Ave		0.0377						20.0			0.9900
PCB-1242 Peak 8	0.0151					Ave		0.0151						20.0			0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 13:17 Calibration End Date: 05/12/2016 13:17 Calibration ID: 55713

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/10	9F001888.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1					LVL 1				
PCB-1242 Peak 1	BNB	Ave	2589130					1000				
PCB-1242 Peak 2	BNB	Ave	4994026					1000				
PCB-1242 Peak 3	BNB	Ave	3182135					1000				
PCB-1242 Peak 4	BNB	Ave	9710696					1000				
PCB-1242 Peak 5	BNB	Ave	4428430					1000				
PCB-1242 Peak 6	BNB	Ave	4316359					1000				
PCB-1242 Peak 7	BNB	Ave	7133657					1000				
PCB-1242 Peak 8	BNB	Ave	2852460					1000				

Curve Type Legend:

Ave = Average ISTD

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001888.D
Lims ID: IC 1242
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-May-2016 13:17:20 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0040924-010
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub4

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:22:09 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 13:39:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.624	1.624	0.000	3411220	20.0	20.0	M
2	1.409	1.409	0.000	3782023	20.0	20.0	M
						RPD = 0.00	
4 PCB-1242							M
1	3.215	3.215	0.000	2897555	1000.0	1000.0	a
1	3.728	3.728	0.000	5972306	1000.0	1000.0	M
1	4.025	4.025	0.000	2478362	1000.0	1000.0	M
1	4.295	4.295	0.000	9925764	1000.0	1000.0	M
1	4.466	4.466	0.000	4602033	1000.0	1000.0	M
1	5.210	5.210	0.000	4246622	1000.0	1000.0	M
1	5.539	5.539	0.000	3464440	1000.0	1000.0	M
1	5.595	5.595	0.000	4112778	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
2	2.477	2.477	0.000	2589130	1000.0	1000.0	M
2	2.866	2.866	0.000	4994026	1000.0	1000.0	M
2	3.087	3.087	0.000	3182135	1000.0	1000.0	M
2	3.386	3.386	0.000	9710696	1000.0	1000.0	M
2	3.540	3.540	0.000	4428430	1000.0	1000.0	M
2	4.019	4.019	0.000	4316359	1000.0	1000.0	M
2	4.543	4.543	0.000	7133657	1000.0	1000.0	M
2	4.776	4.776	0.000	2852460	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
						RPD = 0.00	

QC Flag Legend

Review Flags

M - Manually Integrated

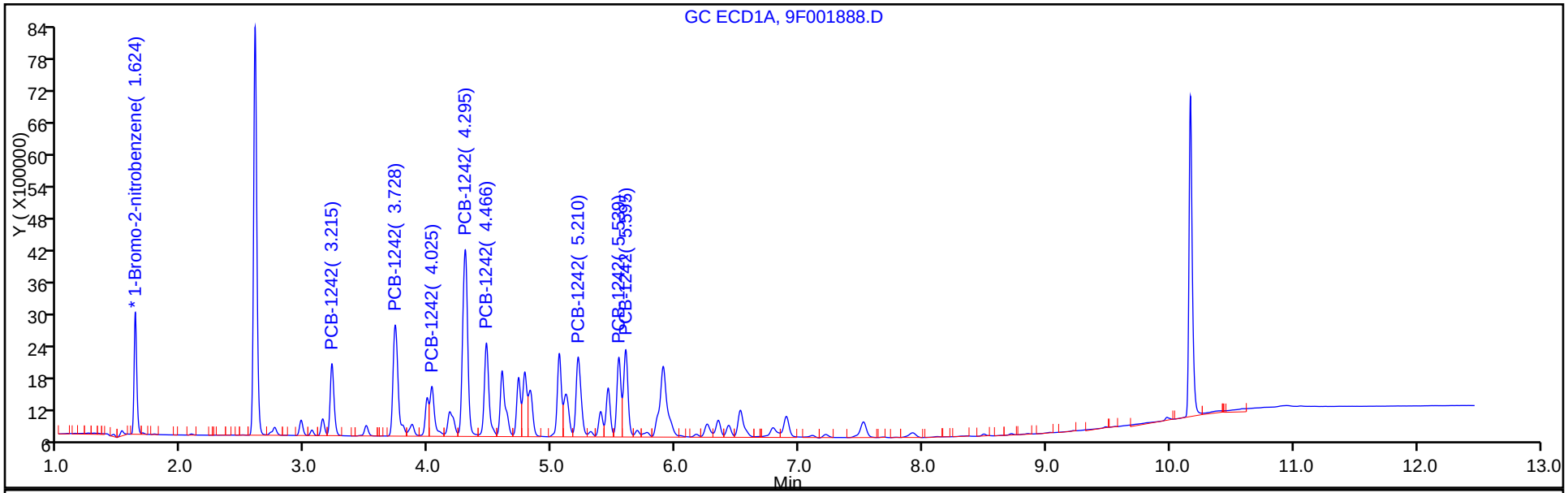
Reagents:

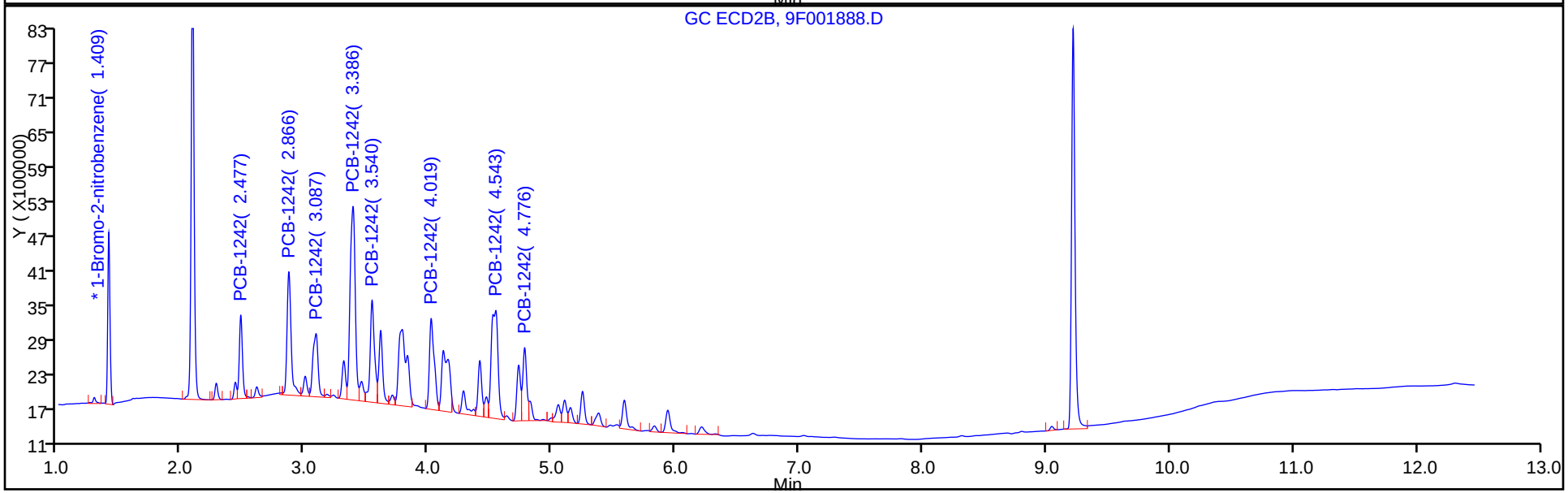
SG1242L3_00026	Amount Added:	1.00	Units: mL	
SGPCBISTD_00006	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:22:14 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001888.D				
Injection Date:	12-May-2016 13:17:20	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	IC 1242			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		





TestAmerica Edison

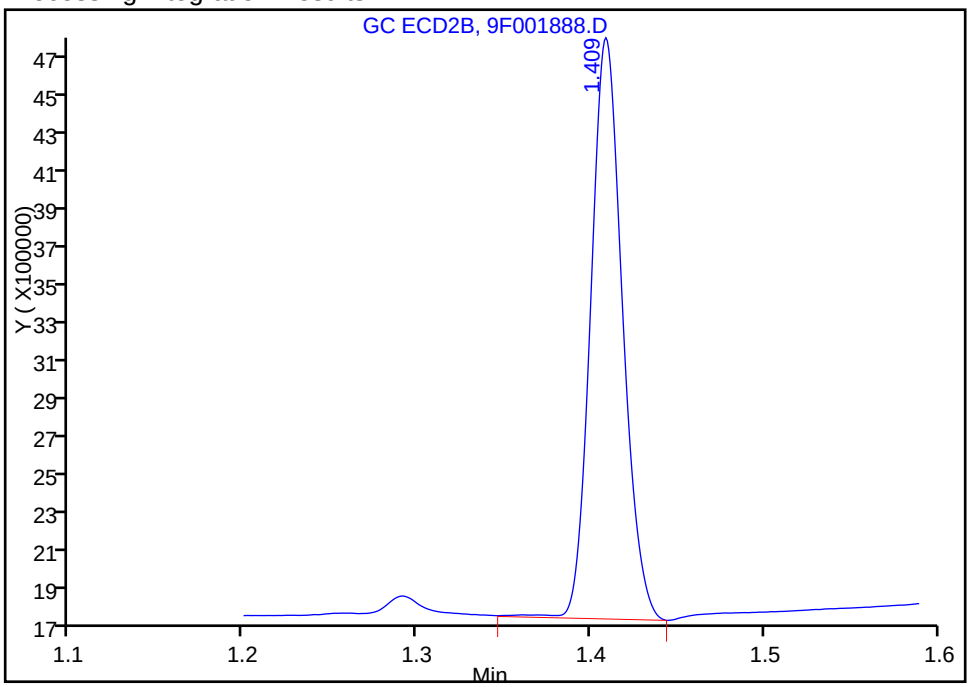
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001888.D				
Injection Date:	12-May-2016 13:17:20	Instrument ID:	CPESTGC9		
Lims ID:	IC 1242				
Client ID:					
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

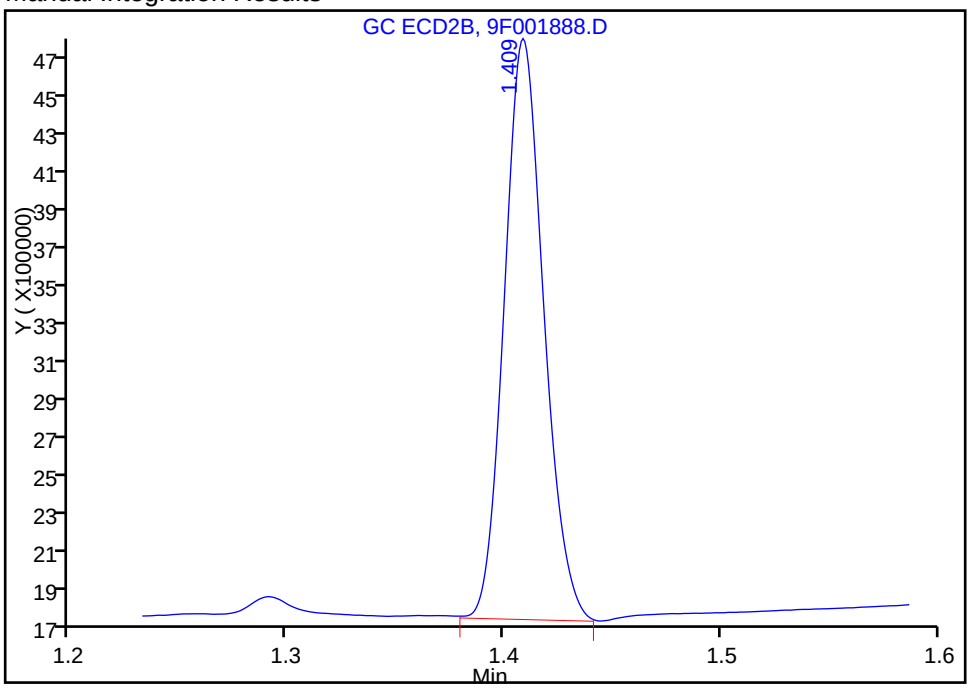
Processing Integration Results

RT: 1.41
Area: 3802656
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.41
Area: 3782023
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 13:39:36
Audit Action: Manually Integrated Audit Reason: Peak not integrated

Report Date: 12-May-2016 15:22:14 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001888.D

Injection Date: 12-May-2016 13:17:20 Instrument ID: CPESTGC9

Lims ID: IC 1242

Client ID:

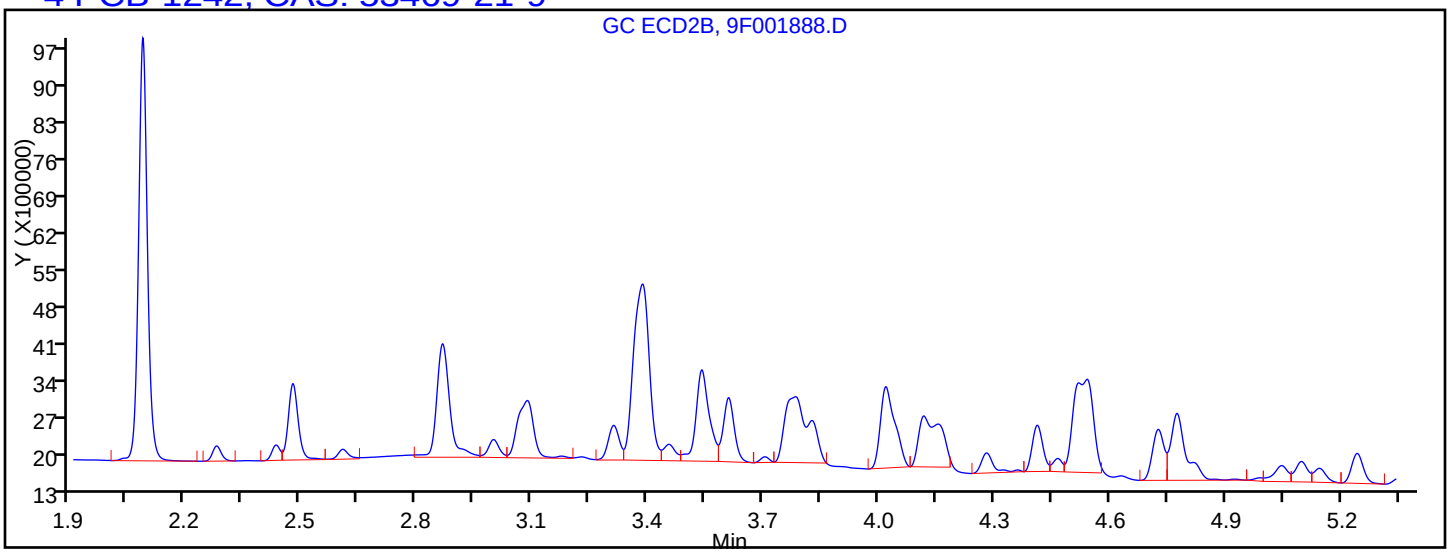
Operator ID: ALS Bottle#: 10 Worklist Smp#: 10

Injection Vol: 1.0 ul Dil. Factor: 1.0000

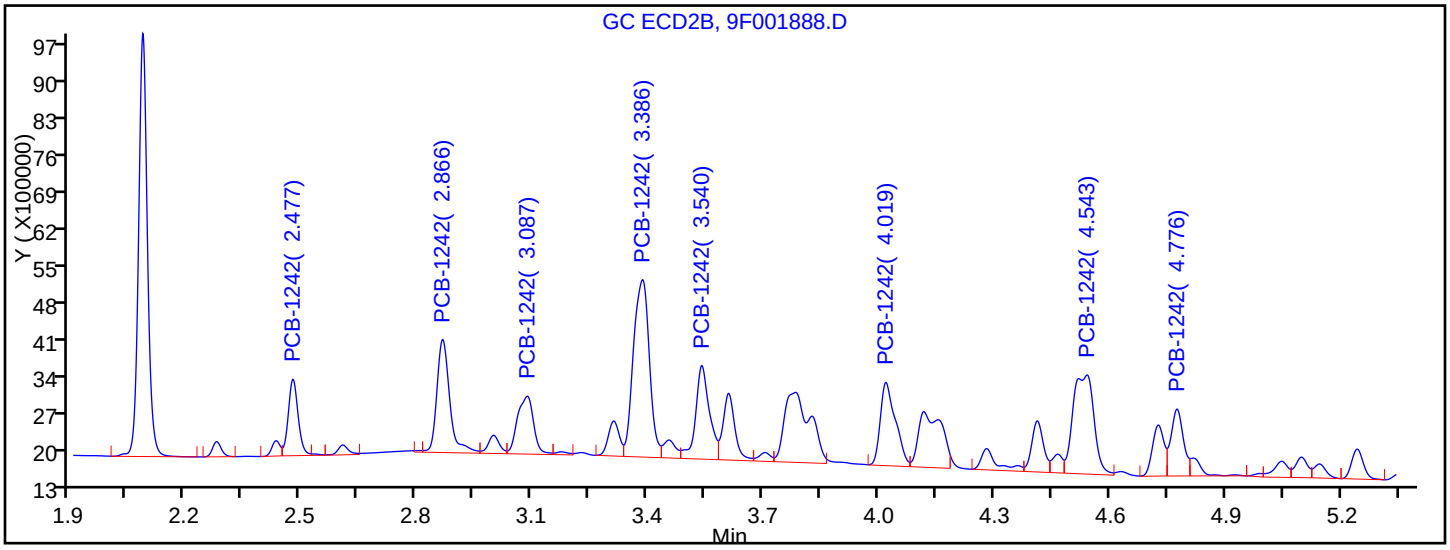
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

Column: Detector GC ECD2B

4 PCB-1242, CAS: 53469-21-9



Processing Integration Results



Manual Integration Results

RT = 2.477	Response = 2589130	M
RT = 2.866	Response = 4994026	M
RT = 3.087	Response = 3182135	M
RT = 3.386	Response = 9710696	M
RT = 3.540	Response = 4428430	M
RT = 4.019	Response = 4316359	M
RT = 4.543	Response = 7133657	M
RT = 4.776	Response = 2852460	M

Reviewer: patelji, 12-May-2016 13:39:36

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 13:35 Calibration End Date: 05/12/2016 13:35 Calibration ID: 55718

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/11	9F001889.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1						B	M1	M2								
PCB-1248 Peak 1	0.0168					Ave		0.0168						20.0			0.9900
PCB-1248 Peak 2	0.0350					Ave		0.0350						20.0			0.9900
PCB-1248 Peak 3	0.0220					Ave		0.0220						20.0			0.9900
PCB-1248 Peak 4	0.0216					Ave		0.0216						20.0			0.9900
PCB-1248 Peak 5	0.0315					Ave		0.0315						20.0			0.9900
PCB-1248 Peak 6	0.0305					Ave		0.0305						20.0			0.9900
PCB-1248 Peak 7	0.0361					Ave		0.0361						20.0			0.9900
PCB-1248 Peak 8	0.0151					Ave		0.0151						20.0			0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 13:35 Calibration End Date: 05/12/2016 13:35 Calibration ID: 55718

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/11	9F001889.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1					LVL 1				
PCB-1248 Peak 1	BNB	Ave	2916975					1000				
PCB-1248 Peak 2	BNB	Ave	6101457					1000				
PCB-1248 Peak 3	BNB	Ave	3824662					1000				
PCB-1248 Peak 4	BNB	Ave	3756826					1000				
PCB-1248 Peak 5	BNB	Ave	5477682					1000				
PCB-1248 Peak 6	BNB	Ave	5311029					1000				
PCB-1248 Peak 7	BNB	Ave	6283639					1000				
PCB-1248 Peak 8	BNB	Ave	2633157					1000				

Curve Type Legend:

Ave = Average ISTD

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001889.D
Lims ID: IC 1248
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-May-2016 13:35:21 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0040924-011
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub5

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:22:18 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 13:59:00

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.624	1.624	0.000	3482365	20.0	20.0	M
2	1.409	1.409	0.000	3427554	20.0	20.0	
						RPD = 0.00	
6 PCB-1248							M
1	3.726	3.726	0.000	2916975	1000.0	1000.0	M
1	4.294	4.294	0.000	6101457	1000.0	1000.0	M
1	4.728	4.728	0.000	3824662	1000.0	1000.0	M
1	4.778	4.778	0.000	3756826	1000.0	1000.0	M
1	5.209	5.209	0.000	5477682	1000.0	1000.0	M
1	5.539	5.539	0.000	5311029	1000.0	1000.0	M
1	5.594	5.594	0.000	6283639	1000.0	1000.0	M
1	6.895	6.895	0.000	2633157	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
2	2.866	2.866	0.000	2490297	1000.0	1000.0	M
2	3.384	3.384	0.000	6302896	1000.0	1000.0	M
2	3.770	3.770	0.000	6812415	1000.0	1000.0	M
2	4.118	4.118	0.000	3894500	1000.0	1000.0	M
2	4.520	4.520	0.000	10999621	1000.0	1000.0	M
2	4.777	4.777	0.000	5024836	1000.0	1000.0	M
2	5.245	5.245	0.000	3418433	1000.0	1000.0	M
2	5.935	5.935	0.000	2173399	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
						RPD = 0.00	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

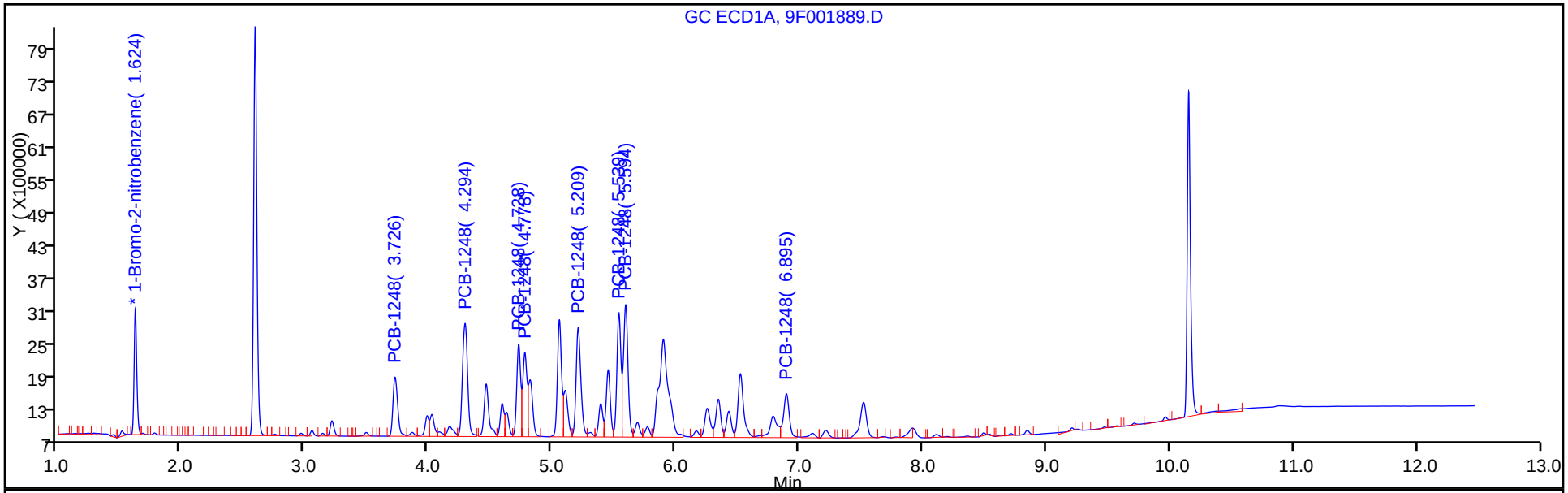
SG1248L3_00025	Amount Added: 1.00	Units: mL	
SGPCBISTD_00006	Amount Added: 20.00	Units: uL	Run Reagent

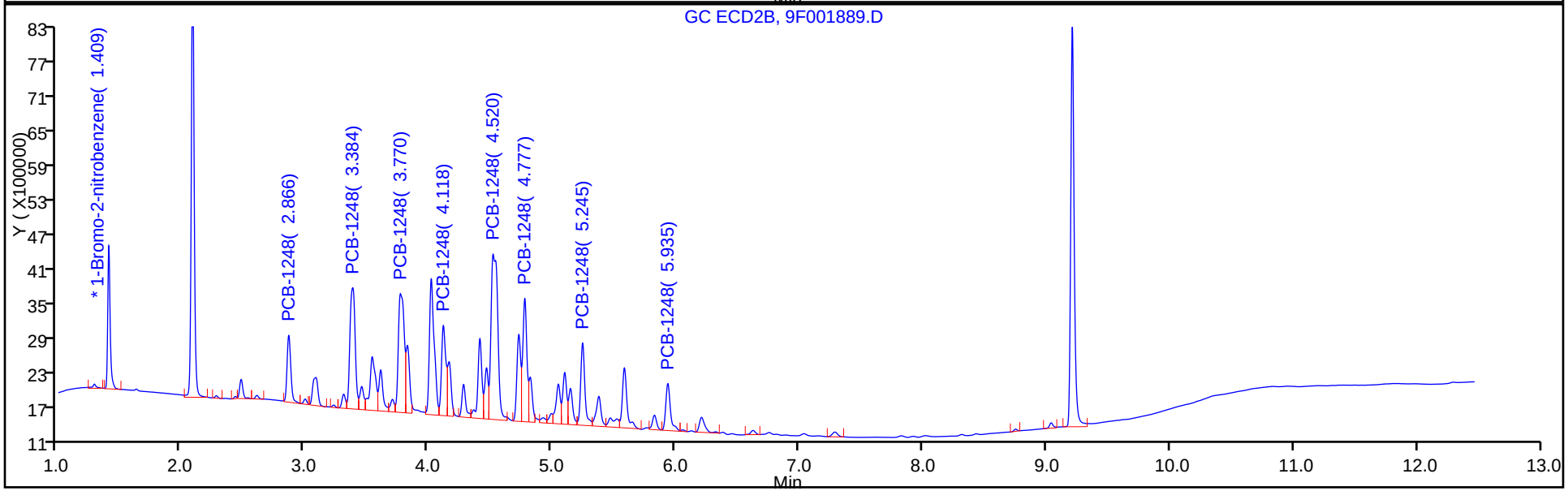
Report Date: 12-May-2016 15:22:22 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001889.D

Injection Date:	12-May-2016 13:35:21	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	IC 1248			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		





Manual Integration/User Assign Peak Report

TestAmerica Edison

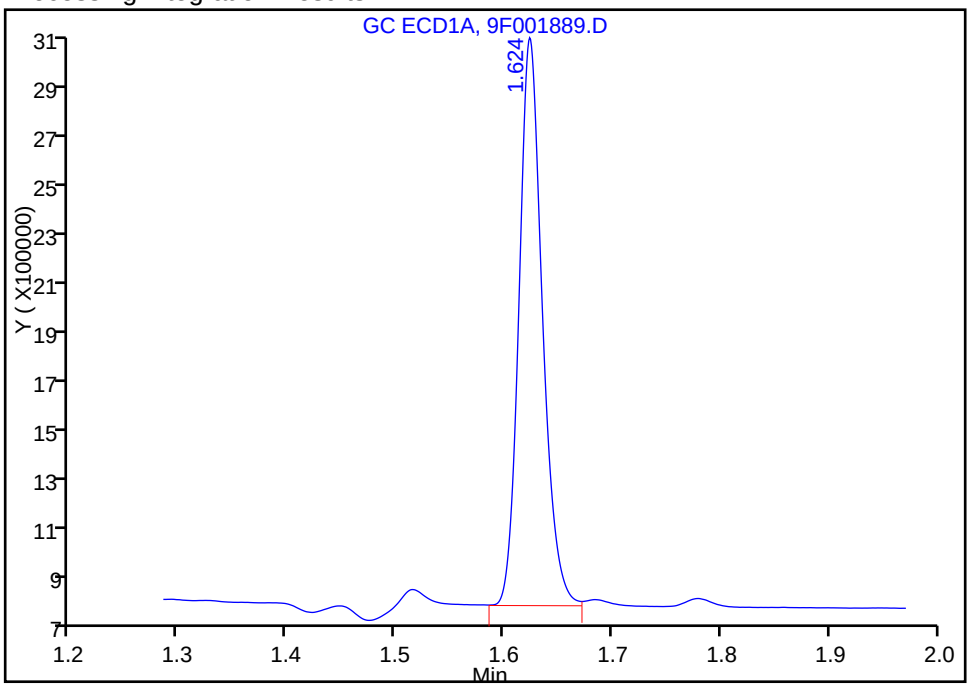
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001889.D				
Injection Date:	12-May-2016 13:35:21	Instrument ID:	CPESTGC9		
Lims ID:	IC 1248				
Client ID:					
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 1

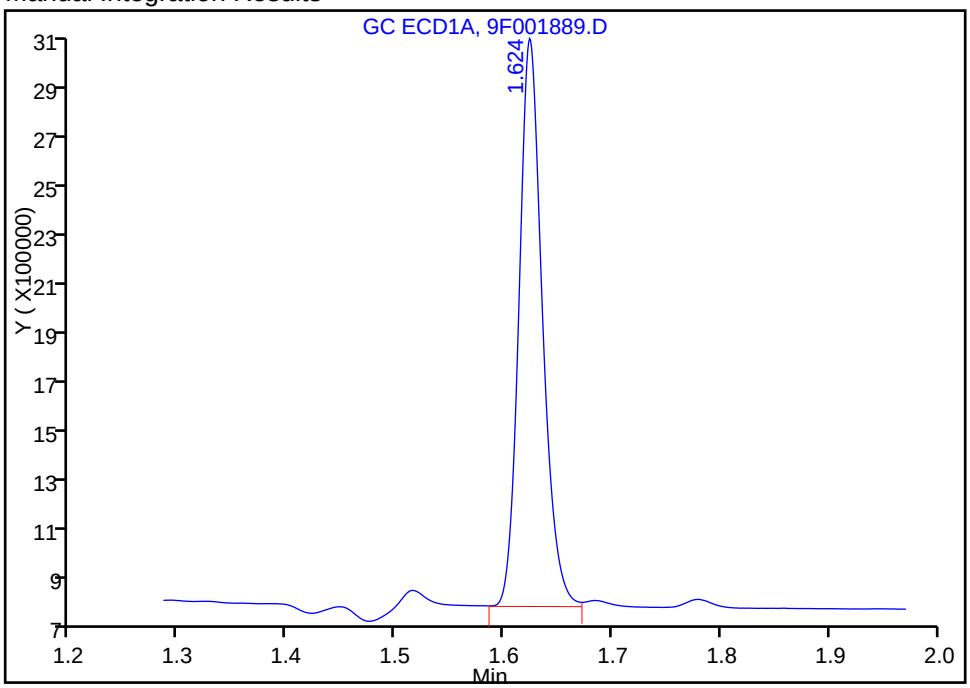
Processing Integration Results

RT: 1.62
Area: 3538178
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.62
Area: 3482365
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 14:03:01
Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

Report Date: 12-May-2016 15:22:22 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001889.D

Injection Date: 12-May-2016 13:35:21 Instrument ID: CPESTGC9

Lims ID: IC 1248

Client ID:

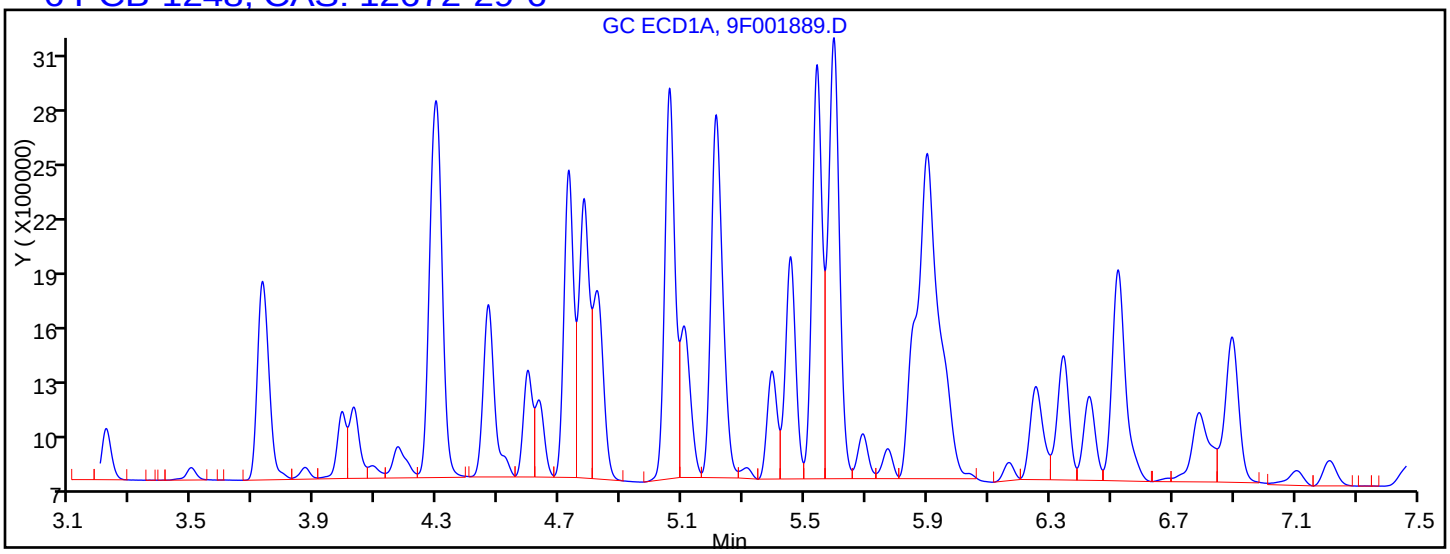
Operator ID: ALS Bottle#: 11 Worklist Smp#: 11

Injection Vol: 1.0 ul Dil. Factor: 1.0000

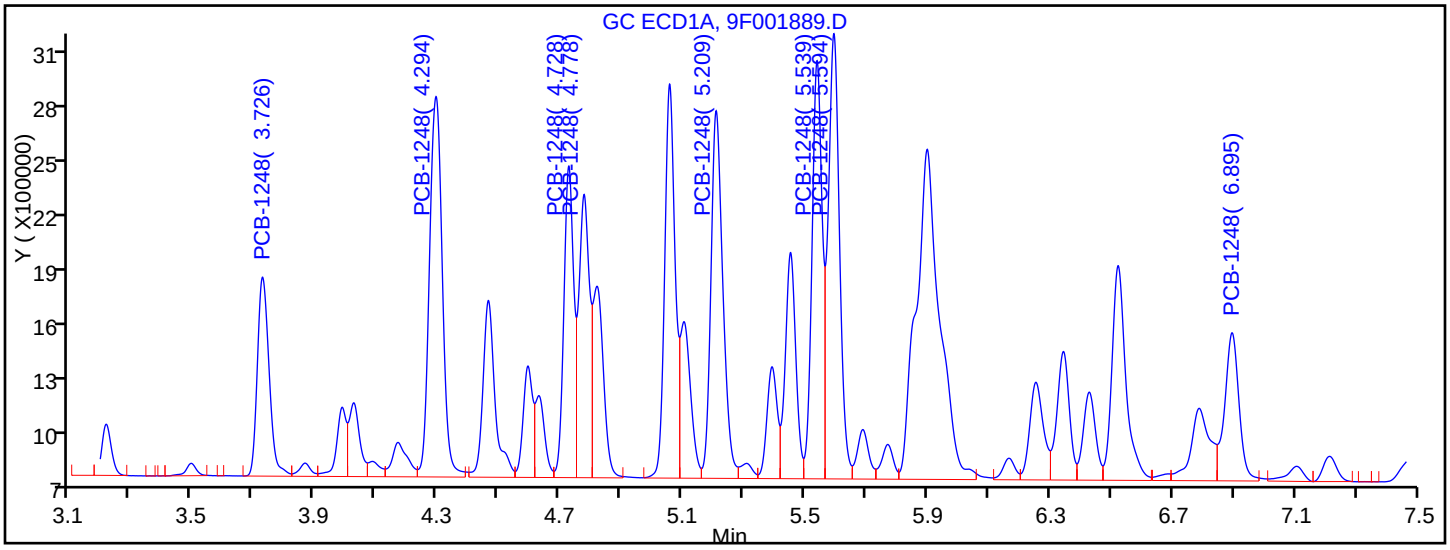
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

Column: Detector GC ECD1A

6 PCB-1248, CAS: 12672-29-6



Processing Integration Results



Manual Integration Results

RT = 3.726	Response = 2916975	M
RT = 4.294	Response = 6101457	M
RT = 4.728	Response = 3824662	M
RT = 4.778	Response = 3756826	M
RT = 5.209	Response = 5477682	M
RT = 5.539	Response = 5311029	M
RT = 5.594	Response = 6283639	M
RT = 6.895	Response = 2633157	M

Reviewer: patelji, 12-May-2016 14:03:01

Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 13:35 Calibration End Date: 05/12/2016 13:35 Calibration ID: 55719

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/11	9F001889.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1						B	M1	M2								
PCB-1248 Peak 1	0.0145					Ave		0.0145						20.0			0.9900
PCB-1248 Peak 2	0.0368					Ave		0.0368						20.0			0.9900
PCB-1248 Peak 3	0.0398					Ave		0.0398						20.0			0.9900
PCB-1248 Peak 4	0.0227					Ave		0.0227						20.0			0.9900
PCB-1248 Peak 5	0.0642					Ave		0.0642						20.0			0.9900
PCB-1248 Peak 6	0.0293					Ave		0.0293						20.0			0.9900
PCB-1248 Peak 7	0.0199					Ave		0.0199						20.0			0.9900
PCB-1248 Peak 8	0.0127					Ave		0.0127						20.0			0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 13:35 Calibration End Date: 05/12/2016 13:35 Calibration ID: 55719

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/11	9F001889.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1					LVL 1				
PCB-1248 Peak 1	BNB	Ave	2490297					1000				
PCB-1248 Peak 2	BNB	Ave	6302896					1000				
PCB-1248 Peak 3	BNB	Ave	6812415					1000				
PCB-1248 Peak 4	BNB	Ave	3894500					1000				
PCB-1248 Peak 5	BNB	Ave	10999621					1000				
PCB-1248 Peak 6	BNB	Ave	5024836					1000				
PCB-1248 Peak 7	BNB	Ave	3418433					1000				
PCB-1248 Peak 8	BNB	Ave	2173399					1000				

Curve Type Legend:

Ave = Average ISTD

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001889.D
Lims ID: IC 1248
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-May-2016 13:35:21 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0040924-011
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub5

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:22:18 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 13:59:00

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.624	1.624	0.000	3482365	20.0	20.0	M
2	1.409	1.409	0.000	3427554	20.0	20.0	
						RPD = 0.00	
6 PCB-1248							M
1	3.726	3.726	0.000	2916975	1000.0	1000.0	M
1	4.294	4.294	0.000	6101457	1000.0	1000.0	M
1	4.728	4.728	0.000	3824662	1000.0	1000.0	M
1	4.778	4.778	0.000	3756826	1000.0	1000.0	M
1	5.209	5.209	0.000	5477682	1000.0	1000.0	M
1	5.539	5.539	0.000	5311029	1000.0	1000.0	M
1	5.594	5.594	0.000	6283639	1000.0	1000.0	M
1	6.895	6.895	0.000	2633157	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
2	2.866	2.866	0.000	2490297	1000.0	1000.0	M
2	3.384	3.384	0.000	6302896	1000.0	1000.0	M
2	3.770	3.770	0.000	6812415	1000.0	1000.0	M
2	4.118	4.118	0.000	3894500	1000.0	1000.0	M
2	4.520	4.520	0.000	10999621	1000.0	1000.0	M
2	4.777	4.777	0.000	5024836	1000.0	1000.0	M
2	5.245	5.245	0.000	3418433	1000.0	1000.0	M
2	5.935	5.935	0.000	2173399	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
						RPD = 0.00	

QC Flag Legend

Review Flags

M - Manually Integrated

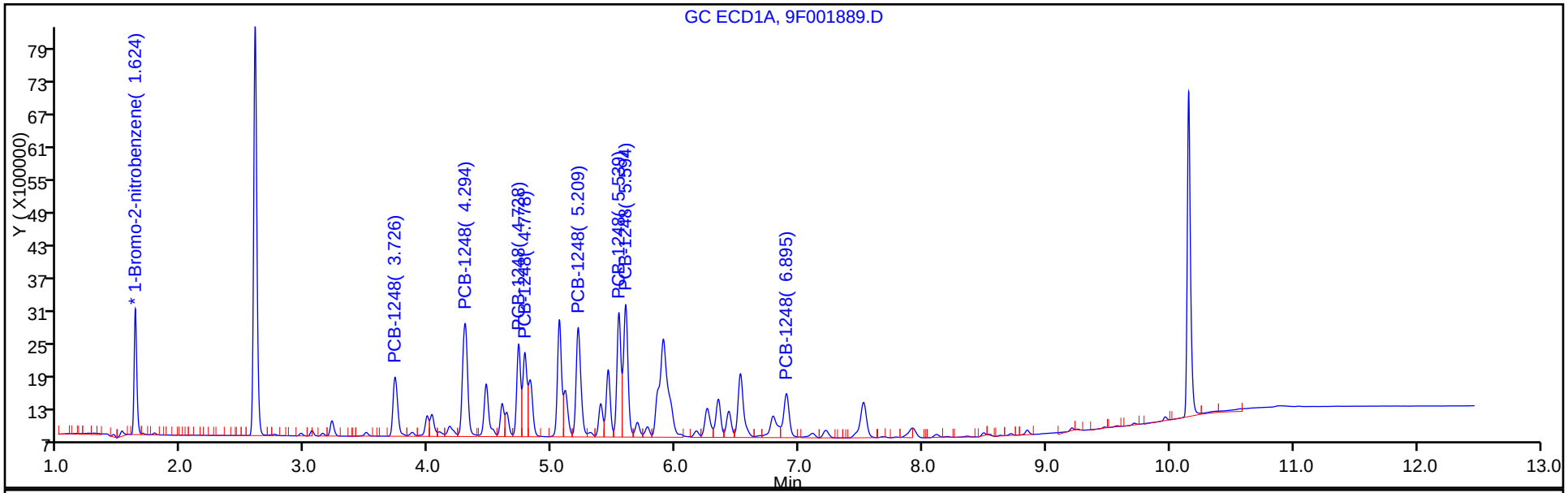
Reagents:

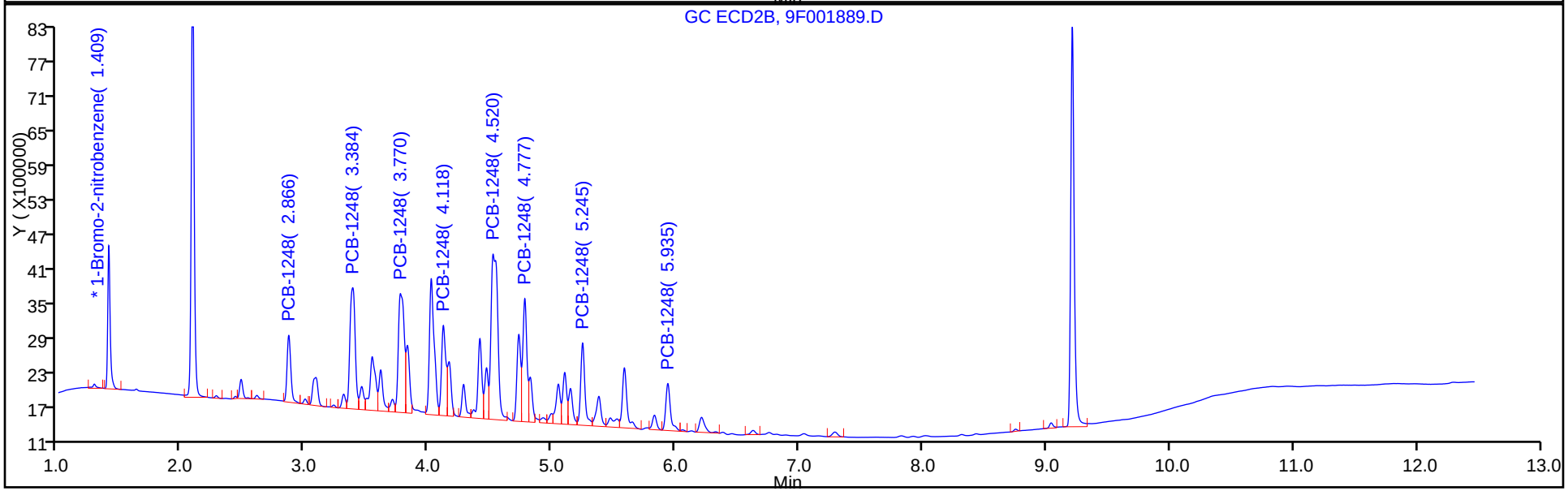
SG1248L3_00025	Amount Added:	1.00	Units: mL	
SGPCBISTD_00006	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:22:23 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001889.D				
Injection Date:	12-May-2016 13:35:21	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	IC 1248			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		





Report Date: 12-May-2016 15:22:23 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001889.D

Injection Date: 12-May-2016 13:35:21 Instrument ID: CPESTGC9

Lims ID: IC 1248

Client ID:

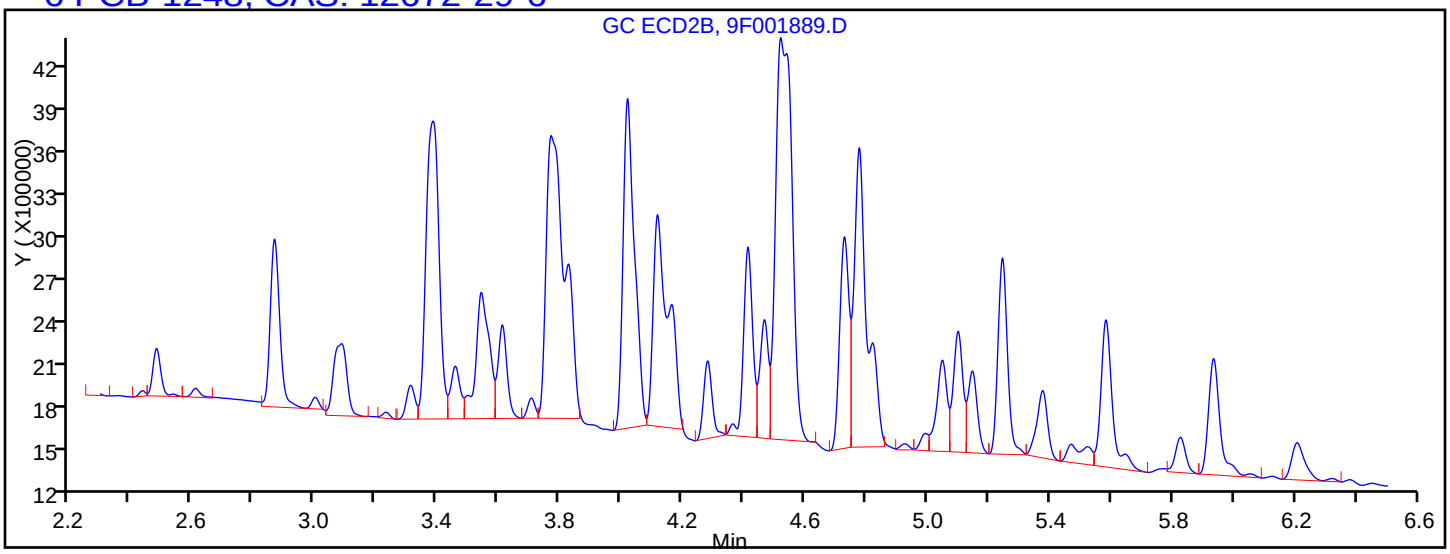
Operator ID: ALS Bottle#: 11 Worklist Smp#: 11

Injection Vol: 1.0 ul Dil. Factor: 1.0000

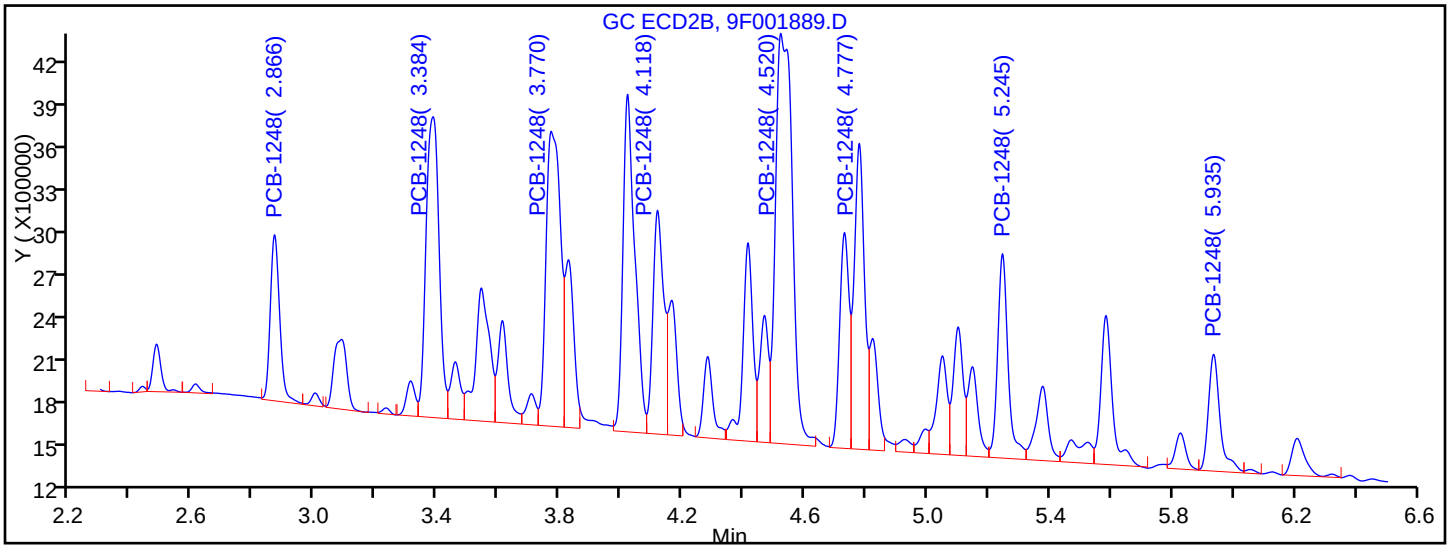
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

Column: Detector GC ECD2B

6 PCB-1248, CAS: 12672-29-6



Processing Integration Results



Manual Integration Results

RT = 2.866	Response = 2490297	M
RT = 3.384	Response = 6302896	M
RT = 3.770	Response = 6812415	M
RT = 4.118	Response = 3894500	M
RT = 4.520	Response = 10999621	M
RT = 4.777	Response = 5024836	M
RT = 5.245	Response = 3418433	M
RT = 5.935	Response = 2173399	M

Reviewer: patelji, 12-May-2016 14:03:01

Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 13:53 Calibration End Date: 05/12/2016 13:53 Calibration ID: 55724

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/12	9F001890.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1						B	M1	M2								
PCB-1254 Peak 1	0.0129					Ave		0.0129						20.0			0.9900
PCB-1254 Peak 2	0.0349					Ave		0.0349						20.0			0.9900
PCB-1254 Peak 3	0.0401					Ave		0.0401						20.0			0.9900
PCB-1254 Peak 4	0.0309					Ave		0.0309						20.0			0.9900
PCB-1254 Peak 5	0.0636					Ave		0.0636						20.0			0.9900
PCB-1254 Peak 6	0.0471					Ave		0.0471						20.0			0.9900
PCB-1254 Peak 7	0.0379					Ave		0.0379						20.0			0.9900
PCB-1254 Peak 8	0.0624					Ave		0.0624						20.0			0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 13:53 Calibration End Date: 05/12/2016 13:53 Calibration ID: 55724

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/12	9F001890.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1					LVL 1				
PCB-1254 Peak 1	BNB	Ave	2242354					1000				
PCB-1254 Peak 2	BNB	Ave	6041621					1000				
PCB-1254 Peak 3	BNB	Ave	6943843					1000				
PCB-1254 Peak 4	BNB	Ave	5357296					1000				
PCB-1254 Peak 5	BNB	Ave	11028067					1000				
PCB-1254 Peak 6	BNB	Ave	8165762					1000				
PCB-1254 Peak 7	BNB	Ave	6574850					1000				
PCB-1254 Peak 8	BNB	Ave	10821922					1000				

Curve Type Legend:

Ave = Average ISTD

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001890.D
Lims ID: IC 1254
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-May-2016 13:53:24 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0040924-012
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub6

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:22:28 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 14:23:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.624	1.624	0.000	3466322	20.0	20.0	M
2	1.409	1.409	0.000	3463379	20.0	20.0	M
						RPD = 0.00	
7 PCB-1254							M
1	5.058	5.058	0.000	2242354	1000.0	1000.0	a
1	5.590	5.590	0.000	6041621	1000.0	1000.0	a
1	5.853	5.853	0.000	6943843	1000.0	1000.0	a
1	6.346	6.346	0.000	5357296	1000.0	1000.0	a
1	6.524	6.524	0.000	11028067	1000.0	1000.0	a
1	6.896	6.896	0.000	8165762	1000.0	1000.0	a
1	7.518	7.518	0.000	6574850	1000.0	1000.0	M
1	7.919	7.919	0.000	10821922	1000.0	1000.0	a
		Average of Peak Amounts =				1000.0	
2	4.019	4.019	0.000	1906805	1000.0	1000.0	M
2	4.469	4.469	0.000	4748146	1000.0	1000.0	M
2	4.781	4.781	0.000	6918061	1000.0	1000.0	M
2	5.100	5.100	0.000	5411524	1000.0	1000.0	M
2	5.246	5.246	0.000	8844516	1000.0	1000.0	M
2	5.584	5.584	0.000	8339719	1000.0	1000.0	M
2	5.828	5.828	0.000	6939754	1000.0	1000.0	M
2	6.208	6.208	0.000	10233843	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
						RPD = 0.00	

QC Flag Legend

Review Flags

M - Manually Integrated

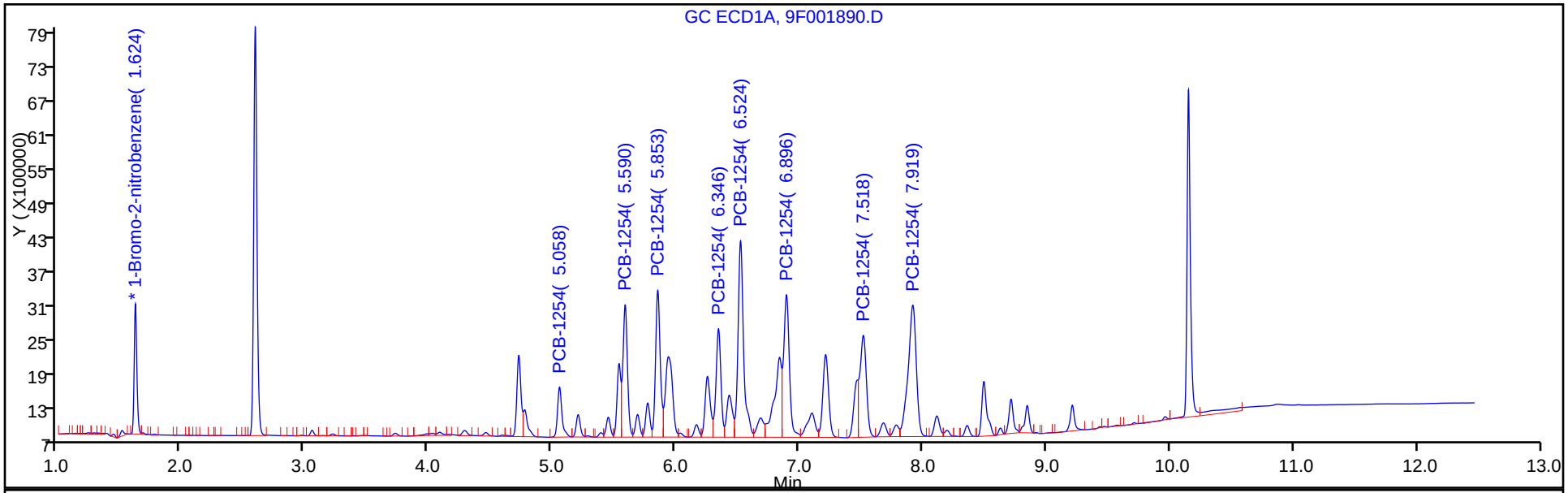
Reagents:

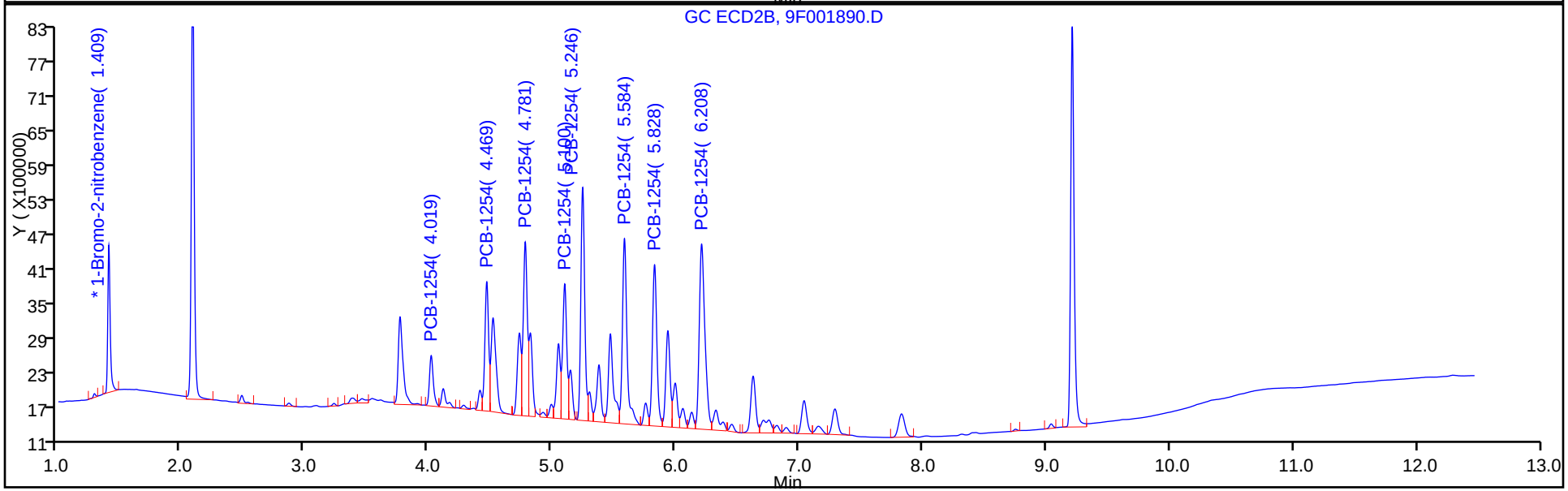
SG1254L3_00027	Amount Added:	1.00	Units: mL	
SGPCBISTD_00006	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:22:31 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001890.D				
Injection Date:	12-May-2016 13:53:24	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	IC 1254			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		





Manual Integration/User Assign Peak Report

TestAmerica Edison

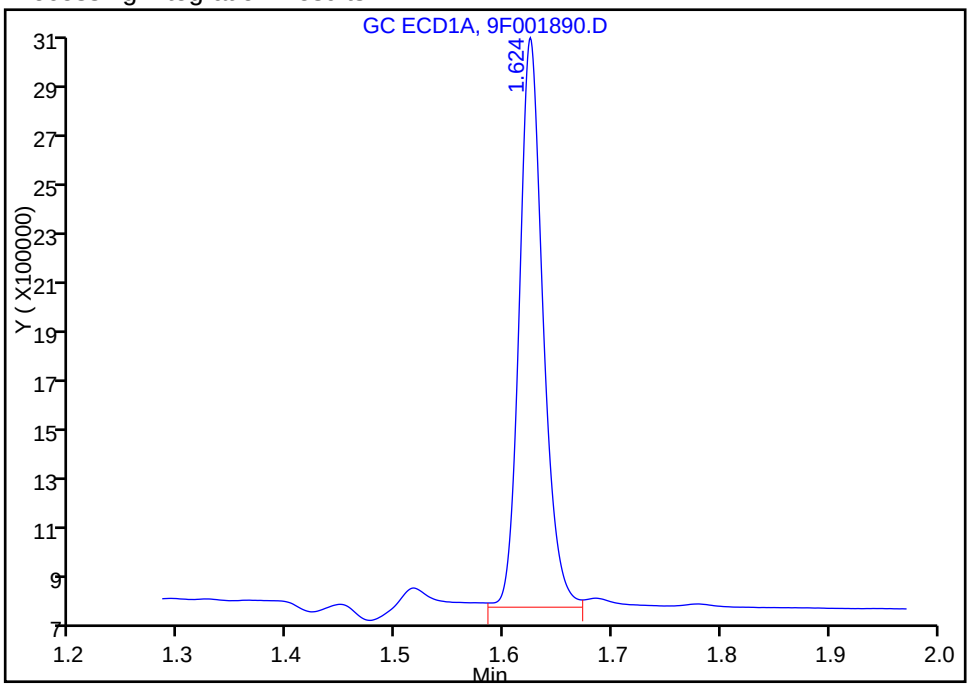
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001890.D				
Injection Date:	12-May-2016 13:53:24	Instrument ID:	CPESTGC9		
Lims ID:	IC 1254				
Client ID:					
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 1

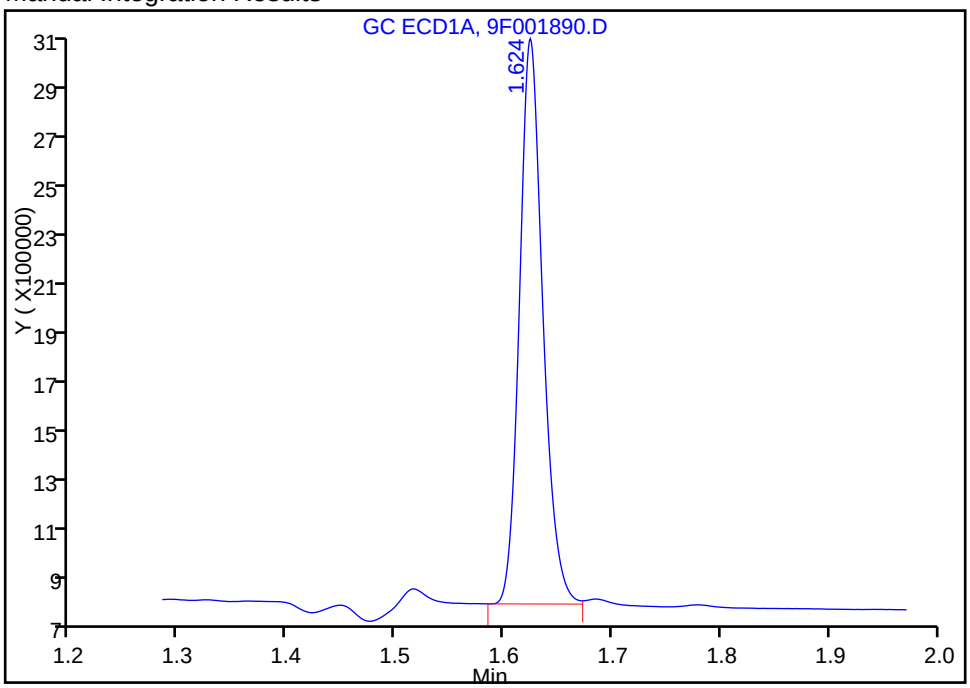
Processing Integration Results

RT: 1.62
Area: 3553561
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.62
Area: 3466322
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 14:23:13
Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

Report Date: 12-May-2016 15:22:32 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001890.D

Injection Date: 12-May-2016 13:53:24 Instrument ID: CPESTGC9

Lims ID: IC 1254

Client ID:

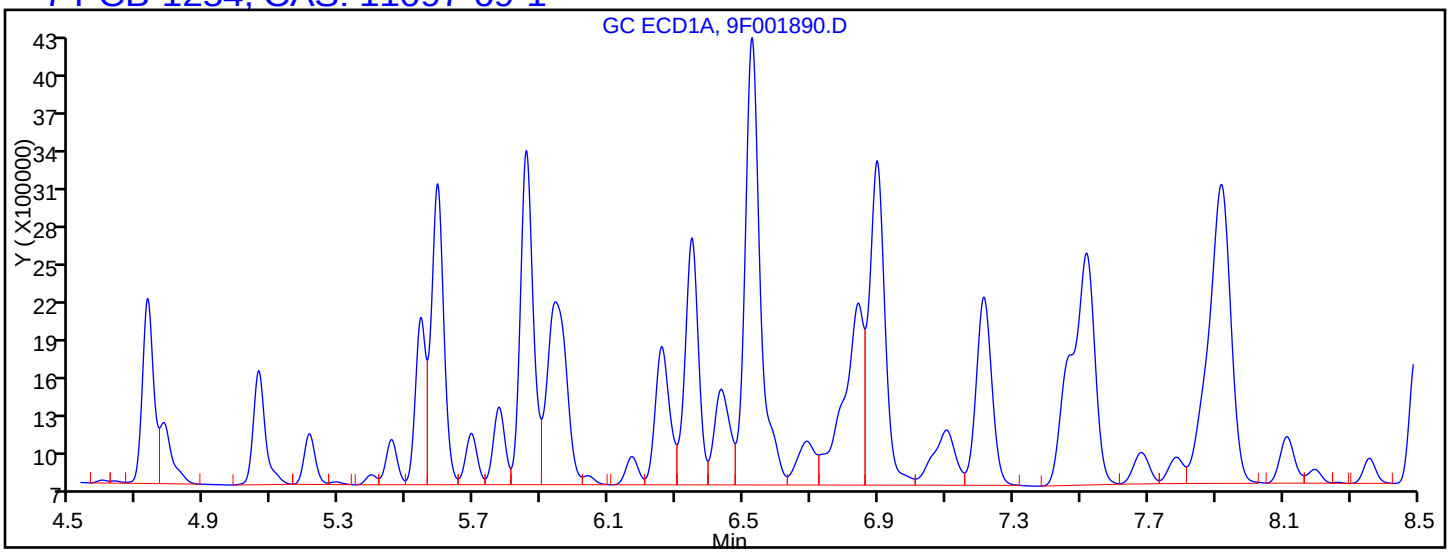
Operator ID: ALS Bottle#: 12 Worklist Smp#: 12

Injection Vol: 1.0 ul Dil. Factor: 1.0000

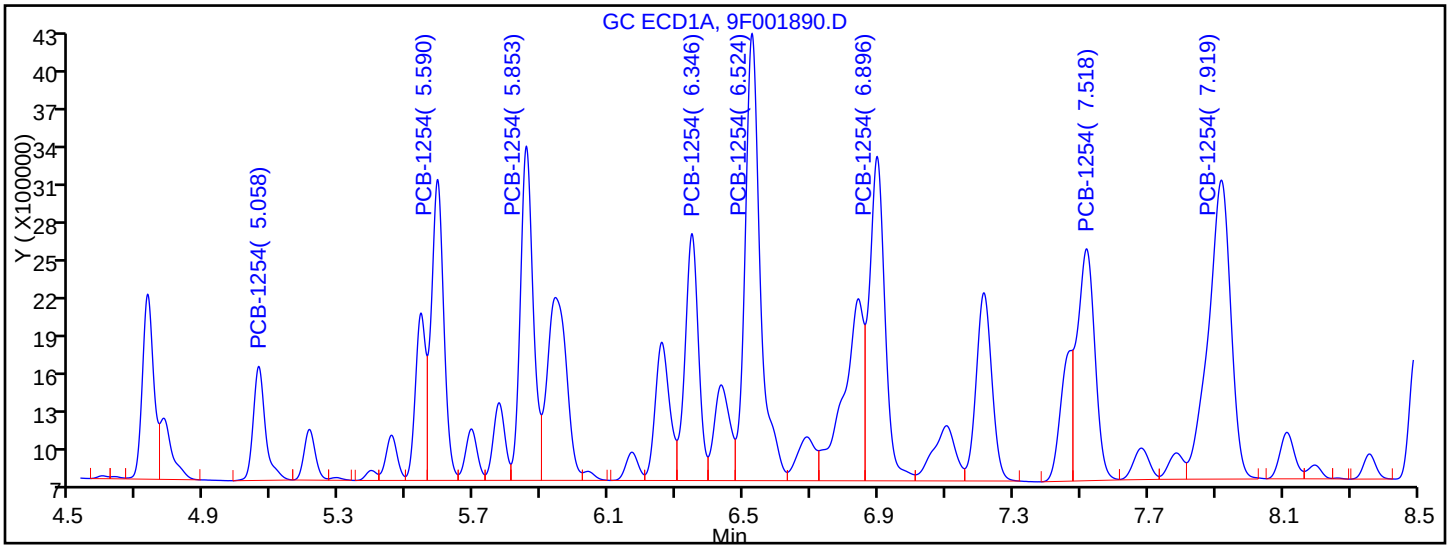
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

Column: Detector GC ECD1A

7 PCB-1254, CAS: 11097-69-1



Processing Integration Results



Manual Integration Results

RT = 5.058	Response = 2242354	M
RT = 5.590	Response = 6041621	M
RT = 5.853	Response = 6943843	M
RT = 6.346	Response = 5357296	M
RT = 6.524	Response = 11028067	M
RT = 6.896	Response = 8165762	M
RT = 7.518	Response = 6574850	M
RT = 7.919	Response = 10821922	M

Reviewer: patelji, 12-May-2016 14:23:13

Audit Action: Split an Integrated Peak Audit Reason: Peak not integrated

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 13:53 Calibration End Date: 05/12/2016 13:53 Calibration ID: 55725

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/12	9F001890.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1						B	M1	M2								
PCB-1254 Peak 1	0.0110					Ave		0.0110						20.0			0.9900
PCB-1254 Peak 2	0.0274					Ave		0.0274						20.0			0.9900
PCB-1254 Peak 3	0.0399					Ave		0.0399						20.0			0.9900
PCB-1254 Peak 4	0.0312					Ave		0.0312						20.0			0.9900
PCB-1254 Peak 5	0.0511					Ave		0.0511						20.0			0.9900
PCB-1254 Peak 6	0.0482					Ave		0.0482						20.0			0.9900
PCB-1254 Peak 7	0.0401					Ave		0.0401						20.0			0.9900
PCB-1254 Peak 8	0.0591					Ave		0.0591						20.0			0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 13:53 Calibration End Date: 05/12/2016 13:53 Calibration ID: 55725

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/12	9F001890.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1					LVL 1				
PCB-1254 Peak 1	BNB	Ave	1906805					1000				
PCB-1254 Peak 2	BNB	Ave	4748146					1000				
PCB-1254 Peak 3	BNB	Ave	6918061					1000				
PCB-1254 Peak 4	BNB	Ave	5411524					1000				
PCB-1254 Peak 5	BNB	Ave	8844516					1000				
PCB-1254 Peak 6	BNB	Ave	8339719					1000				
PCB-1254 Peak 7	BNB	Ave	6939754					1000				
PCB-1254 Peak 8	BNB	Ave	10233843					1000				

Curve Type Legend:

Ave = Average ISTD

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001890.D
Lims ID: IC 1254
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-May-2016 13:53:24 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0040924-012
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub6

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:22:28 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 14:23:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.624	1.624	0.000	3466322	20.0	20.0	M
2	1.409	1.409	0.000	3463379	20.0	20.0	M
						RPD = 0.00	
7 PCB-1254							M
1	5.058	5.058	0.000	2242354	1000.0	1000.0	a
1	5.590	5.590	0.000	6041621	1000.0	1000.0	a
1	5.853	5.853	0.000	6943843	1000.0	1000.0	a
1	6.346	6.346	0.000	5357296	1000.0	1000.0	a
1	6.524	6.524	0.000	11028067	1000.0	1000.0	a
1	6.896	6.896	0.000	8165762	1000.0	1000.0	a
1	7.518	7.518	0.000	6574850	1000.0	1000.0	M
1	7.919	7.919	0.000	10821922	1000.0	1000.0	a
		Average of Peak Amounts =				1000.0	
2	4.019	4.019	0.000	1906805	1000.0	1000.0	M
2	4.469	4.469	0.000	4748146	1000.0	1000.0	M
2	4.781	4.781	0.000	6918061	1000.0	1000.0	M
2	5.100	5.100	0.000	5411524	1000.0	1000.0	M
2	5.246	5.246	0.000	8844516	1000.0	1000.0	M
2	5.584	5.584	0.000	8339719	1000.0	1000.0	M
2	5.828	5.828	0.000	6939754	1000.0	1000.0	M
2	6.208	6.208	0.000	10233843	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
						RPD = 0.00	

QC Flag Legend

Review Flags

M - Manually Integrated

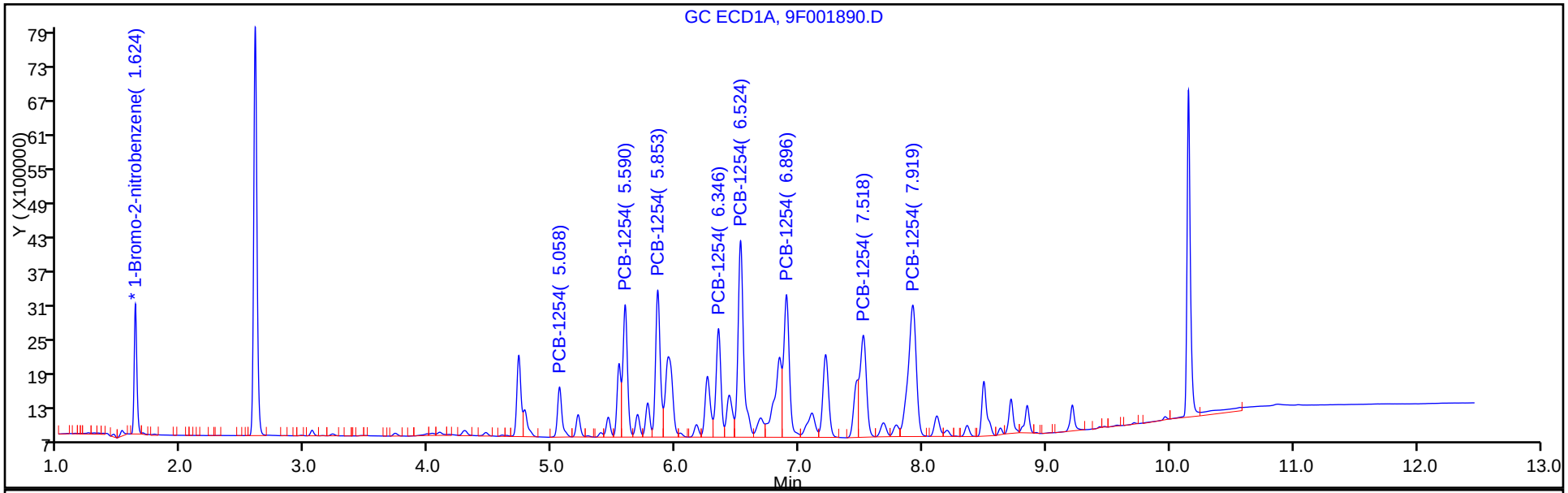
Reagents:

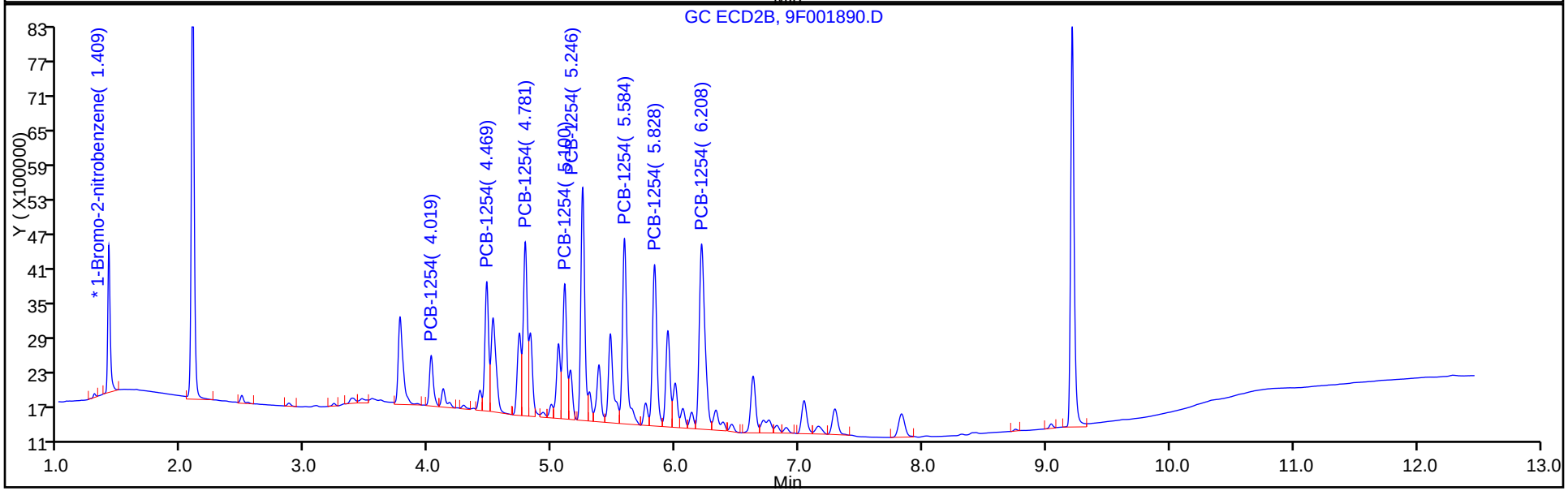
SG1254L3_00027	Amount Added:	1.00	Units: mL	
SGPCBISTD_00006	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:22:32 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001890.D				
Injection Date:	12-May-2016 13:53:24	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	IC 1254			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		





TestAmerica Edison

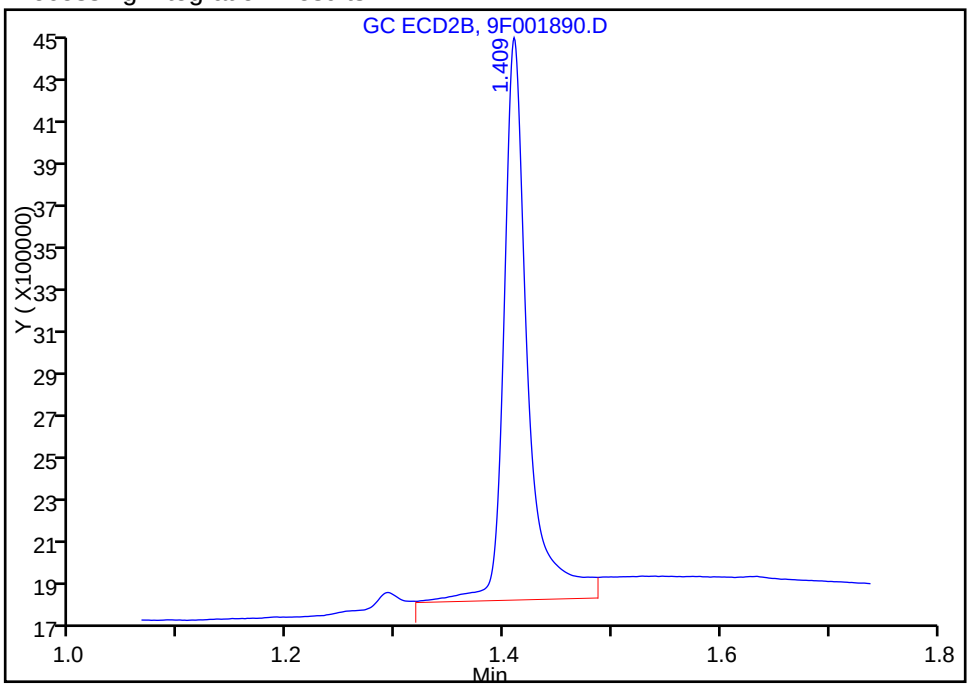
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001890.D				
Injection Date:	12-May-2016 13:53:24	Instrument ID:	CPESTGC9		
Lims ID:	IC 1254				
Client ID:					
Operator ID:		ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

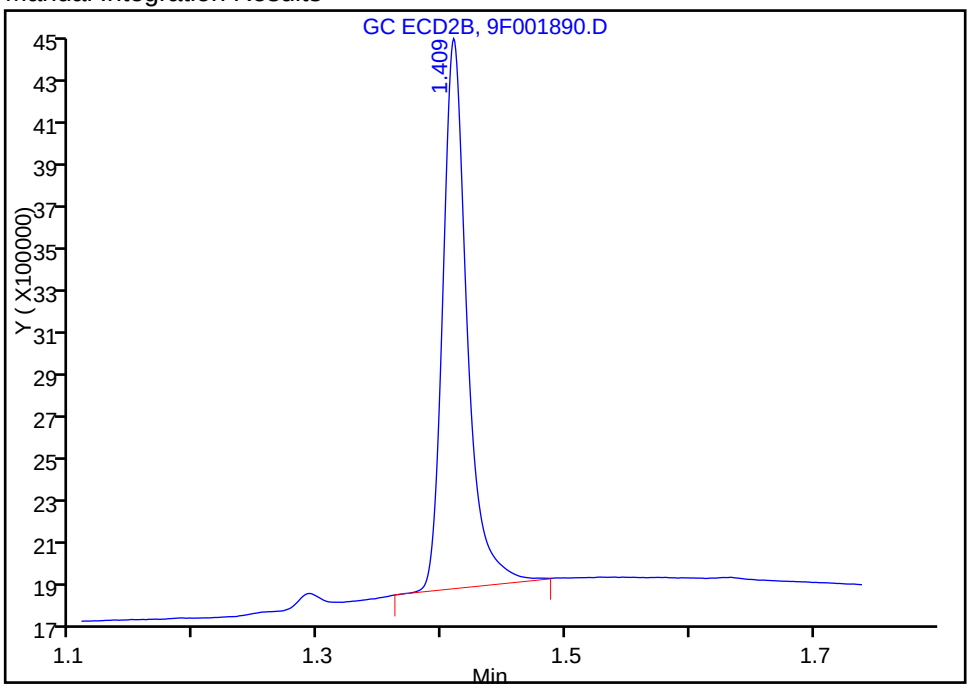
Processing Integration Results

RT: 1.41
Area: 3983989
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.41
Area: 3463379
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 12-May-2016 14:23:13
Audit Action: Manually Integrated Audit Reason: Peak not integrated

Report Date: 12-May-2016 15:22:32 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001890.D

Injection Date: 12-May-2016 13:53:24 Instrument ID: CPESTGC9

Lims ID: IC 1254

Client ID:

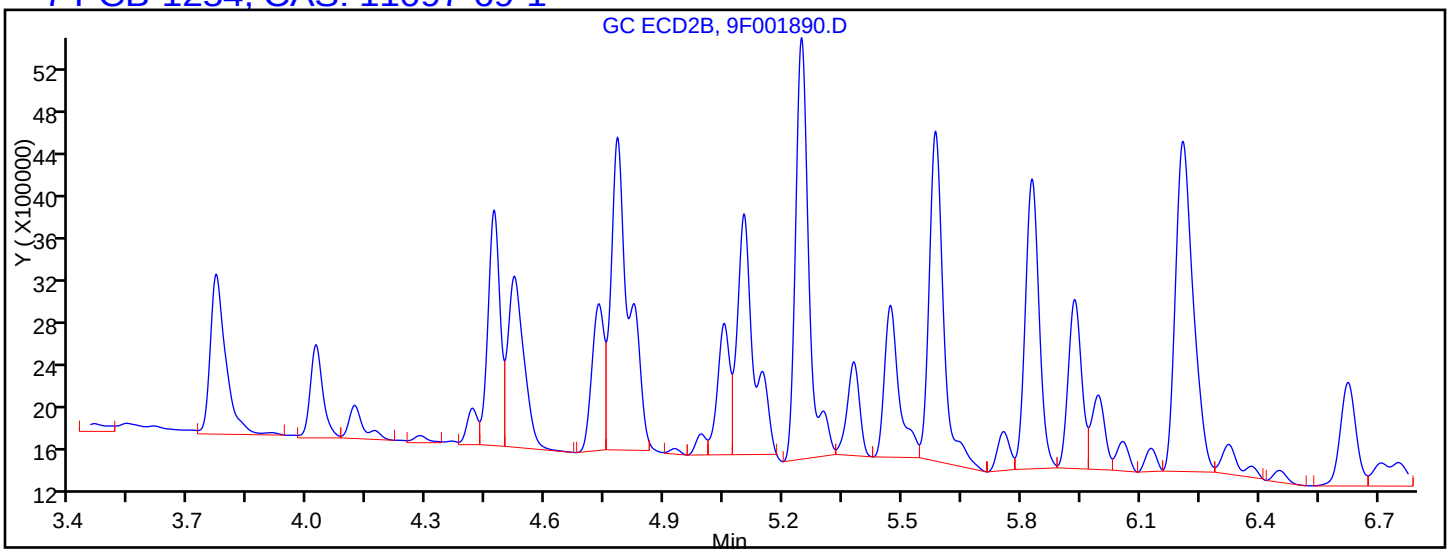
Operator ID: ALS Bottle#: 12 Worklist Smp#: 12

Injection Vol: 1.0 ul Dil. Factor: 1.0000

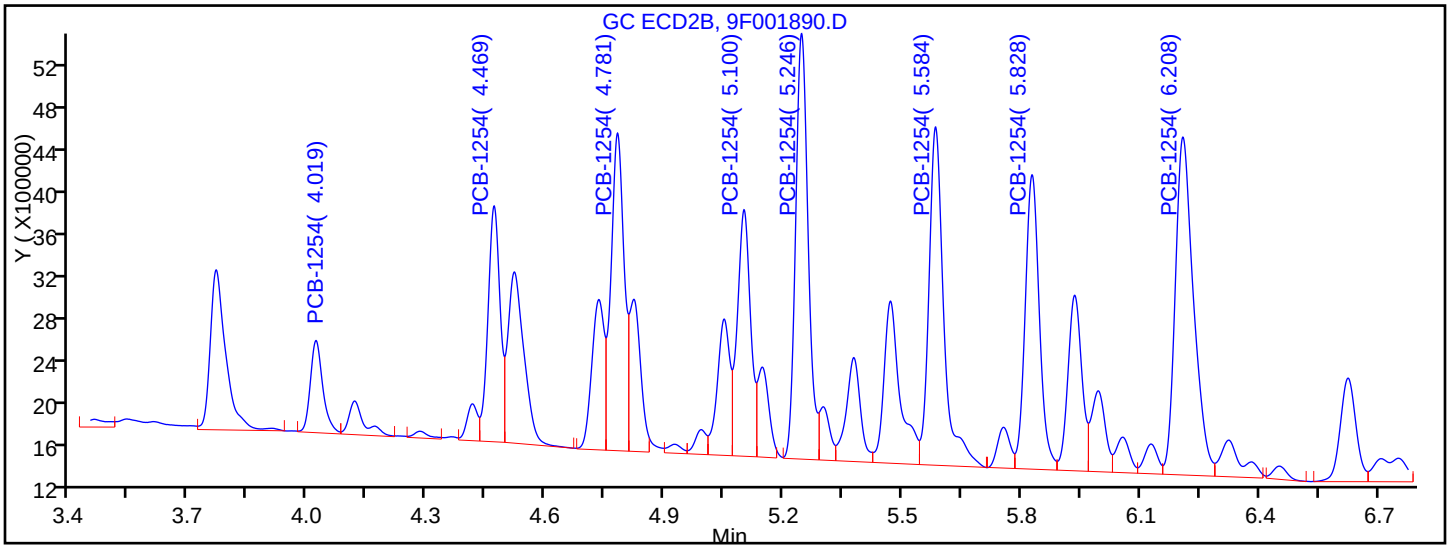
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

Column: Detector GC ECD2B

7 PCB-1254, CAS: 11097-69-1



Processing Integration Results



Manual Integration Results

RT = 4.019	Response = 1906805	M
RT = 4.469	Response = 4748146	M
RT = 4.781	Response = 6918061	M
RT = 5.100	Response = 5411524	M
RT = 5.246	Response = 8844516	M
RT = 5.584	Response = 8339719	M
RT = 5.828	Response = 6939754	M
RT = 6.208	Response = 10233843	M

Reviewer: patelji, 12-May-2016 14:23:13

Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 14:11 Calibration End Date: 05/12/2016 14:11 Calibration ID: 55730

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/13	9F001891.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1						B	M1	M2								
PCB-1262 Peak 1	0.0403					Ave		0.0403						20.0			0.9900
PCB-1262 Peak 2	0.0464					Ave		0.0464						20.0			0.9900
PCB-1262 Peak 3	0.0655					Ave		0.0655						20.0			0.9900
PCB-1262 Peak 4	0.0516					Ave		0.0516						20.0			0.9900
PCB-1262 Peak 5	0.0974					Ave		0.0974						20.0			0.9900
PCB-1262 Peak 6	0.0169					Ave		0.0169						20.0			0.9900
PCB-1262 Peak 7	0.0380					Ave		0.0380						20.0			0.9900
PCB-1262 Peak 8	0.0149					Ave		0.0149						20.0			0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 14:11 Calibration End Date: 05/12/2016 14:11 Calibration ID: 55730

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/13	9F001891.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1					LVL 1				
PCB-1262 Peak 1	BNB	Ave	6831300					1000				
PCB-1262 Peak 2	BNB	Ave	7877614					1000				
PCB-1262 Peak 3	BNB	Ave	11119292					1000				
PCB-1262 Peak 4	BNB	Ave	8746872					1000				
PCB-1262 Peak 5	BNB	Ave	16514569					1000				
PCB-1262 Peak 6	BNB	Ave	2859801					1000				
PCB-1262 Peak 7	BNB	Ave	6452627					1000				
PCB-1262 Peak 8	BNB	Ave	2520808					1000				

Curve Type Legend:

Ave = Average ISTD

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001891.D
Lims ID: IC 1262
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-May-2016 14:11:26 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0040924-013
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub7

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:22:35 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 14:27:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							
1	1.624	1.624	0.000	3392790	20.0	20.0	
2	1.410	1.410	0.000	3412529	20.0	20.0	
						RPD = 0.00	
9 PCB-1262							M
1	6.841	6.841	0.000	6831300	1000.0	1000.0	a
1	7.213	7.213	0.000	7877614	1000.0	1000.0	a
1	8.109	8.109	0.000	11119292	1000.0	1000.0	M
1	8.542	8.542	0.000	8746872	1000.0	1000.0	a
1	8.848	8.848	0.000	16514569	1000.0	1000.0	M
1	9.579	9.579	0.000	2859801	1000.0	1000.0	M
1	9.717	9.717	0.000	6452627	1000.0	1000.0	M
1	9.970	9.970	0.000	2520808	1000.0	1000.0	a
		Average of Peak Amounts =				1000.0	
2	5.470	5.470	0.000	6162878	1000.0	1000.0	a
2	6.754	6.754	0.000	10545861	1000.0	1000.0	M
2	7.287	7.287	0.000	24485796	1000.0	1000.0	M
2	7.826	7.826	0.000	7636060	1000.0	1000.0	a
2	8.012	8.012	0.000	10862935	1000.0	1000.0	M
2	8.433	8.433	0.000	3738716	1000.0	1000.0	M
2	8.752	8.752	0.000	8093884	1000.0	1000.0	a
2	9.042	9.042	0.000	3080980	1000.0	1000.0	a
		Average of Peak Amounts =				1000.0	
						RPD = 0.00	

QC Flag Legend

Review Flags

M - Manually Integrated

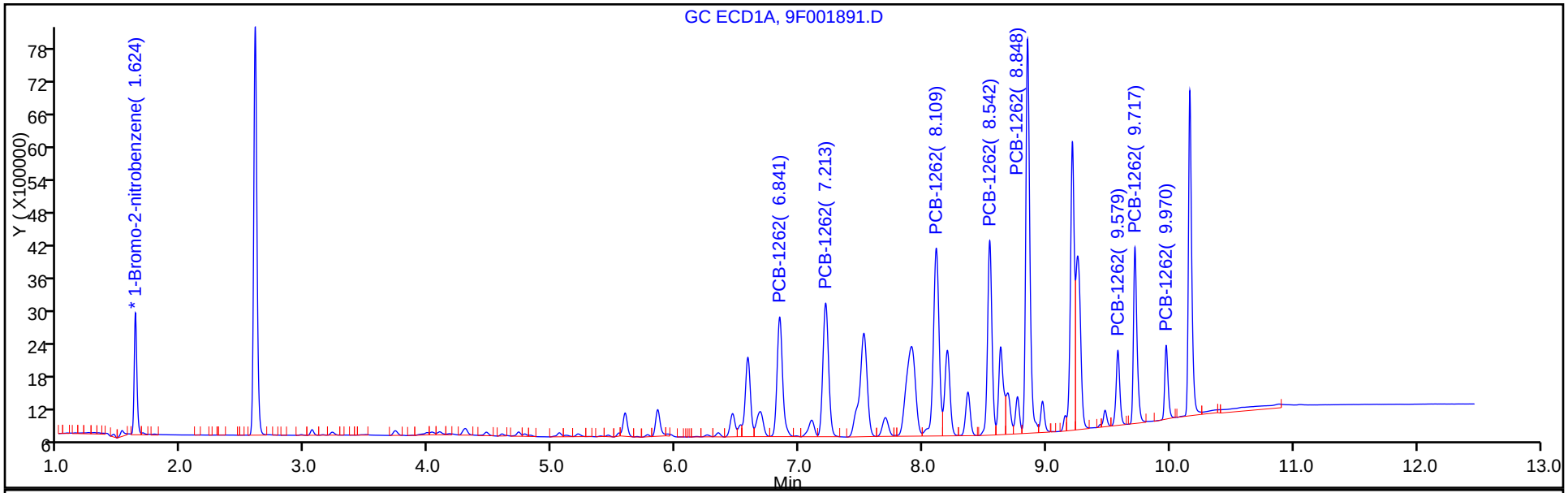
Reagents:

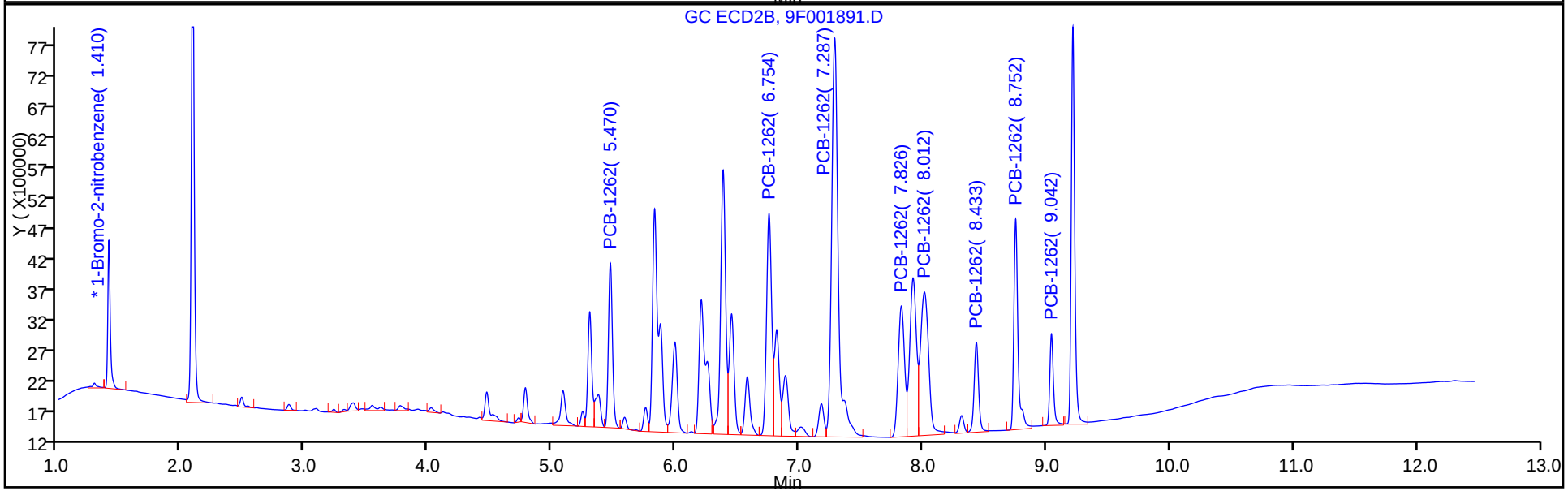
SG1262L3_00023	Amount Added:	1.00	Units: mL	
SGPCBISTD_00006	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:22:38 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001891.D				
Injection Date:	12-May-2016 14:11:26	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	IC 1262			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		





Report Date: 12-May-2016 15:22:38 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001891.D

Injection Date: 12-May-2016 14:11:26 Instrument ID: CPESTGC9

Lims ID: IC 1262

Client ID:

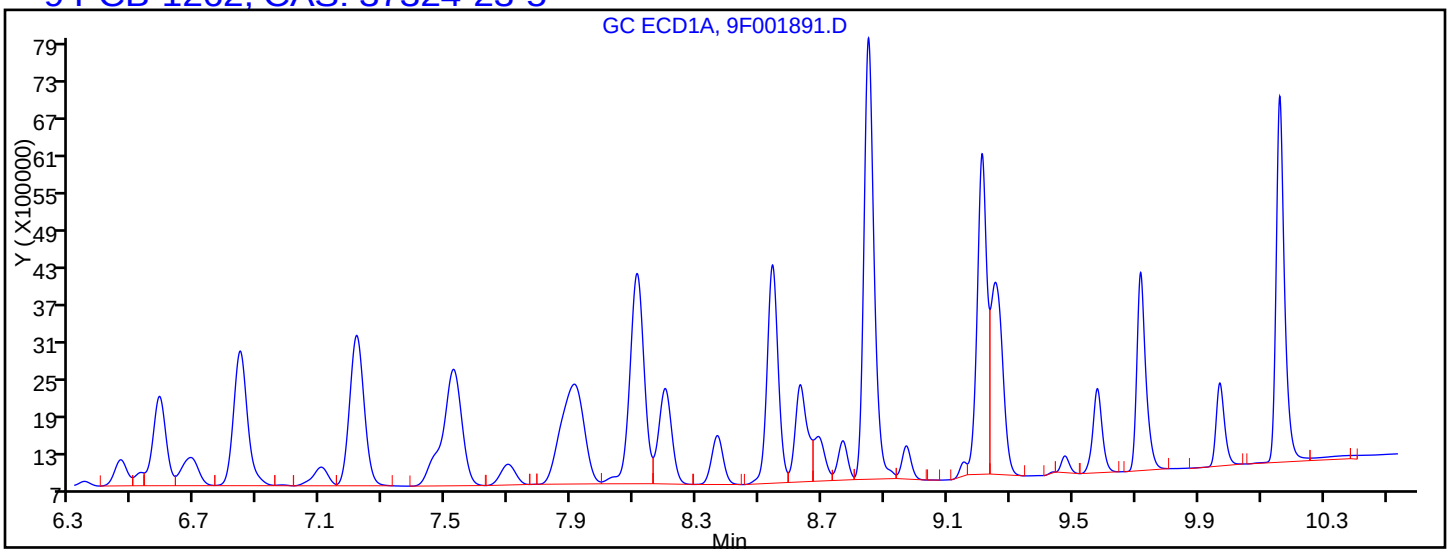
Operator ID: ALS Bottle#: 13 Worklist Smp#: 13

Injection Vol: 1.0 ul Dil. Factor: 1.0000

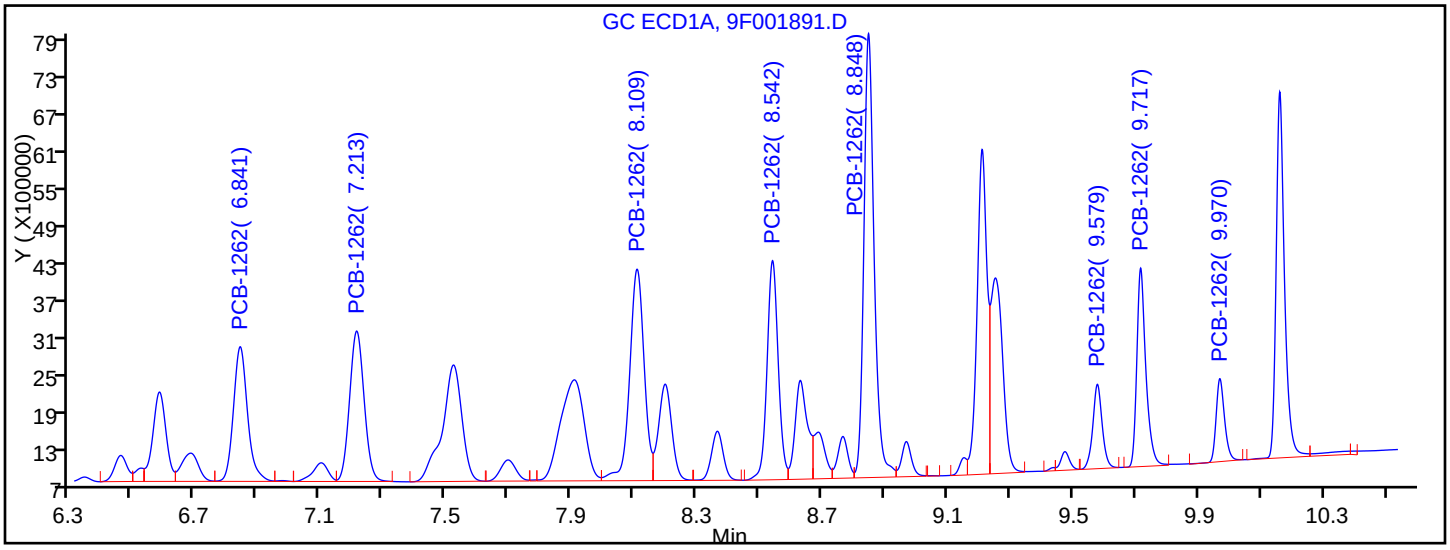
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

Column: Detector GC ECD1A

9 PCB-1262, CAS: 37324-23-5



Processing Integration Results



Manual Integration Results

RT = 6.841	Response = 6831300	M
RT = 7.213	Response = 7877614	M
RT = 8.109	Response = 11119292	M
RT = 8.542	Response = 8746872	M
RT = 8.848	Response = 16514569	M
RT = 9.579	Response = 2859801	M
RT = 9.717	Response = 6452627	M
RT = 9.970	Response = 2520808	M

Reviewer: patelji, 12-May-2016 14:27:50

Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 14:11 Calibration End Date: 05/12/2016 14:11 Calibration ID: 55731

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/13	9F001891.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1						B	M1	M2								
PCB-1262 Peak 1	0.0361					Ave		0.0361						20.0			0.9900
PCB-1262 Peak 2	0.0618					Ave		0.0618						20.0			0.9900
PCB-1262 Peak 3	0.1435					Ave		0.1435						20.0			0.9900
PCB-1262 Peak 4	0.0448					Ave		0.0448						20.0			0.9900
PCB-1262 Peak 5	0.0637					Ave		0.0637						20.0			0.9900
PCB-1262 Peak 6	0.0219					Ave		0.0219						20.0			0.9900
PCB-1262 Peak 7	0.0474					Ave		0.0474						20.0			0.9900
PCB-1262 Peak 8	0.0181					Ave		0.0181						20.0			0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 14:11 Calibration End Date: 05/12/2016 14:11 Calibration ID: 55731

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/13	9F001891.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1					LVL 1				
PCB-1262 Peak 1	BNB	Ave	6162878					1000				
PCB-1262 Peak 2	BNB	Ave	10545861					1000				
PCB-1262 Peak 3	BNB	Ave	24485796					1000				
PCB-1262 Peak 4	BNB	Ave	7636060					1000				
PCB-1262 Peak 5	BNB	Ave	10862935					1000				
PCB-1262 Peak 6	BNB	Ave	3738716					1000				
PCB-1262 Peak 7	BNB	Ave	8093884					1000				
PCB-1262 Peak 8	BNB	Ave	3080980					1000				

Curve Type Legend:

Ave = Average ISTD

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001891.D
Lims ID: IC 1262
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-May-2016 14:11:26 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0040924-013
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub7

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:22:35 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 14:27:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							
1	1.624	1.624	0.000	3392790	20.0	20.0	
2	1.410	1.410	0.000	3412529	20.0	20.0	
						RPD = 0.00	
9 PCB-1262							M
1	6.841	6.841	0.000	6831300	1000.0	1000.0	a
1	7.213	7.213	0.000	7877614	1000.0	1000.0	a
1	8.109	8.109	0.000	11119292	1000.0	1000.0	M
1	8.542	8.542	0.000	8746872	1000.0	1000.0	a
1	8.848	8.848	0.000	16514569	1000.0	1000.0	M
1	9.579	9.579	0.000	2859801	1000.0	1000.0	M
1	9.717	9.717	0.000	6452627	1000.0	1000.0	M
1	9.970	9.970	0.000	2520808	1000.0	1000.0	a
		Average of Peak Amounts =				1000.0	
2	5.470	5.470	0.000	6162878	1000.0	1000.0	a
2	6.754	6.754	0.000	10545861	1000.0	1000.0	M
2	7.287	7.287	0.000	24485796	1000.0	1000.0	M
2	7.826	7.826	0.000	7636060	1000.0	1000.0	a
2	8.012	8.012	0.000	10862935	1000.0	1000.0	M
2	8.433	8.433	0.000	3738716	1000.0	1000.0	M
2	8.752	8.752	0.000	8093884	1000.0	1000.0	a
2	9.042	9.042	0.000	3080980	1000.0	1000.0	a
		Average of Peak Amounts =				1000.0	
						RPD = 0.00	

QC Flag Legend

Review Flags

M - Manually Integrated

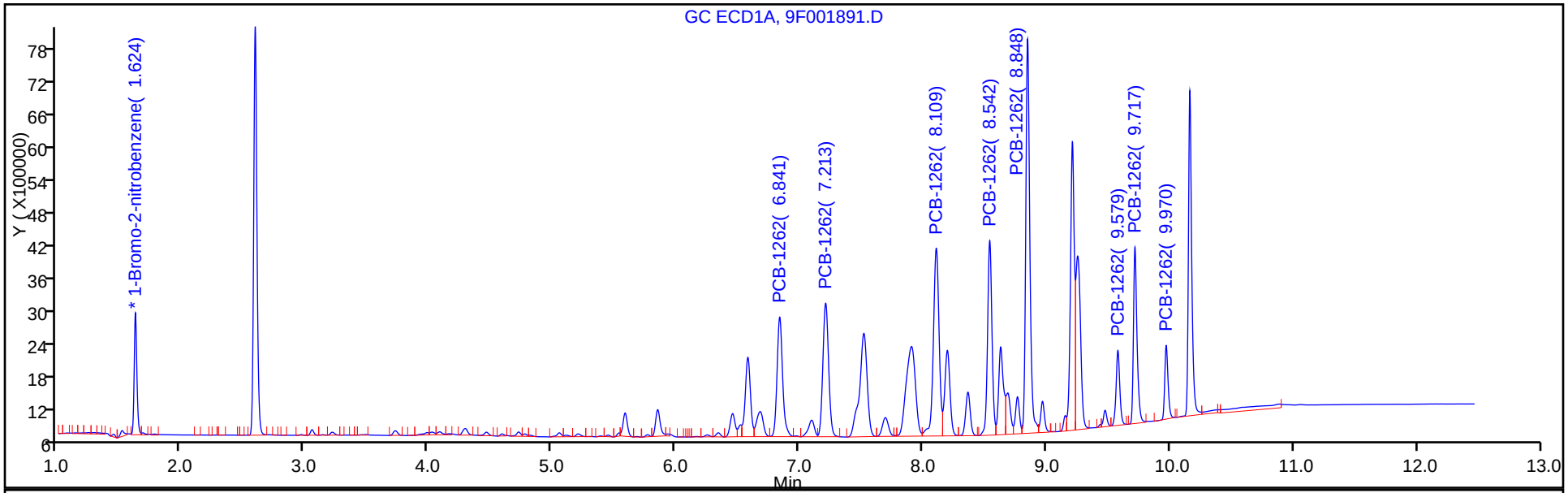
Reagents:

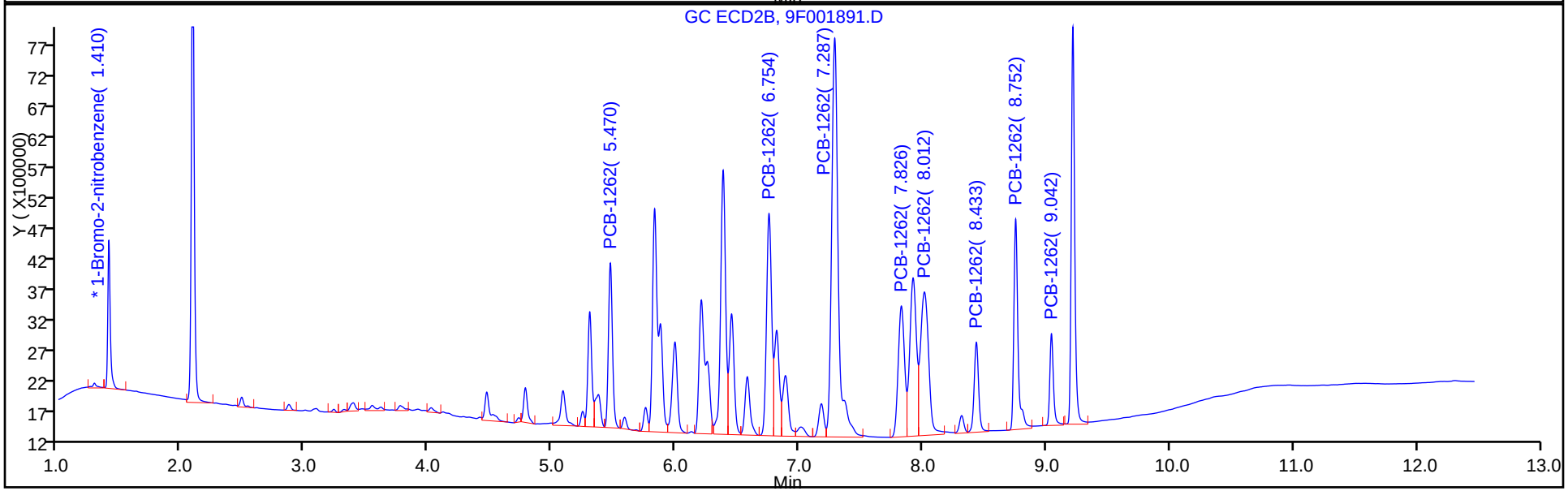
SG1262L3_00023	Amount Added: 1.00	Units: mL	
SGPCBISTD_00006	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:22:39 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001891.D				
Injection Date:	12-May-2016 14:11:26	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	IC 1262			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		





Report Date: 12-May-2016 15:22:39 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001891.D

Injection Date: 12-May-2016 14:11:26 Instrument ID: CPESTGC9

Lims ID: IC 1262

Client ID:

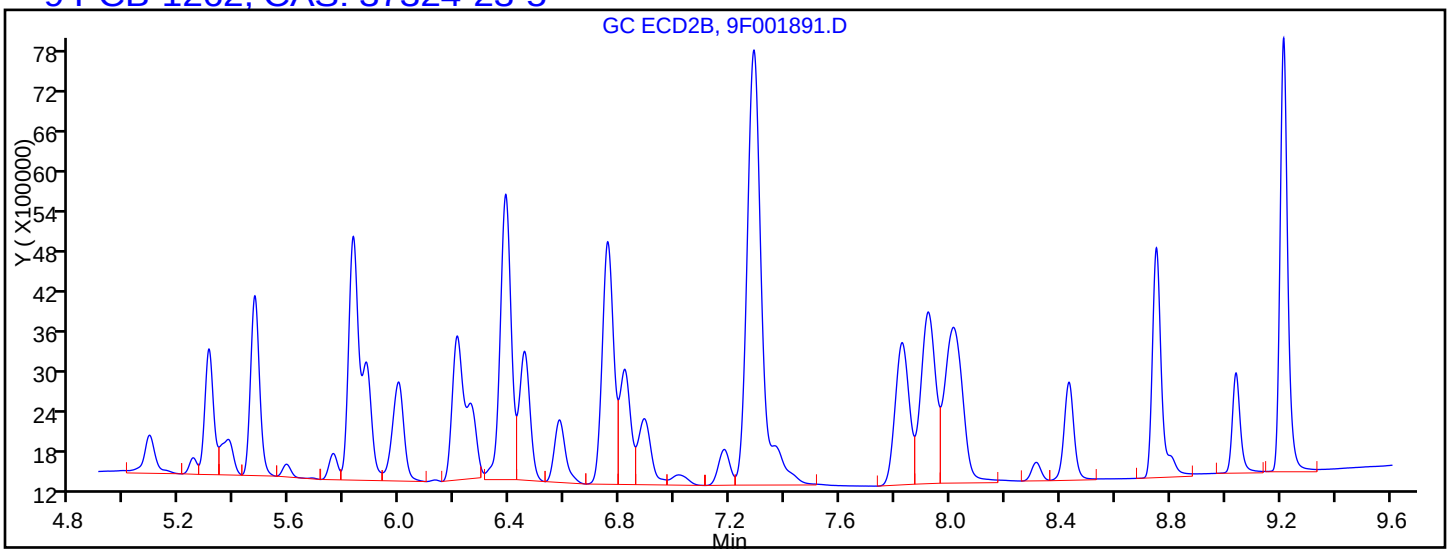
Operator ID: ALS Bottle#: 13 Worklist Smp#: 13

Injection Vol: 1.0 ul Dil. Factor: 1.0000

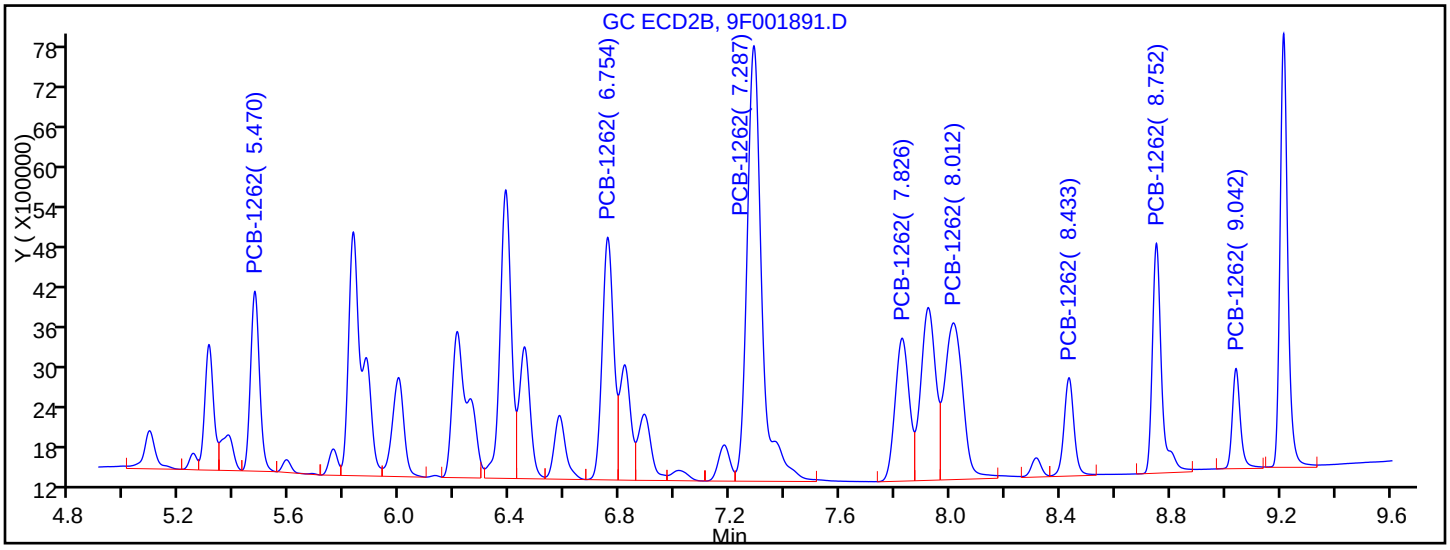
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

Column: Detector GC ECD2B

9 PCB-1262, CAS: 37324-23-5



Processing Integration Results



Manual Integration Results

RT = 5.470	Response = 6162878	M
RT = 6.754	Response = 10545861	M
RT = 7.287	Response = 24485796	M
RT = 7.826	Response = 7636060	M
RT = 8.012	Response = 10862935	M
RT = 8.433	Response = 3738716	M
RT = 8.752	Response = 8093884	M
RT = 9.042	Response = 3080980	M

Reviewer: patelji, 12-May-2016 14:27:50

Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 14:29 Calibration End Date: 05/12/2016 14:29 Calibration ID: 55736

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/14	9F001892.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1						B	M1	M2								
PCB-1268 Peak 1	0.0236					Ave		0.0236						20.0			0.9900
PCB-1268 Peak 2	0.0281					Ave		0.0281						20.0			0.9900
PCB-1268 Peak 3	0.0880					Ave		0.0880						20.0			0.9900
PCB-1268 Peak 4	0.1037					Ave		0.1037						20.0			0.9900
PCB-1268 Peak 5	0.0772					Ave		0.0772						20.0			0.9900
PCB-1268 Peak 6	0.0250					Ave		0.0250						20.0			0.9900
PCB-1268 Peak 7	0.0350					Ave		0.0350						20.0			0.9900
PCB-1268 Peak 8	0.2093					Ave		0.2093						20.0			0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 14:29 Calibration End Date: 05/12/2016 14:29 Calibration ID: 55736

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/14	9F001892.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1					LVL 1				
PCB-1268 Peak 1	BNB	Ave	4012068					1000				
PCB-1268 Peak 2	BNB	Ave	4772449					1000				
PCB-1268 Peak 3	BNB	Ave	14960284					1000				
PCB-1268 Peak 4	BNB	Ave	17619446					1000				
PCB-1268 Peak 5	BNB	Ave	13114972					1000				
PCB-1268 Peak 6	BNB	Ave	4250884					1000				
PCB-1268 Peak 7	BNB	Ave	5954381					1000				
PCB-1268 Peak 8	BNB	Ave	35567927					1000				

Curve Type Legend:

Ave = Average ISTD

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D
Lims ID: IC 1268
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-May-2016 14:29:29 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0040924-014
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub8

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:22:41 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 14:55:54

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							
1	1.624	1.624	0.000	3399016	20.0	20.0	
2	1.410	1.410	0.000	3598741	20.0	20.0	
						RPD = 0.00	
10 PCB-1268							M
1	8.109	8.109	0.000	4012068	1000.0	1000.0	M
1	8.544	8.544	0.000	4772449	1000.0	1000.0	M
1	9.206	9.206	0.000	14960284	1000.0	1000.0	M
1	9.247	9.247	0.000	17619446	1000.0	1000.0	M
1	9.471	9.471	0.000	13114972	1000.0	1000.0	M
1	9.555	9.555	0.000	4250884	1000.0	1000.0	M
1	9.712	9.712	0.000	5954381	1000.0	1000.0	a
1	9.964	9.964	0.000	35567927	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
2	6.750	6.750	0.000	6241548	1000.0	1000.0	M
2	7.281	7.281	0.000	3938427	1000.0	1000.0	a
2	7.921	7.921	0.000	23391935	1000.0	1000.0	a
2	8.003	8.003	0.000	23615222	1000.0	1000.0	a
2	8.313	8.313	0.000	17724210	1000.0	1000.0	M
2	8.426	8.426	0.000	5690182	1000.0	1000.0	M
2	8.751	8.751	0.000	7976826	1000.0	1000.0	M
2	9.038	9.038	0.000	42067017	1000.0	1000.0	a
		Average of Peak Amounts =				1000.0	
						RPD = 0.00	

QC Flag Legend

Review Flags

M - Manually Integrated

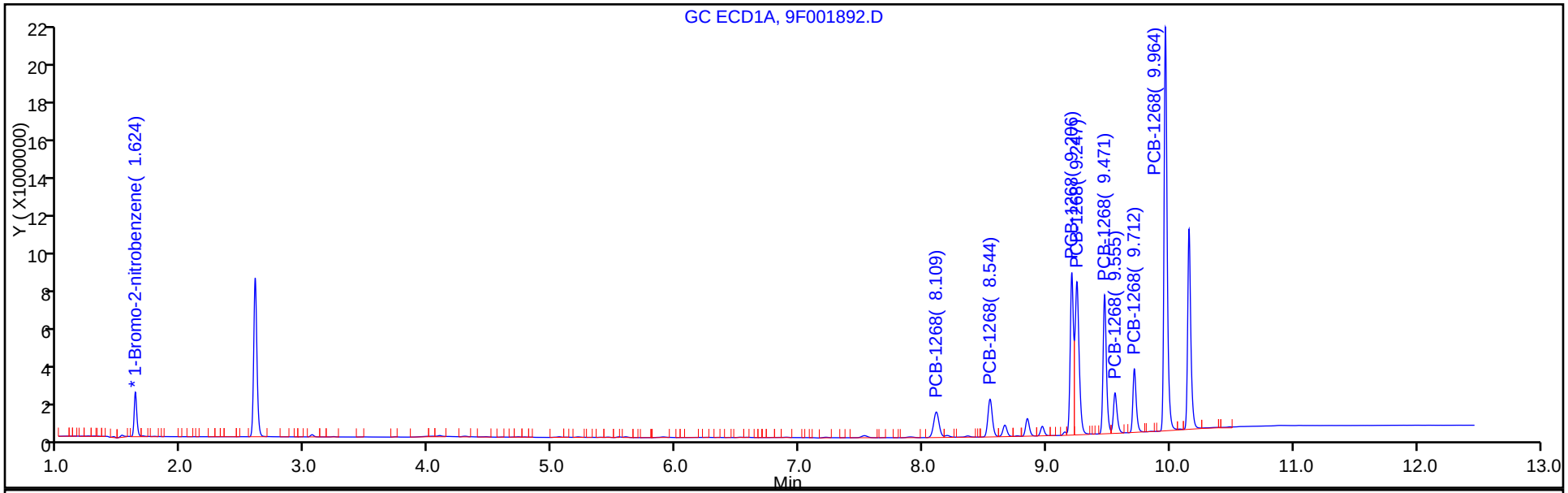
Reagents:

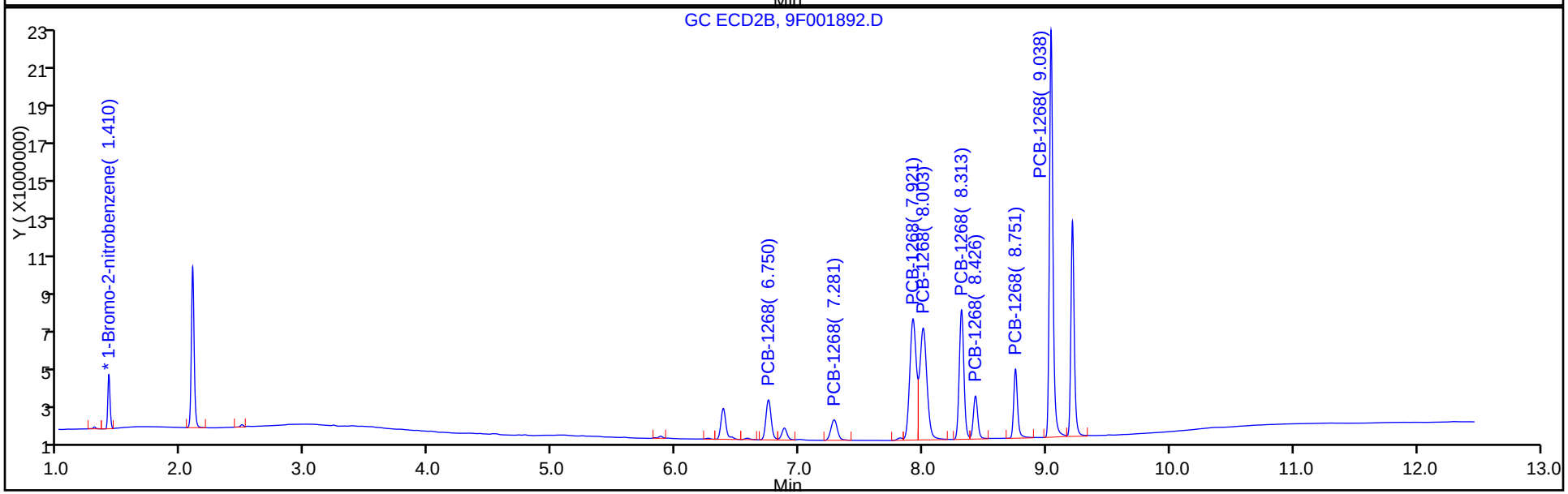
SG1268L3_00024	Amount Added:	1.00	Units: mL	
SGPCBISTD_00006	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:22:44 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D				
Injection Date:	12-May-2016 14:29:29	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	IC 1268			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		





Report Date: 12-May-2016 15:22:44 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Injection Date: 12-May-2016 14:29:29 Instrument ID: CPESTGC9

Lims ID: IC 1268

Client ID:

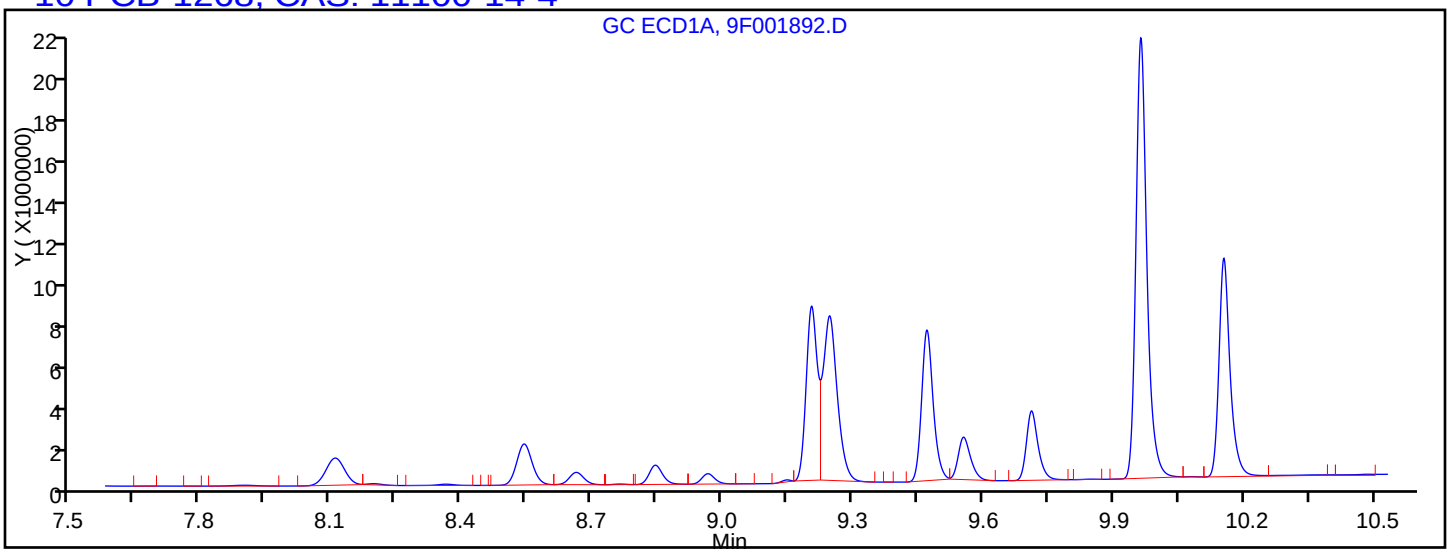
Operator ID: ALS Bottle#: 14 Worklist Smp#: 14

Injection Vol: 1.0 ul Dil. Factor: 1.0000

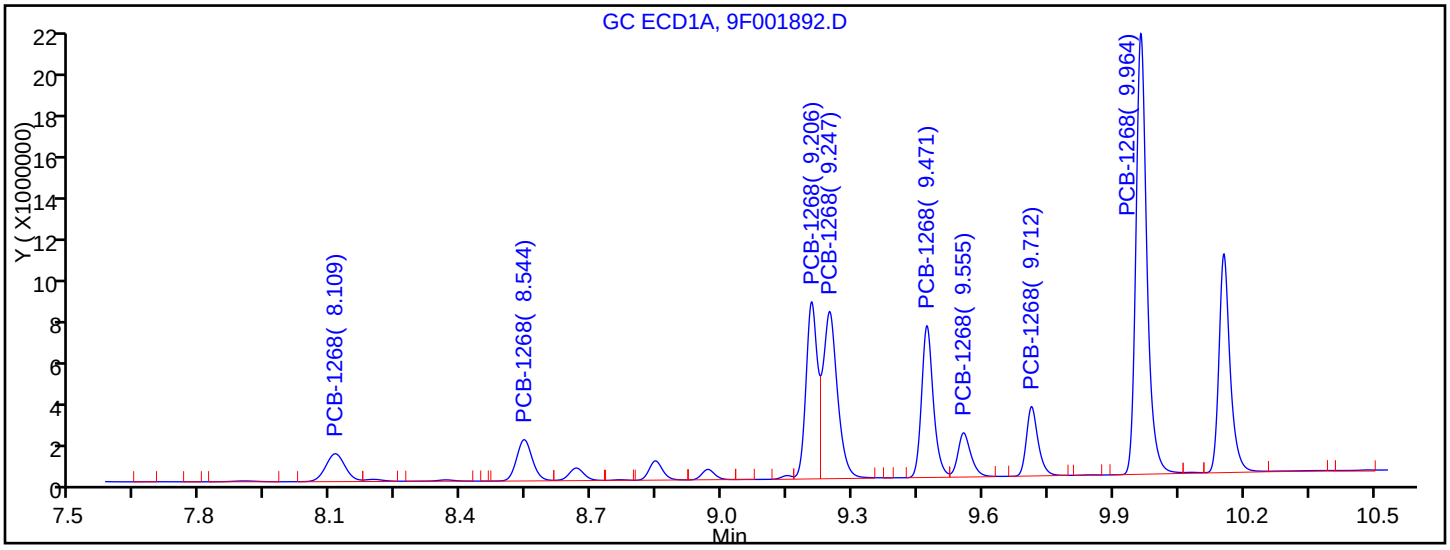
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

Column: Detector GC ECD1A

10 PCB-1268, CAS: 11100-14-4



Processing Integration Results



Manual Integration Results

RT = 8.109	Response = 4012068	M
RT = 8.544	Response = 4772449	M
RT = 9.206	Response = 14960284	M
RT = 9.247	Response = 17619446	M
RT = 9.471	Response = 13114972	M
RT = 9.555	Response = 4250884	M
RT = 9.712	Response = 5954381	M
RT = 9.964	Response = 35567927	M

Reviewer: patelji, 12-May-2016 14:55:54

Audit Action: Assigned New Baseline Audit Reason: Sample matrix interference

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 14:29 Calibration End Date: 05/12/2016 14:29 Calibration ID: 55737

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/14	9F001892.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1						B	M1	M2								
PCB-1268 Peak 1	0.0347					Ave		0.0347						20.0			0.9900
PCB-1268 Peak 2	0.0219					Ave		0.0219						20.0			0.9900
PCB-1268 Peak 3	0.1300					Ave		0.1300						20.0			0.9900
PCB-1268 Peak 4	0.1312					Ave		0.1312						20.0			0.9900
PCB-1268 Peak 5	0.0985					Ave		0.0985						20.0			0.9900
PCB-1268 Peak 6	0.0316					Ave		0.0316						20.0			0.9900
PCB-1268 Peak 7	0.0443					Ave		0.0443						20.0			0.9900
PCB-1268 Peak 8	0.2338					Ave		0.2338						20.0			0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-114699-1 Analy Batch No.: 367709

SDG No.:

Instrument ID: CPESTGC9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2016 14:29 Calibration End Date: 05/12/2016 14:29 Calibration ID: 55737

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 460-367709/14	9F001892.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1					LVL 1				
PCB-1268 Peak 1	BNB	Ave	6241548					1000				
PCB-1268 Peak 2	BNB	Ave	3938427					1000				
PCB-1268 Peak 3	BNB	Ave	23391935					1000				
PCB-1268 Peak 4	BNB	Ave	23615222					1000				
PCB-1268 Peak 5	BNB	Ave	17724210					1000				
PCB-1268 Peak 6	BNB	Ave	5690182					1000				
PCB-1268 Peak 7	BNB	Ave	7976826					1000				
PCB-1268 Peak 8	BNB	Ave	42067017					1000				

Curve Type Legend:

Ave = Average ISTD

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D
Lims ID: IC 1268
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-May-2016 14:29:29 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 460-0040924-014
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub8

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 12-May-2016 15:22:41 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: patelji Date: 12-May-2016 14:55:54

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							
1	1.624	1.624	0.000	3399016	20.0	20.0	
2	1.410	1.410	0.000	3598741	20.0	20.0	
						RPD = 0.00	
10 PCB-1268							M
1	8.109	8.109	0.000	4012068	1000.0	1000.0	M
1	8.544	8.544	0.000	4772449	1000.0	1000.0	M
1	9.206	9.206	0.000	14960284	1000.0	1000.0	M
1	9.247	9.247	0.000	17619446	1000.0	1000.0	M
1	9.471	9.471	0.000	13114972	1000.0	1000.0	M
1	9.555	9.555	0.000	4250884	1000.0	1000.0	M
1	9.712	9.712	0.000	5954381	1000.0	1000.0	a
1	9.964	9.964	0.000	35567927	1000.0	1000.0	M
		Average of Peak Amounts =				1000.0	
2	6.750	6.750	0.000	6241548	1000.0	1000.0	M
2	7.281	7.281	0.000	3938427	1000.0	1000.0	a
2	7.921	7.921	0.000	23391935	1000.0	1000.0	a
2	8.003	8.003	0.000	23615222	1000.0	1000.0	a
2	8.313	8.313	0.000	17724210	1000.0	1000.0	M
2	8.426	8.426	0.000	5690182	1000.0	1000.0	M
2	8.751	8.751	0.000	7976826	1000.0	1000.0	M
2	9.038	9.038	0.000	42067017	1000.0	1000.0	a
		Average of Peak Amounts =				1000.0	
						RPD = 0.00	

QC Flag Legend

Review Flags

M - Manually Integrated

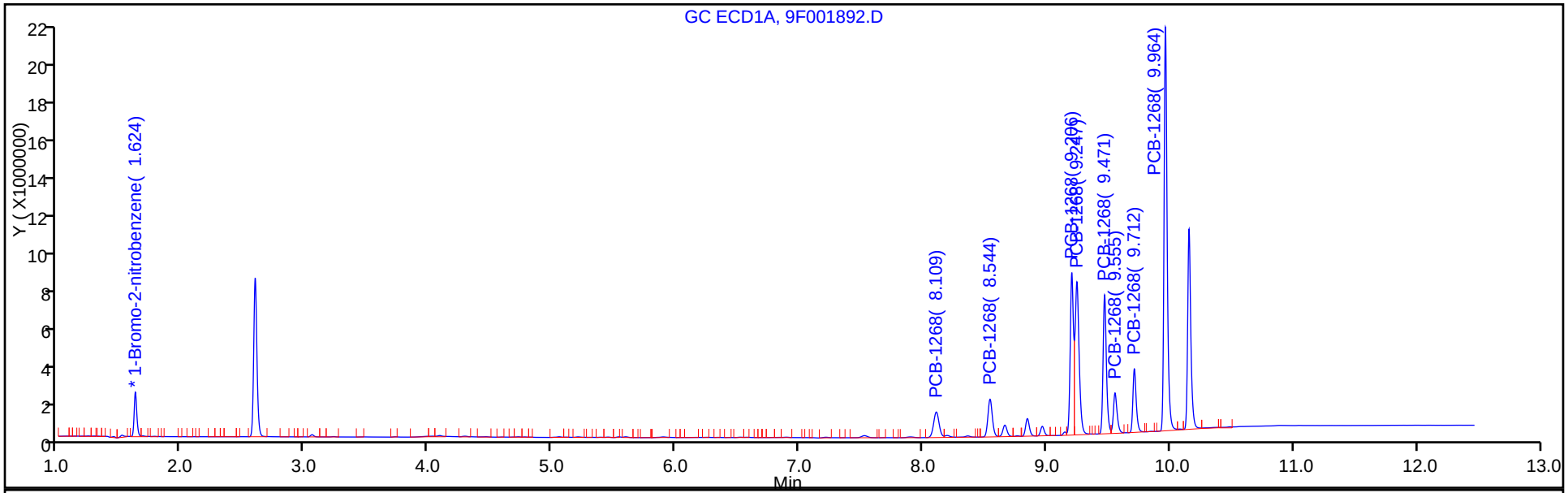
Reagents:

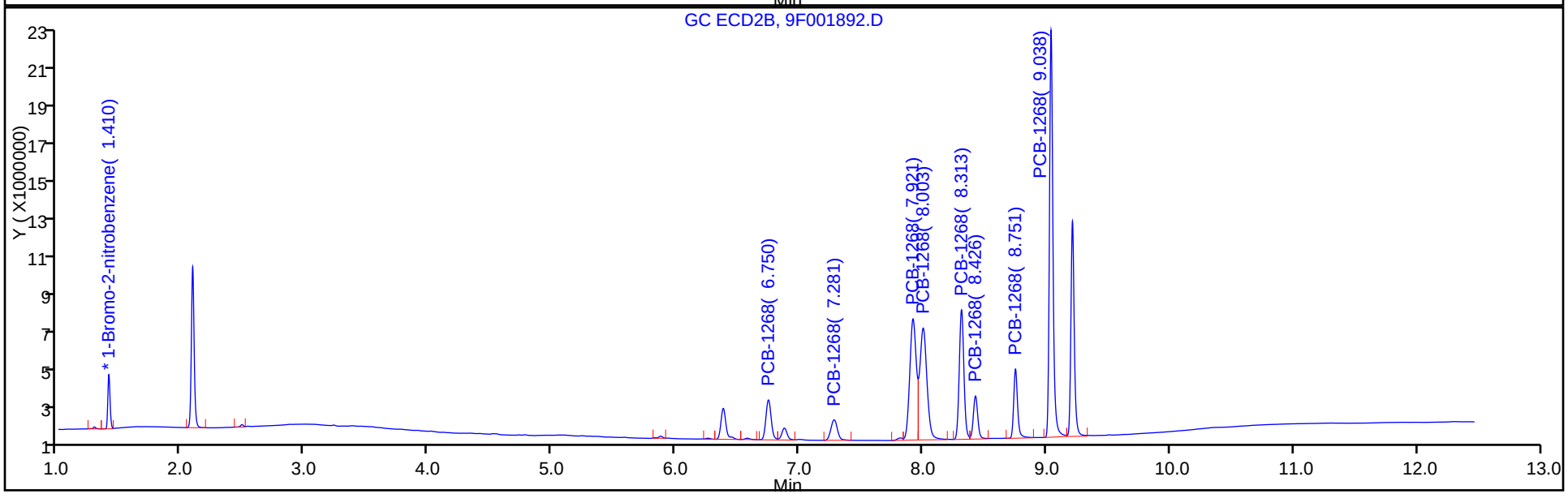
SG1268L3_00024	Amount Added: 1.00	Units: mL	
SGPCBISTD_00006	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 12-May-2016 15:22:44 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D				
Injection Date:	12-May-2016 14:29:29	Instrument ID:	CPESTGC9	Operator ID:	
Lims ID:	IC 1268			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		





Report Date: 12-May-2016 15:22:44 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Injection Date: 12-May-2016 14:29:29 Instrument ID: CPESTGC9

Lims ID: IC 1268

Client ID:

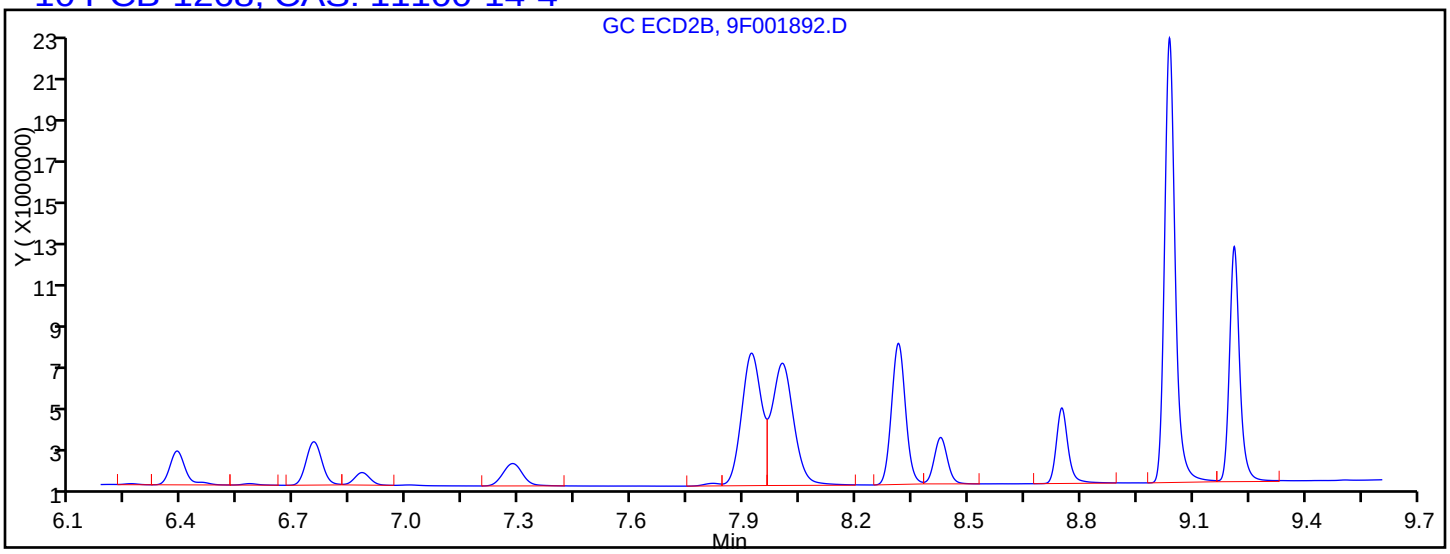
Operator ID: ALS Bottle#: 14 Worklist Smp#: 14

Injection Vol: 1.0 ul Dil. Factor: 1.0000

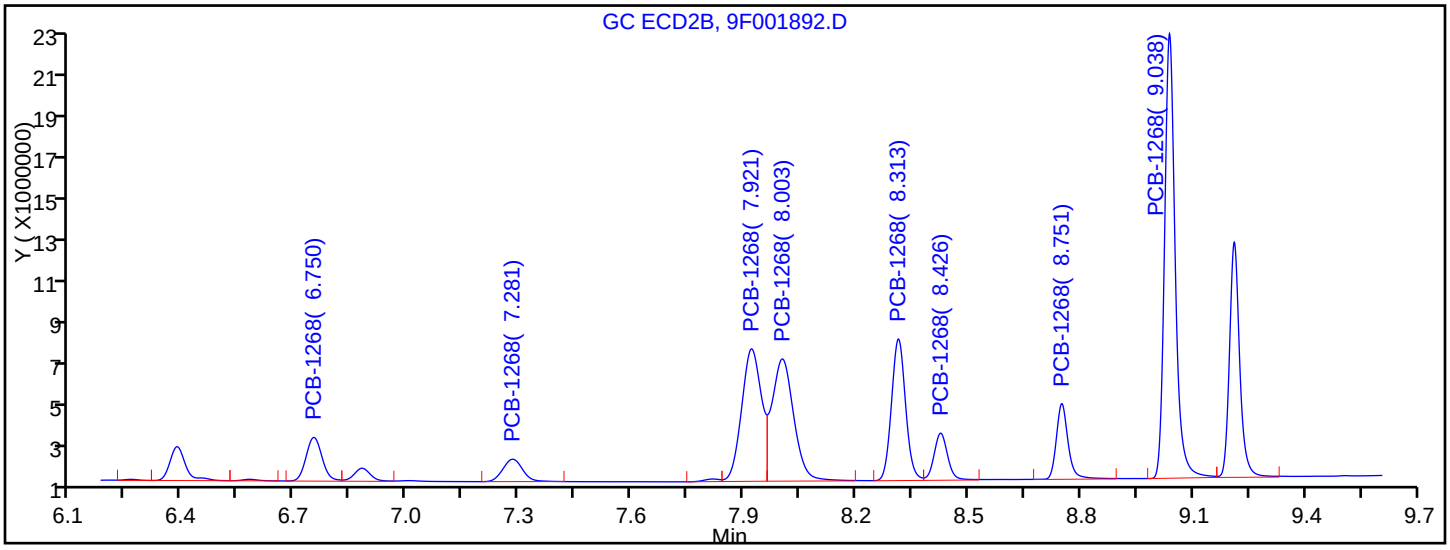
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

Column: Detector GC ECD2B

10 PCB-1268, CAS: 11100-14-4



Processing Integration Results



Manual Integration Results

RT = 6.750	Response = 6241548	M
RT = 7.281	Response = 3938427	M
RT = 7.921	Response = 23391935	M
RT = 8.003	Response = 23615222	M
RT = 8.313	Response = 17724210	M
RT = 8.426	Response = 5690182	M
RT = 8.751	Response = 7976826	M
RT = 9.038	Response = 42067017	M

Reviewer: patelji, 12-May-2016 14:55:54

Audit Action: Assigned New Baseline Audit Reason: Sample matrix interference

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Lab Sample ID: CCVIS 460-373069/3 Calibration Date: 06/11/2016 13:42

Instrument ID: CPESTGC9 Calib Start Date: 05/12/2016 10:14

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 05/12/2016 11:53

Lab File ID: 9F023732.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1260 Peak 4	Ave	0.0430	0.0529		0.0840	1000	23.1*	20.0
PCB-1016 Peak 1	Ave	0.0182	0.0202		1110	1000	11.2	20.0
PCB-1016 Peak 2	Ave	0.0374	0.0386		1030	1000	3.2	20.0
PCB-1016 Peak 3	Ave	0.0166	0.0164		985	1000	-1.5	20.0
PCB-1016 Peak 4	Ave	0.0652	0.0705		1080	1000	8.1	20.0
PCB-1016 Peak 5	Ave	0.0299	0.0314		1050	1000	5.1	20.0
PCB-1016 Peak 6	Ave	0.0165	0.0170		1030	1000	3.4	20.0
PCB-1016 Peak 7	Ave	0.0238	0.0261		1090	1000	9.5	20.0
PCB-1016 Peak 8	Ave	0.0260	0.0297		1140	1000	14.0	20.0
PCB-1260 Peak 1	Ave	0.0236	0.0275		1160	1000	16.4	20.0
PCB-1260 Peak 2	Ave	0.0484	0.0537		1110	1000	11.0	20.0
PCB-1260 Peak 3	Ave	0.0579	0.0634		1100	1000	9.5	20.0
PCB-1260 Peak 5	Ave	0.0423	0.0470		1110	1000	11.1	20.0
PCB-1260 Peak 6	Ave	0.0849	0.0966		1140	1000	13.7	20.0
PCB-1260 Peak 7	Ave	0.0623	0.0669		1070	1000	7.4	20.0
PCB-1260 Peak 8	Ave	0.0255	0.0291		1140	1000	14.0	20.0
Tetrachloro-m-xylene	Ave	0.8297	0.9088		110	100	9.5	20.0
DCB Decachlorobiphenyl	Ave	0.7142	0.7267		102	100	1.7	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Lab Sample ID: CCVIS 460-373069/3 Calibration Date: 06/11/2016 13:42

Instrument ID: CPESTGC9 Calib Start Date: 05/12/2016 10:14

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 05/12/2016 11:53

Lab File ID: 9F023732.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1260 Peak 4	0.00	8.01	8.15
PCB-1016 Peak 1	3.21	3.18	3.24
PCB-1016 Peak 2	3.72	3.65	3.79
PCB-1016 Peak 3	4.01	3.94	4.08
PCB-1016 Peak 4	4.28	4.21	4.35
PCB-1016 Peak 5	4.45	4.38	4.52
PCB-1016 Peak 6	4.71	4.64	4.78
PCB-1016 Peak 7	5.04	4.97	5.11
PCB-1016 Peak 8	5.20	5.13	5.27
PCB-1260 Peak 1	6.56	6.53	6.59
PCB-1260 Peak 2	6.82	6.75	6.89
PCB-1260 Peak 3	7.19	7.12	7.26
PCB-1260 Peak 5	8.52	8.45	8.59
PCB-1260 Peak 6	8.83	8.76	8.90
PCB-1260 Peak 7	9.20	9.13	9.27
PCB-1260 Peak 8	9.71	9.64	9.78
Tetrachloro-m-xylene	2.59	2.56	2.62
DCB Decachlorobiphenyl	10.16	10.13	10.19

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023732.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 11-Jun-2016 13:42:16 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info:
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub1

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 13-Jun-2016 09:03:01 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: patelji Date: 11-Jun-2016 14:16:32

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.618	1.618	0.000	2395213	20.0	20.0	
2	1.403	1.403	0.000	3322584	20.0	20.0	M
						RPD = 0.00	
$ 2 Tetrachloro-m-xylene							M
1	2.585	2.585	0.000	10883532	100.0	109.5	
2	2.080	2.080	0.000	11545104	100.0	91.1	M
						RPD = 18.40	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 PCB-1016							M
1	3.206	3.206	0.000	2421700	1000.0	1111.6	
1	3.717	3.717	0.000	4617484	1000.0	1031.9	
1	4.013	4.013	0.000	1959544	1000.0	985.0	
1	4.283	4.283	0.000	8443286	1000.0	1081.2	
1	4.454	4.454	0.000	3760788	1000.0	1051.3	
1	4.714	4.714	0.000	2038306	1000.0	1034.5	
1	5.043	5.043	0.000	3126804	1000.0	1094.9	
1	5.195	5.195	0.000	3551914	1000.0	1139.5	
		Average of Peak Amounts =				1066.2	
2	2.469	2.469	0.000	2618204	1000.0	928.5	
2	2.858	2.858	0.000	4929871	1000.0	928.7	M
2	3.077	3.077	0.000	3187152	1000.0	913.7	M
2	3.378	3.378	0.000	9801314	1000.0	907.1	M
2	3.530	3.530	0.000	4503185	1000.0	929.8	M
2	3.600	3.600	0.000	2820284	1000.0	946.7	M
2	4.008	4.008	0.000	4567258	1000.0	973.9	M
2	4.106	4.106	0.000	2574668	1000.0	1072.9	M
		Average of Peak Amounts =				950.1	
						RPD = 11.51	
8 PCB-1260							
1	6.561	6.561	0.000	3289690	1000.0	1164.1	
1	6.818	6.818	0.000	6430405	1000.0	1110.4	
1	7.188	7.188	0.000	7592505	1000.0	1095.2	
1	0.000	8.083	-8.083	0	1000.0	0	
1	8.523	8.523	0.000	5623536	1000.0	1110.8	
1	8.834	8.834	0.000	11563662	1000.0	1136.9	
1	9.202	9.202	0.000	8014711	1000.0	1073.8	
1	9.710	9.710	0.000	3480232	1000.0	1139.8	
		Average of Peak Amounts =				1118.7	
2	5.453	5.453	0.000	6727224	1000.0	937.2	M
2	6.188	6.188	0.000	11463978	1000.0	908.7	M
2	6.363	6.363	0.000	7551829	1000.0	976.3	M
2	6.733	6.733	0.000	6532876	1000.0	836.5	M
2	7.261	7.261	0.000	17120321	1000.0	901.3	
2	7.797	7.797	0.000	7928196	1000.0	887.7	
2	7.985	7.985	0.000	5964158	1000.0	967.4	
2	8.738	8.738	0.000	4843443	1000.0	908.6	
		Average of Peak Amounts =				915.4	
						RPD = 19.99	
$ 11 DCB Decachlorobiphenyl							M
1	10.157	10.157	0.000	8702417	100.0	101.7	M
2	9.207	9.207	0.000	11594577	100.0	83.7	
						RPD = 19.41	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660L3_00028	Amount Added: 1.00	Units: mL	
SGPCBISTD_00006	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 13-Jun-2016 09:03:06 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023732.D

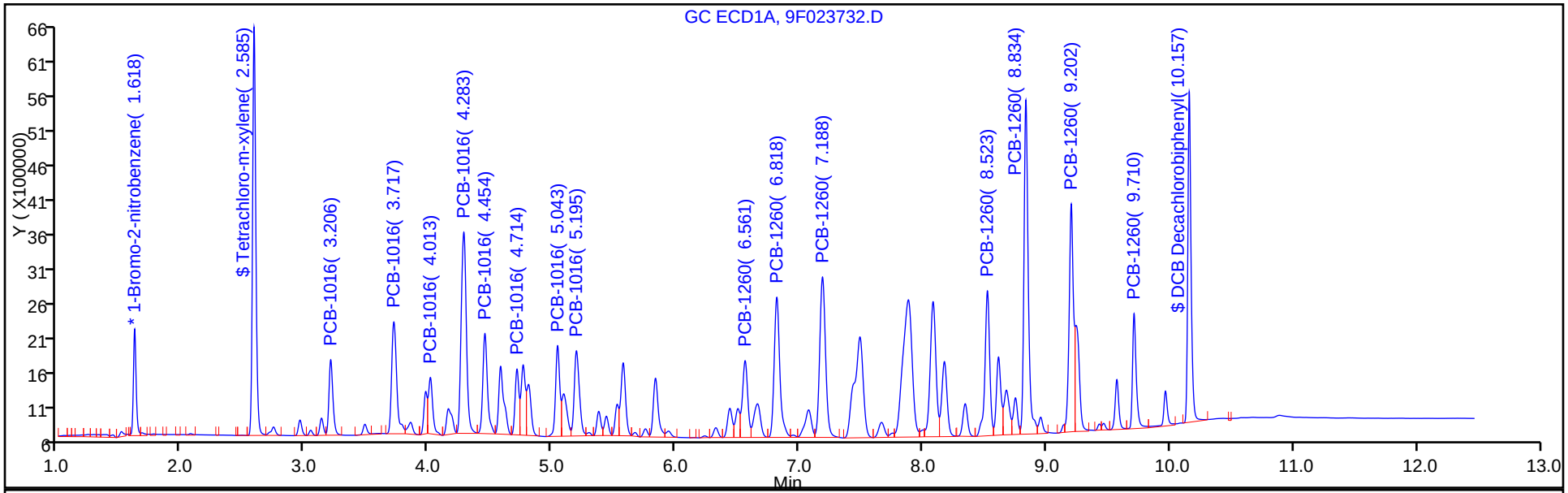
Injection Date: 11-Jun-2016 13:42:16 Instrument ID: CPESTGC9 Operator ID:

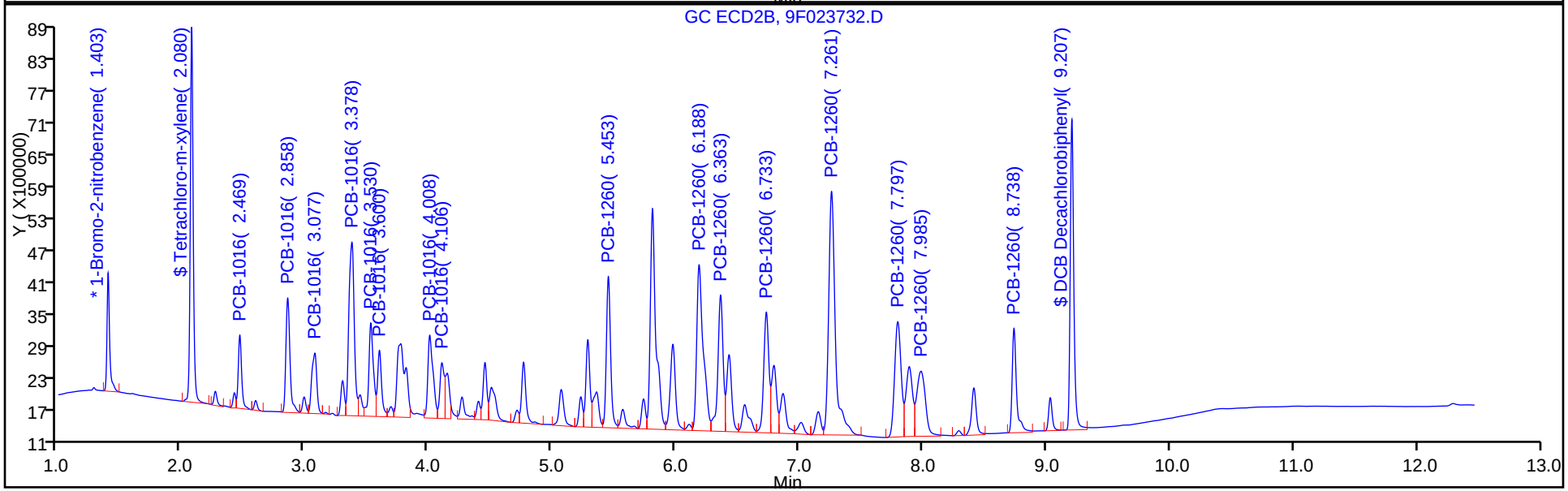
Lims ID: CCVIS Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD





TestAmerica Edison

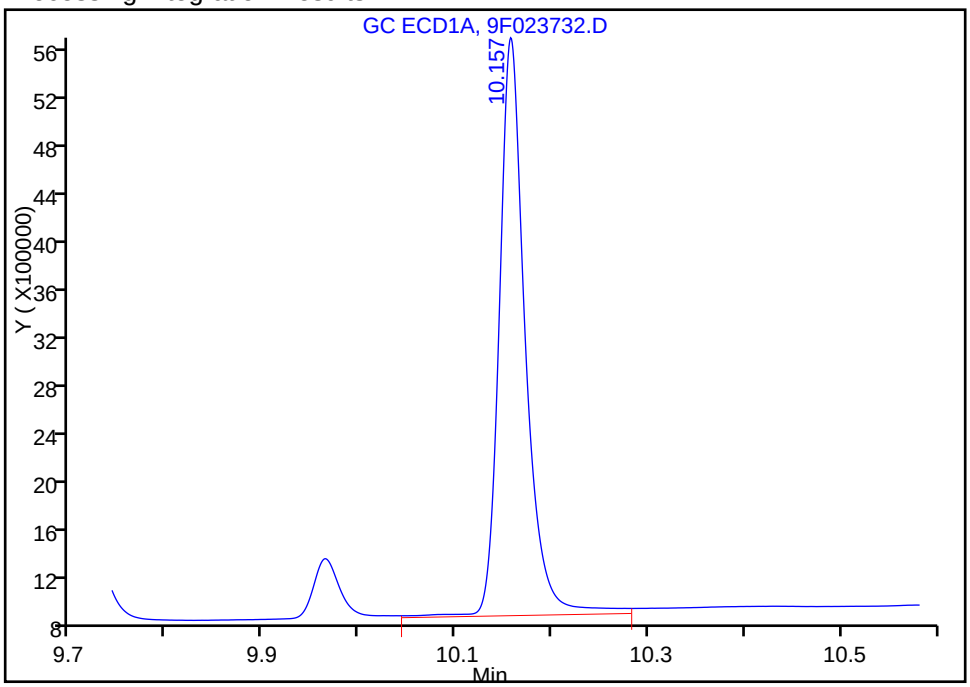
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023732.D				
Injection Date:	11-Jun-2016 13:42:16	Instrument ID:	CPESTGC9		
Lims ID:	CCVIS				
Client ID:					
Operator ID:		ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD1A		

$ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

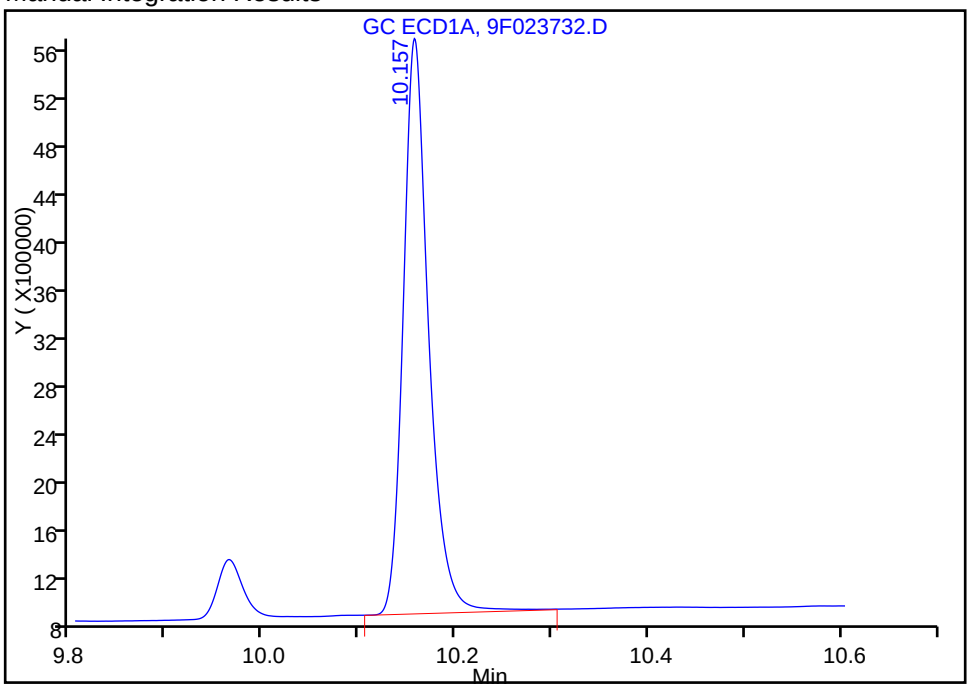
Processing Integration Results

RT: 10.16
Area: 9026389
Amount: 105.5275
Amount Units: ug/l



Manual Integration Results

RT: 10.16
Area: 8702417
Amount: 101.7399
Amount Units: ug/l



Reviewer: patelji, 11-Jun-2016 14:16:32
Audit Action: Manually Integrated Audit Reason: Peak not integrated

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Lab Sample ID: CCVIS 460-373069/3 Calibration Date: 06/11/2016 13:42

Instrument ID: CPESTGC9 Calib Start Date: 05/12/2016 10:14

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 05/12/2016 11:53

Lab File ID: 9F023732.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	0.0170	0.0158		929	1000	-7.1	20.0
PCB-1016 Peak 2	Ave	0.0320	0.0297		929	1000	-7.1	20.0
PCB-1016 Peak 3	Ave	0.0210	0.0192		914	1000	-8.6	20.0
PCB-1016 Peak 4	Ave	0.0650	0.0590		907	1000	-9.3	20.0
PCB-1016 Peak 5	Ave	0.0292	0.0271		930	1000	-7.0	20.0
PCB-1016 Peak 6	Ave	0.0179	0.0170		947	1000	-5.3	20.0
PCB-1016 Peak 7	Ave	0.0282	0.0275		974	1000	-2.6	20.0
PCB-1016 Peak 8	Ave	0.0144	0.0155		1070	1000	7.3	20.0
PCB-1260 Peak 1	Ave	0.0432	0.0405		937	1000	-6.3	20.0
PCB-1260 Peak 2	Ave	0.0759	0.0690		909	1000	-9.1	20.0
PCB-1260 Peak 3	Ave	0.0466	0.0455		976	1000	-2.4	20.0
PCB-1260 Peak 4	Ave	0.0470	0.0393		836	1000	-16.4	20.0
PCB-1260 Peak 5	Ave	0.1143	0.1031		901	1000	-9.9	20.0
PCB-1260 Peak 6	Ave	0.0538	0.0477		888	1000	-11.2	20.0
PCB-1260 Peak 7	Ave	0.0371	0.0359		967	1000	-3.3	20.0
PCB-1260 Peak 8	Ave	0.0321	0.0292		909	1000	-9.1	20.0
Tetrachloro-m-xylene	Ave	0.7630	0.6950		91.1	100	-8.9	20.0
DCB Decachlorobiphenyl	Ave	0.8335	0.6979		83.7	100	-16.3	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Lab Sample ID: CCVIS 460-373069/3 Calibration Date: 06/11/2016 13:42

Instrument ID: CPESTGC9 Calib Start Date: 05/12/2016 10:14

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 05/12/2016 11:53

Lab File ID: 9F023732.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	2.47	2.40	2.54
PCB-1016 Peak 2	2.86	2.79	2.93
PCB-1016 Peak 3	3.08	3.01	3.15
PCB-1016 Peak 4	3.38	3.31	3.45
PCB-1016 Peak 5	3.53	3.46	3.60
PCB-1016 Peak 6	3.60	3.53	3.67
PCB-1016 Peak 7	4.01	3.94	4.08
PCB-1016 Peak 8	4.11	4.04	4.18
PCB-1260 Peak 1	5.45	5.38	5.52
PCB-1260 Peak 2	6.19	6.12	6.26
PCB-1260 Peak 3	6.36	6.29	6.43
PCB-1260 Peak 4	6.73	6.66	6.80
PCB-1260 Peak 5	7.26	7.19	7.33
PCB-1260 Peak 6	7.80	7.73	7.87
PCB-1260 Peak 7	7.99	7.92	8.06
PCB-1260 Peak 8	8.74	8.67	8.81
Tetrachloro-m-xylene	2.08	2.03	2.13
DCB Decachlorobiphenyl	9.21	9.11	9.31

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023732.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 11-Jun-2016 13:42:16 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info:
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub1

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 13-Jun-2016 09:03:01 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: patelji Date: 11-Jun-2016 14:16:32

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							M
1	1.618	1.618	0.000	2395213	20.0	20.0	
2	1.403	1.403	0.000	3322584	20.0	20.0	M
						RPD = 0.00	
$ 2 Tetrachloro-m-xylene							M
1	2.585	2.585	0.000	10883532	100.0	109.5	
2	2.080	2.080	0.000	11545104	100.0	91.1	M
						RPD = 18.40	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
5 PCB-1016							M
1	3.206	3.206	0.000	2421700	1000.0	1111.6	
1	3.717	3.717	0.000	4617484	1000.0	1031.9	
1	4.013	4.013	0.000	1959544	1000.0	985.0	
1	4.283	4.283	0.000	8443286	1000.0	1081.2	
1	4.454	4.454	0.000	3760788	1000.0	1051.3	
1	4.714	4.714	0.000	2038306	1000.0	1034.5	
1	5.043	5.043	0.000	3126804	1000.0	1094.9	
1	5.195	5.195	0.000	3551914	1000.0	1139.5	
		Average of Peak Amounts =				1066.2	
2	2.469	2.469	0.000	2618204	1000.0	928.5	
2	2.858	2.858	0.000	4929871	1000.0	928.7	M
2	3.077	3.077	0.000	3187152	1000.0	913.7	M
2	3.378	3.378	0.000	9801314	1000.0	907.1	M
2	3.530	3.530	0.000	4503185	1000.0	929.8	M
2	3.600	3.600	0.000	2820284	1000.0	946.7	M
2	4.008	4.008	0.000	4567258	1000.0	973.9	M
2	4.106	4.106	0.000	2574668	1000.0	1072.9	M
		Average of Peak Amounts =				950.1	
						RPD = 11.51	
8 PCB-1260							
1	6.561	6.561	0.000	3289690	1000.0	1164.1	
1	6.818	6.818	0.000	6430405	1000.0	1110.4	
1	7.188	7.188	0.000	7592505	1000.0	1095.2	
1	0.000	8.083	-8.083	0	1000.0	0	
1	8.523	8.523	0.000	5623536	1000.0	1110.8	
1	8.834	8.834	0.000	11563662	1000.0	1136.9	
1	9.202	9.202	0.000	8014711	1000.0	1073.8	
1	9.710	9.710	0.000	3480232	1000.0	1139.8	
		Average of Peak Amounts =				1118.7	
2	5.453	5.453	0.000	6727224	1000.0	937.2	M
2	6.188	6.188	0.000	11463978	1000.0	908.7	M
2	6.363	6.363	0.000	7551829	1000.0	976.3	M
2	6.733	6.733	0.000	6532876	1000.0	836.5	M
2	7.261	7.261	0.000	17120321	1000.0	901.3	
2	7.797	7.797	0.000	7928196	1000.0	887.7	
2	7.985	7.985	0.000	5964158	1000.0	967.4	
2	8.738	8.738	0.000	4843443	1000.0	908.6	
		Average of Peak Amounts =				915.4	
						RPD = 19.99	
$ 11 DCB Decachlorobiphenyl							M
1	10.157	10.157	0.000	8702417	100.0	101.7	M
2	9.207	9.207	0.000	11594577	100.0	83.7	
						RPD = 19.41	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1660L3_00028	Amount Added: 1.00	Units: mL	
SGPCBISTD_00006	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 13-Jun-2016 09:03:07 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023732.D

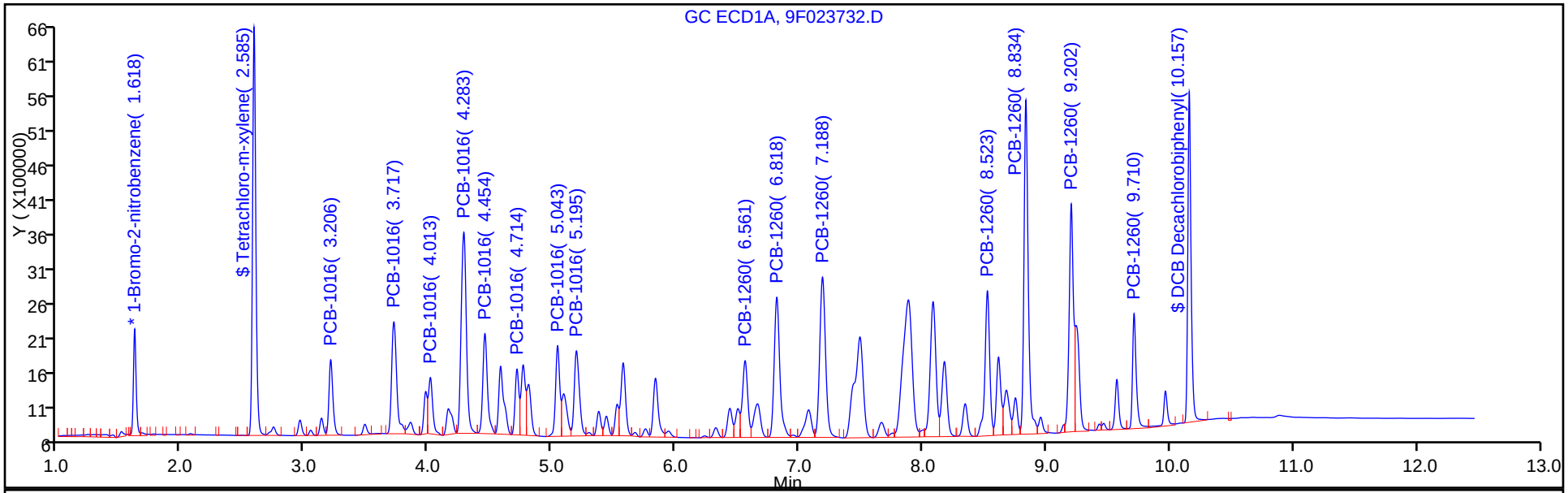
Injection Date: 11-Jun-2016 13:42:16 Instrument ID: CPESTGC9 Operator ID:

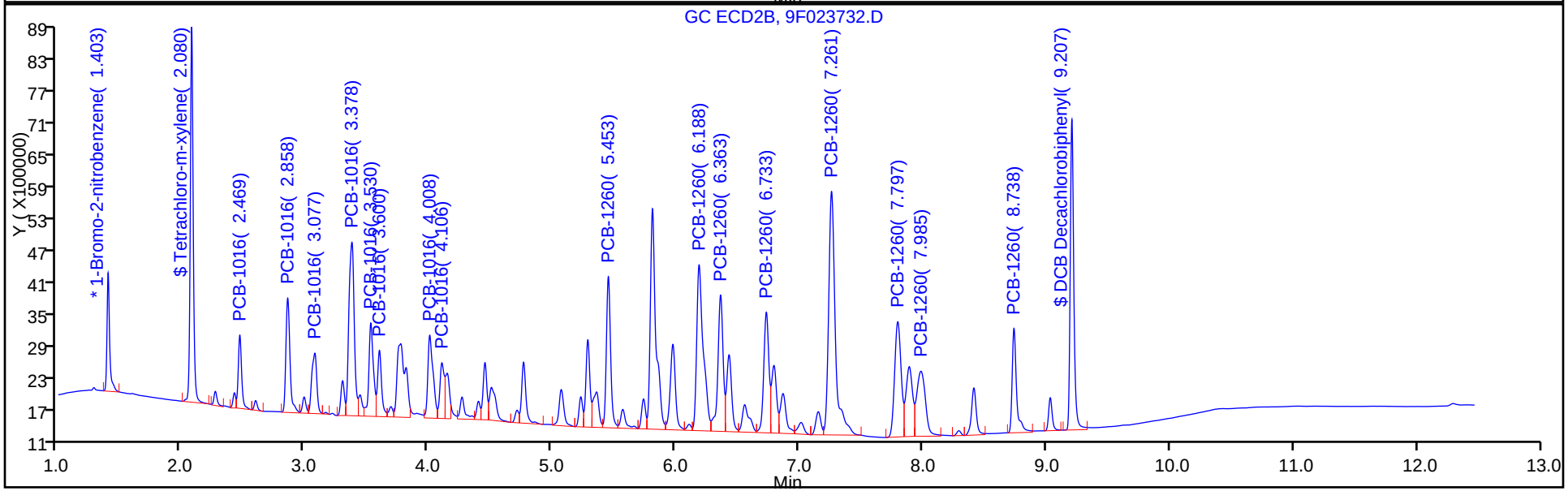
Lims ID: CCVIS Worklist Smp#: 3

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD





TestAmerica Edison

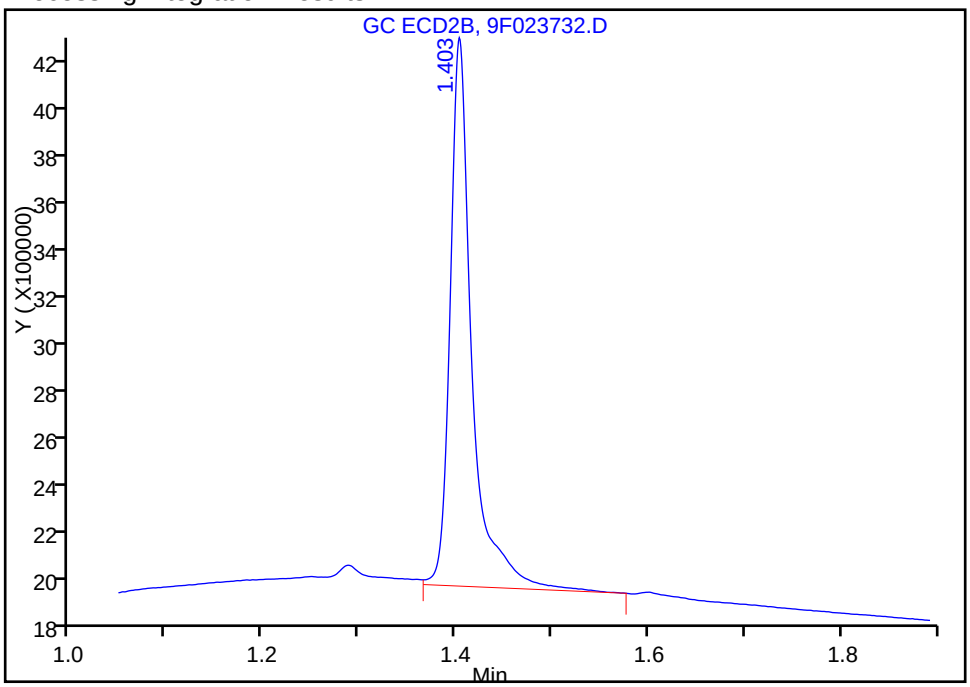
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023732.D				
Injection Date:	11-Jun-2016 13:42:16	Instrument ID:	CPESTGC9		
Lims ID:	CCVIS				
Client ID:					
Operator ID:		ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

* 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

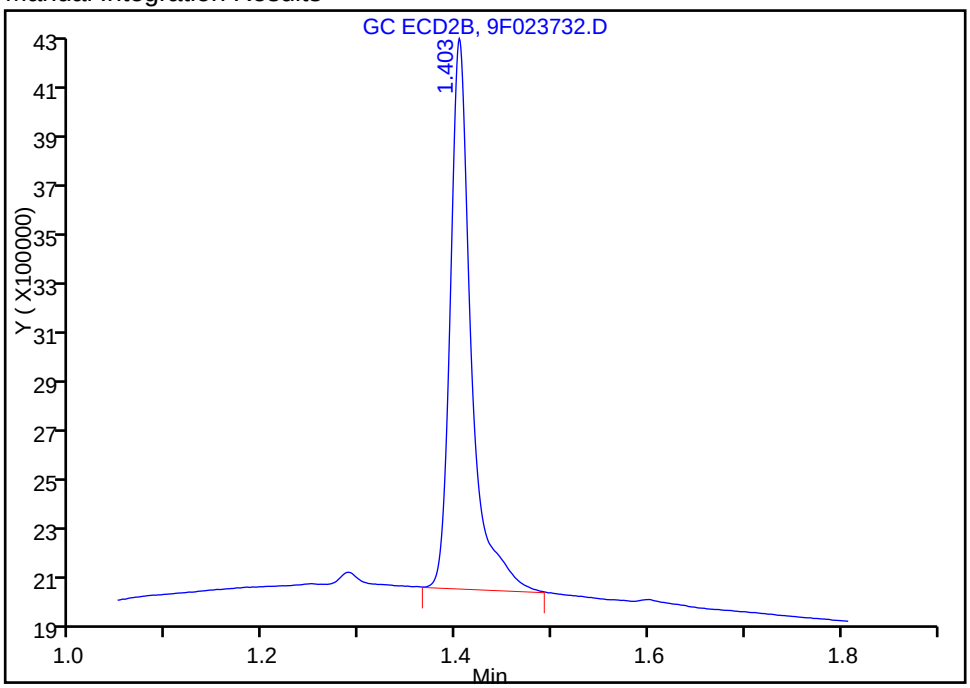
Processing Integration Results

RT: 1.40
Area: 3494040
Amount: 20.000000
Amount Units: ug/l



Manual Integration Results

RT: 1.40
Area: 3322584
Amount: 20.000000
Amount Units: ug/l



Reviewer: patelji, 11-Jun-2016 14:16:32
Audit Action: Manually Integrated Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

TestAmerica Edison

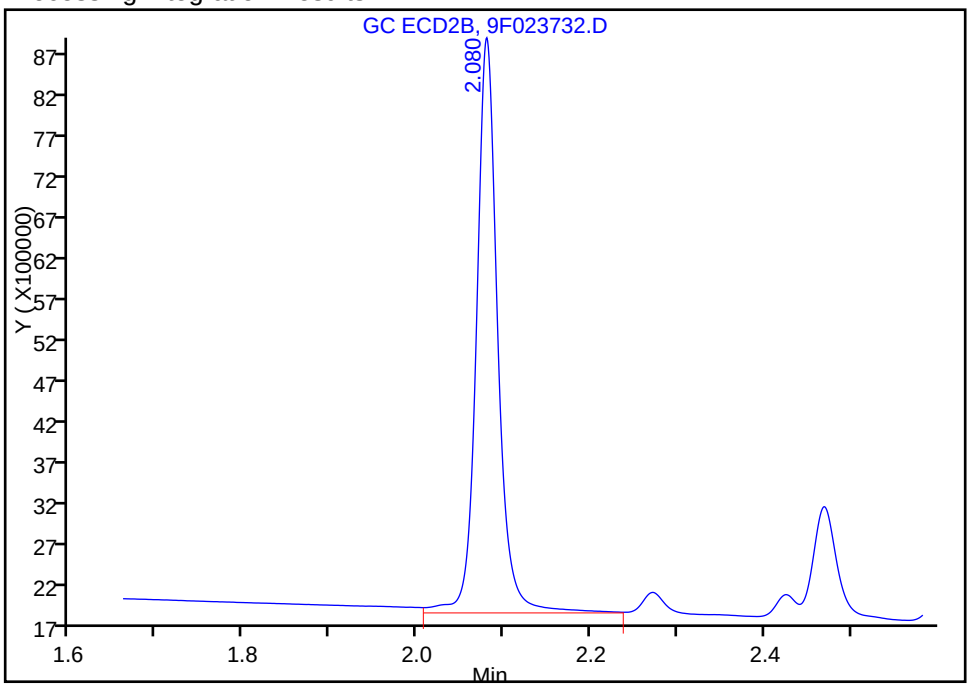
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023732.D				
Injection Date:	11-Jun-2016 13:42:16	Instrument ID:	CPESTGC9		
Lims ID:	CCVIS				
Client ID:					
Operator ID:		ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

$ 2 Tetrachloro-m-xylene, CAS: 877-09-8

Signal: 2

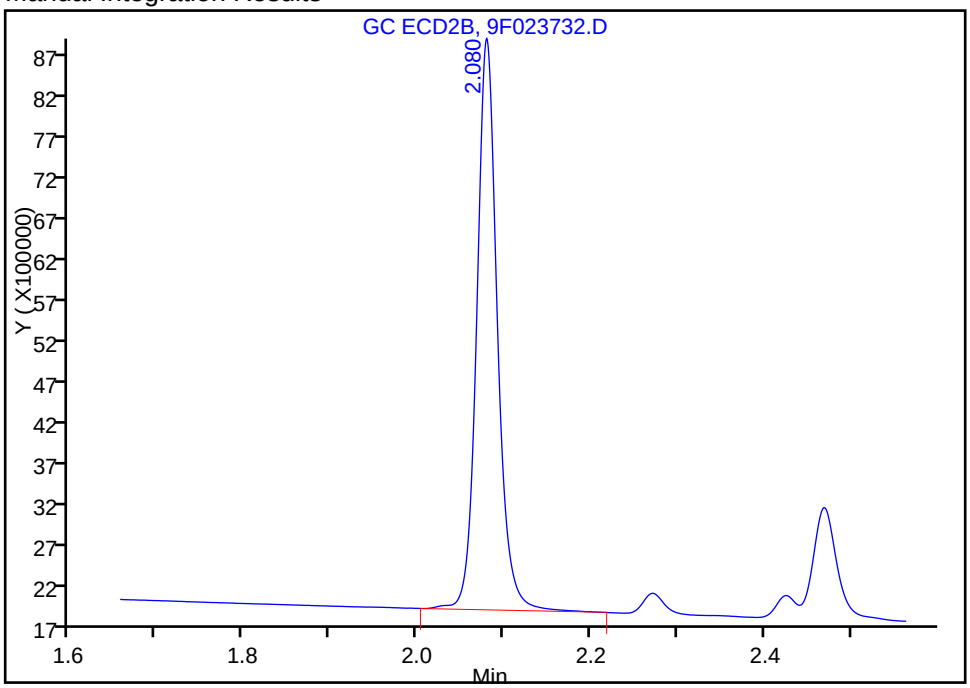
Processing Integration Results

RT: 2.08
Area: 12082559
Amount: 95.320063
Amount Units: ug/l



Manual Integration Results

RT: 2.08
Area: 11545104
Amount: 91.080047
Amount Units: ug/l



Reviewer: patelji, 11-Jun-2016 14:16:32

Audit Action: Manually Integrated Audit Reason: Peak not integrated

Report Date: 13-Jun-2016 09:03:08 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023732.D

Injection Date: 11-Jun-2016 13:42:16 Instrument ID: CPESTGC9

Lims ID: CCVIS

Client ID:

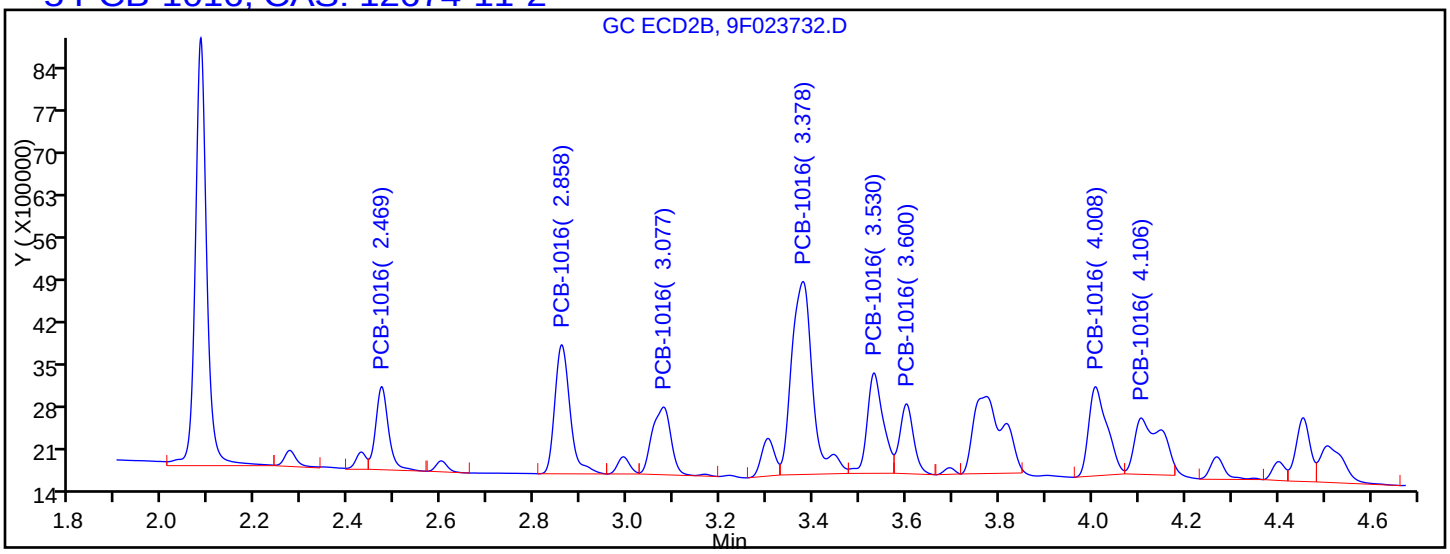
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

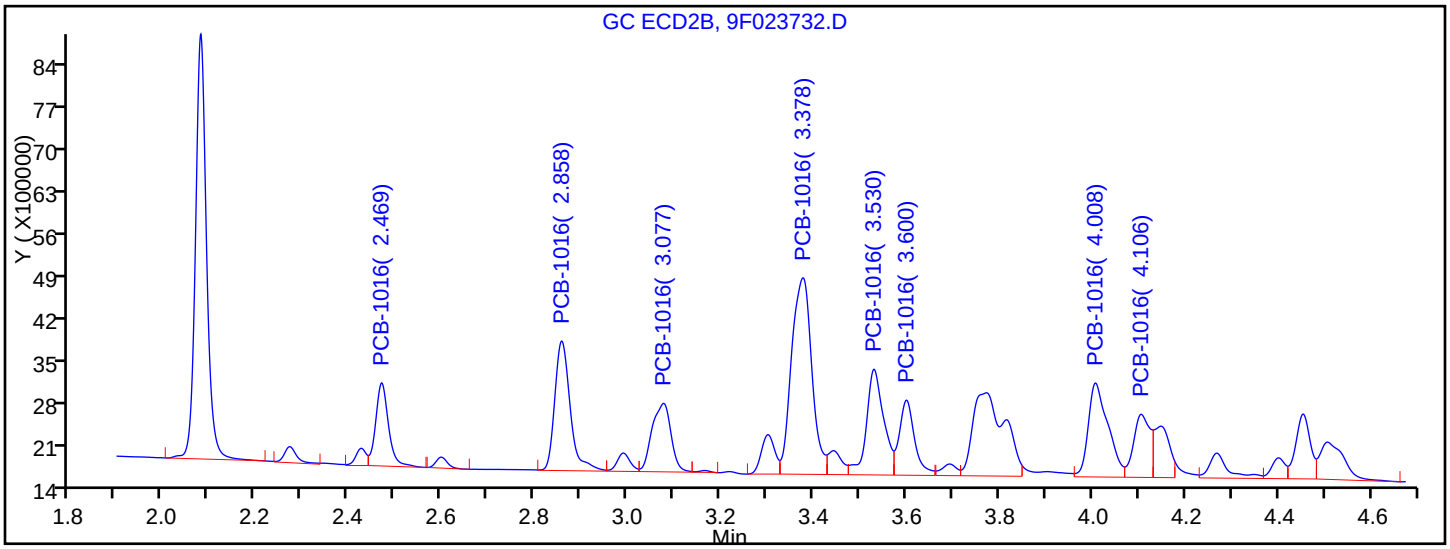
Column: Detector GC ECD2B

5 PCB-1016, CAS: 12674-11-2



Processing Integration Results

RT = 2.469	Response = 2618204	
RT = 2.858	Response = 4837591	M
RT = 3.077	Response = 3143851	M
RT = 3.378	Response = 10031989	M
RT = 3.530	Response = 3989000	M
RT = 3.600	Response = 2380911	M
RT = 4.008	Response = 4016900	M
RT = 4.106	Response = 3767368	M



Manual Integration Results

RT = 2.469	Response = 2618204	
RT = 2.858	Response = 4929871	M
RT = 3.077	Response = 3187152	M
RT = 3.378	Response = 9801314	M
RT = 3.530	Response = 4503185	M
RT = 3.600	Response = 2820284	M

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Lab Sample ID: CCV 460-373069/4 Calibration Date: 06/11/2016 14:02

Instrument ID: CPESTGC9 Calib Start Date: 05/12/2016 10:14

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 05/12/2016 11:53

Lab File ID: 9F023733.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrachloro-m-xylene	Ave	0.8297	0.8630		104	100	4.0	20.0
DCB Decachlorobiphenyl	Ave	0.7142	0.6850		95.9	100	-4.1	20.0

FORM VII 8082A

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Lab Sample ID: CCV 460-373069/4 Calibration Date: 06/11/2016 14:02

Instrument ID: CPESTGC9 Calib Start Date: 05/12/2016 10:14

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 05/12/2016 11:53

Lab File ID: 9F023733.D

Analyte	RT	RT WINDOW	
		FROM	TO
Tetrachloro-m-xylene	2.59	2.56	2.62
DCB Decachlorobiphenyl	10.15	10.13	10.19

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023733.D
Lims ID: CCV AR1248
Client ID:
Sample Type: CCV
Inject. Date: 11-Jun-2016 14:02:35 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info:
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub5

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 13-Jun-2016 08:53:25 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: patelji Date: 11-Jun-2016 14:21:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							
1	1.619	1.618	0.001	2673351	20.0	20.0	
2	1.404	1.403	0.001	3394038	20.0	20.0	
						RPD = 0.00	
$ 2 Tetrachloro-m-xylene							M
1	2.585	2.585	0.000	11535481	100.0	104.0	
2	2.081	2.080	0.001	11539240	100.0	89.1	M
						RPD = 15.43	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
6 PCB-1248							M
1	3.714	3.714	0.000	2552577	1000.0	1139.9	
1	4.281	4.281	0.000	5442476	1000.0	1161.9	
1	4.714	4.714	0.000	3252117	1000.0	1107.6	
1	4.764	4.764	0.000	3249086	1000.0	1126.6	
1	5.194	5.194	0.000	4719306	1000.0	1122.3	M
1	5.524	5.524	0.000	4540246	1000.0	1113.6	M
1	5.579	5.579	0.000	5712933	1000.0	1184.3	M
1	6.875	6.875	0.000	2287497	1000.0	1131.6	
		Average of Peak Amounts =				1136.0	
2	2.857	2.857	0.000	2454005	1000.0	995.2	M
2	3.375	3.375	0.000	5605687	1000.0	898.2	M
2	3.759	3.759	0.000	6520985	1000.0	966.7	M
2	4.106	4.106	0.000	3536130	1000.0	916.9	M
2	4.509	4.509	0.000	10885645	1000.0	999.4	M
2	4.765	4.765	0.000	4984410	1000.0	1001.8	M
2	5.233	5.233	0.000	3218206	1000.0	950.7	M
2	5.923	5.923	0.000	1995932	1000.0	927.4	M
		Average of Peak Amounts =				957.0	
						RPD = 17.10	
$ 11 DCB Decachlorobiphenyl							
1	10.149	10.157	-0.008	9156716	100.0	95.9	
2	9.203	9.207	-0.004	11766610	100.0	83.2	
						RPD = 14.21	
S 12 Polychlorinated biphenyls, Total							
1						1136.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1248L3_00025	Amount Added: 1.00	Units: mL	
SGPCBISTD_00006	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 13-Jun-2016 08:53:25 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023733.D

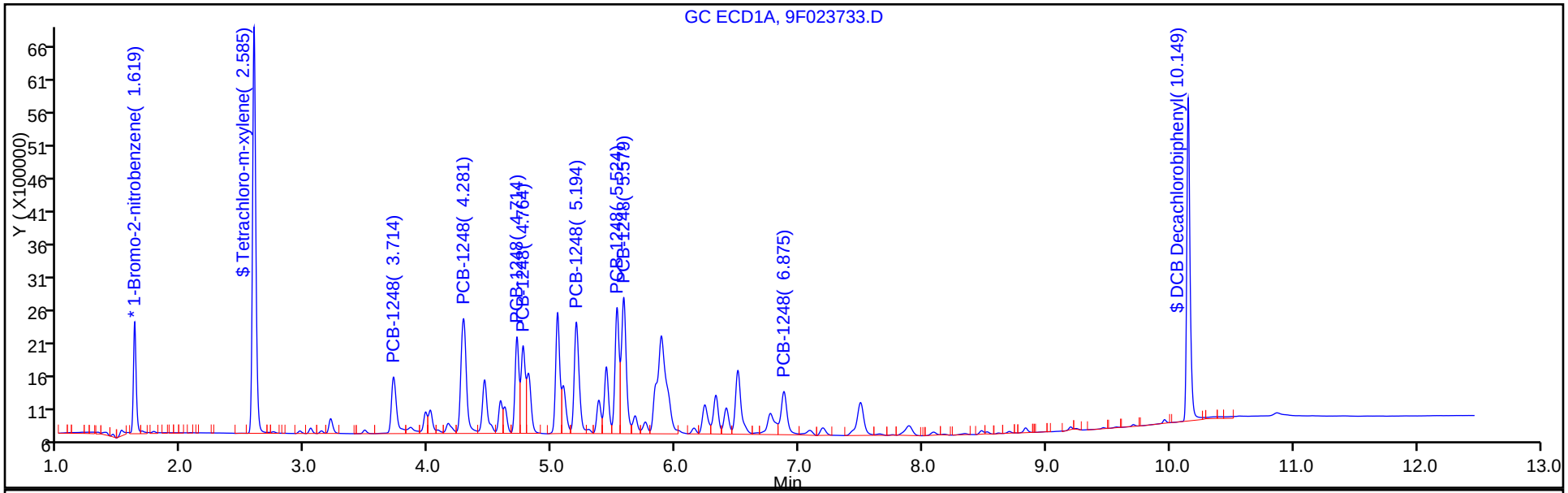
Injection Date: 11-Jun-2016 14:02:35 Instrument ID: CPESTGC9 Operator ID:

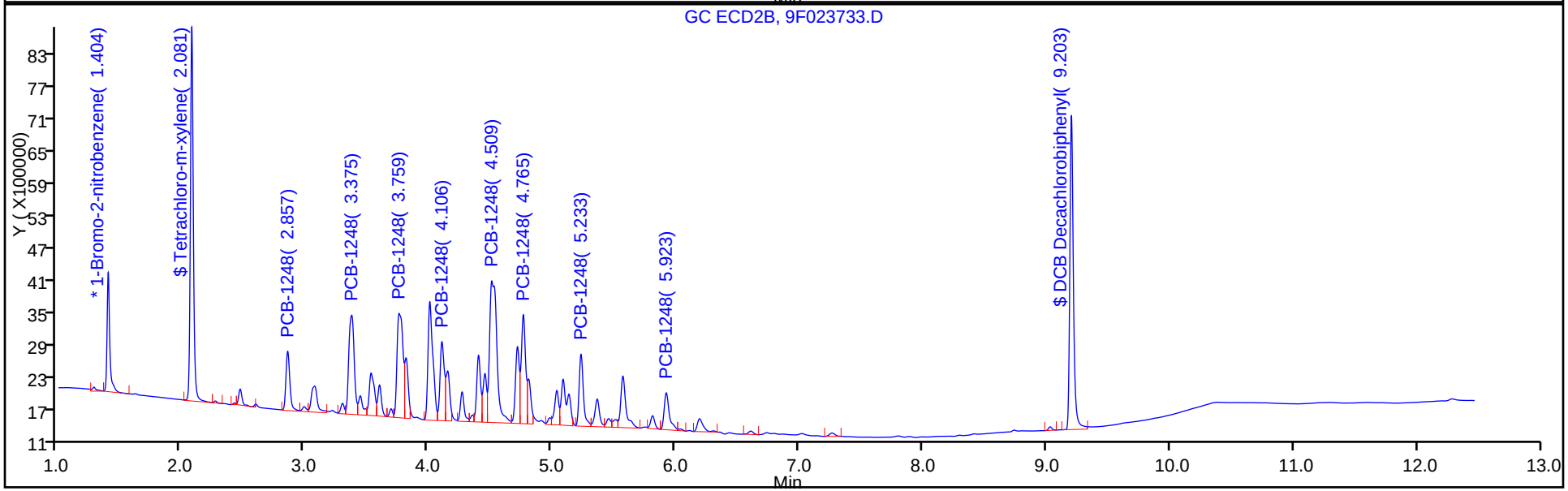
Lims ID: CCV AR1248 Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD





FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Lab Sample ID: CCV 460-373069/4 Calibration Date: 06/11/2016 14:02

Instrument ID: CPESTGC9 Calib Start Date: 05/12/2016 13:35

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 05/12/2016 13:35

Lab File ID: 9F023733.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Ave	0.0168	0.0191		1140	1000	14.0	20.0
PCB-1248 Peak 2	Ave	0.0350	0.0407		1160	1000	16.2	20.0
PCB-1248 Peak 3	Ave	0.0220	0.0243		1110	1000	10.8	20.0
PCB-1248 Peak 4	Ave	0.0216	0.0243		1130	1000	12.7	20.0
PCB-1248 Peak 5	Ave	0.0315	0.0353		1120	1000	12.2	20.0
PCB-1248 Peak 6	Ave	0.0305	0.0340		1110	1000	11.4	20.0
PCB-1248 Peak 7	Ave	0.0361	0.0427		1180	1000	18.4	20.0
PCB-1248 Peak 8	Ave	0.0151	0.0171		1130	1000	13.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Lab Sample ID: CCV 460-373069/4 Calibration Date: 06/11/2016 14:02

Instrument ID: CPESTGC9 Calib Start Date: 05/12/2016 13:35

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 05/12/2016 13:35

Lab File ID: 9F023733.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	3.71	3.68	3.74
PCB-1248 Peak 2	4.28	4.21	4.35
PCB-1248 Peak 3	4.71	4.64	4.78
PCB-1248 Peak 4	4.76	4.69	4.83
PCB-1248 Peak 5	5.19	5.12	5.26
PCB-1248 Peak 6	5.52	5.45	5.59
PCB-1248 Peak 7	5.58	5.51	5.65
PCB-1248 Peak 8	6.88	6.81	6.95

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023733.D
Lims ID: CCV AR1248
Client ID:
Sample Type: CCV
Inject. Date: 11-Jun-2016 14:02:35 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info:
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub5

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 13-Jun-2016 08:53:25 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: patelji Date: 11-Jun-2016 14:21:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							
1	1.619	1.618	0.001	2673351	20.0	20.0	
2	1.404	1.403	0.001	3394038	20.0	20.0	
						RPD = 0.00	
$ 2 Tetrachloro-m-xylene							M
1	2.585	2.585	0.000	11535481	100.0	104.0	
2	2.081	2.080	0.001	11539240	100.0	89.1	M
						RPD = 15.43	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
6 PCB-1248							M
1	3.714	3.714	0.000	2552577	1000.0	1139.9	
1	4.281	4.281	0.000	5442476	1000.0	1161.9	
1	4.714	4.714	0.000	3252117	1000.0	1107.6	
1	4.764	4.764	0.000	3249086	1000.0	1126.6	
1	5.194	5.194	0.000	4719306	1000.0	1122.3	M
1	5.524	5.524	0.000	4540246	1000.0	1113.6	M
1	5.579	5.579	0.000	5712933	1000.0	1184.3	M
1	6.875	6.875	0.000	2287497	1000.0	1131.6	
		Average of Peak Amounts =				1136.0	
2	2.857	2.857	0.000	2454005	1000.0	995.2	M
2	3.375	3.375	0.000	5605687	1000.0	898.2	M
2	3.759	3.759	0.000	6520985	1000.0	966.7	M
2	4.106	4.106	0.000	3536130	1000.0	916.9	M
2	4.509	4.509	0.000	10885645	1000.0	999.4	M
2	4.765	4.765	0.000	4984410	1000.0	1001.8	M
2	5.233	5.233	0.000	3218206	1000.0	950.7	M
2	5.923	5.923	0.000	1995932	1000.0	927.4	M
		Average of Peak Amounts =				957.0	
						RPD = 17.10	
$ 11 DCB Decachlorobiphenyl							
1	10.149	10.157	-0.008	9156716	100.0	95.9	
2	9.203	9.207	-0.004	11766610	100.0	83.2	
						RPD = 14.21	
S 12 Polychlorinated biphenyls, Total							
1						1136.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1248L3_00025	Amount Added: 1.00	Units: mL	
SGPCBISTD_00006	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 13-Jun-2016 08:53:25 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023733.D

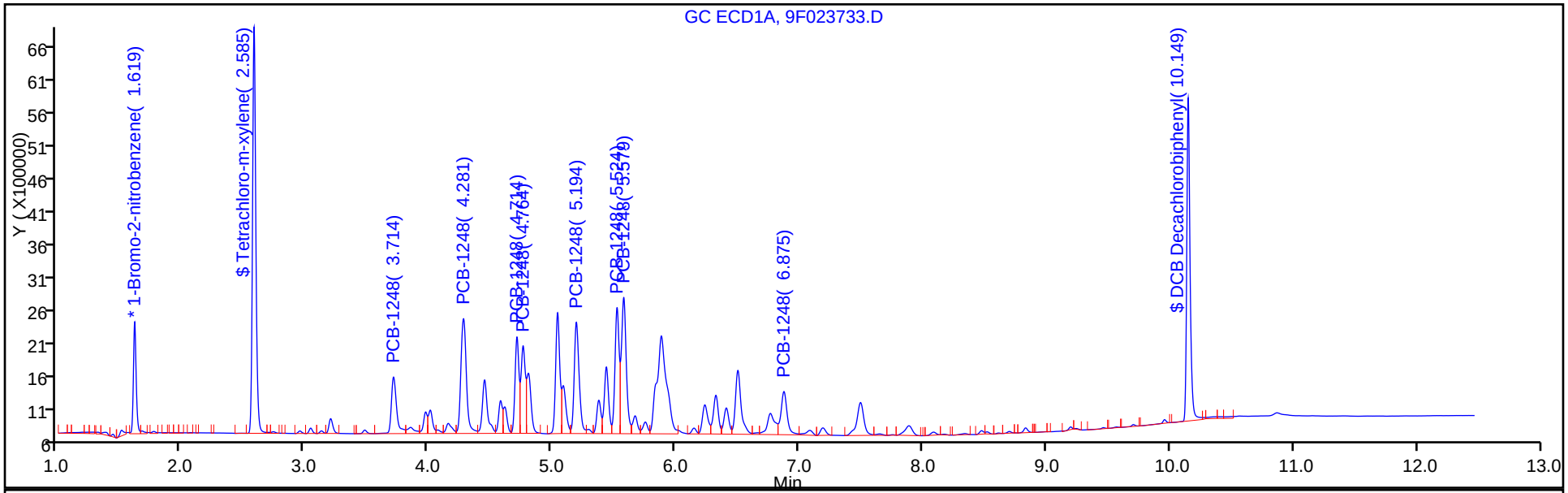
Injection Date: 11-Jun-2016 14:02:35 Instrument ID: CPESTGC9 Operator ID:

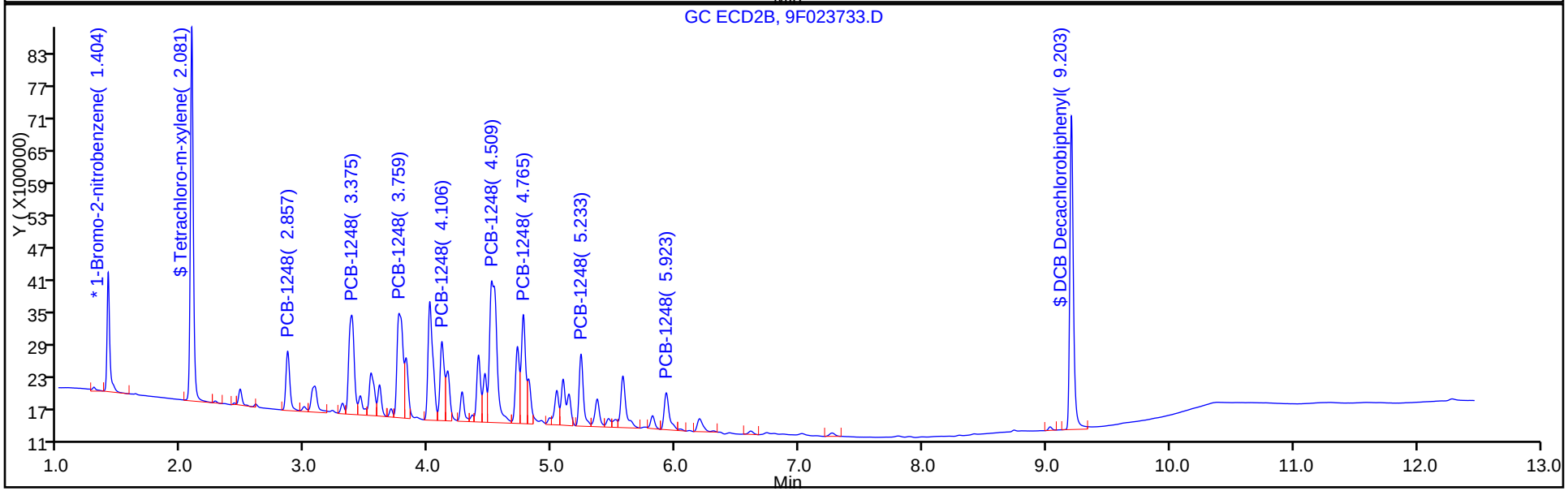
Lims ID: CCV AR1248 Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD



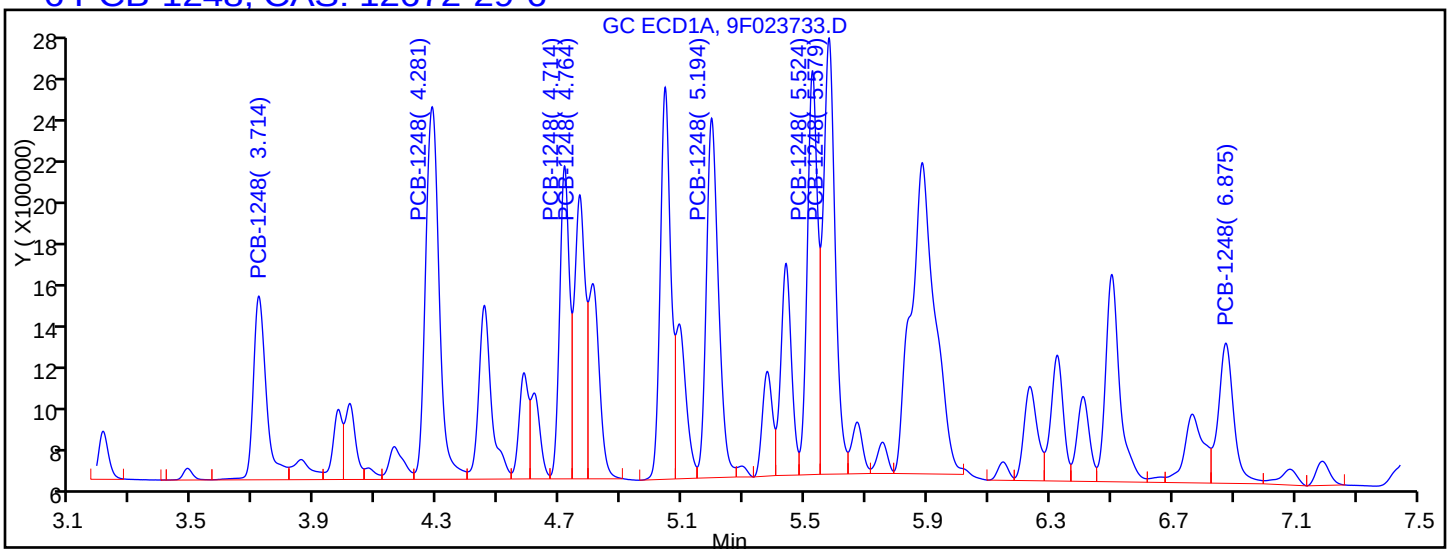


Report Date: 13-Jun-2016 08:53:26 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

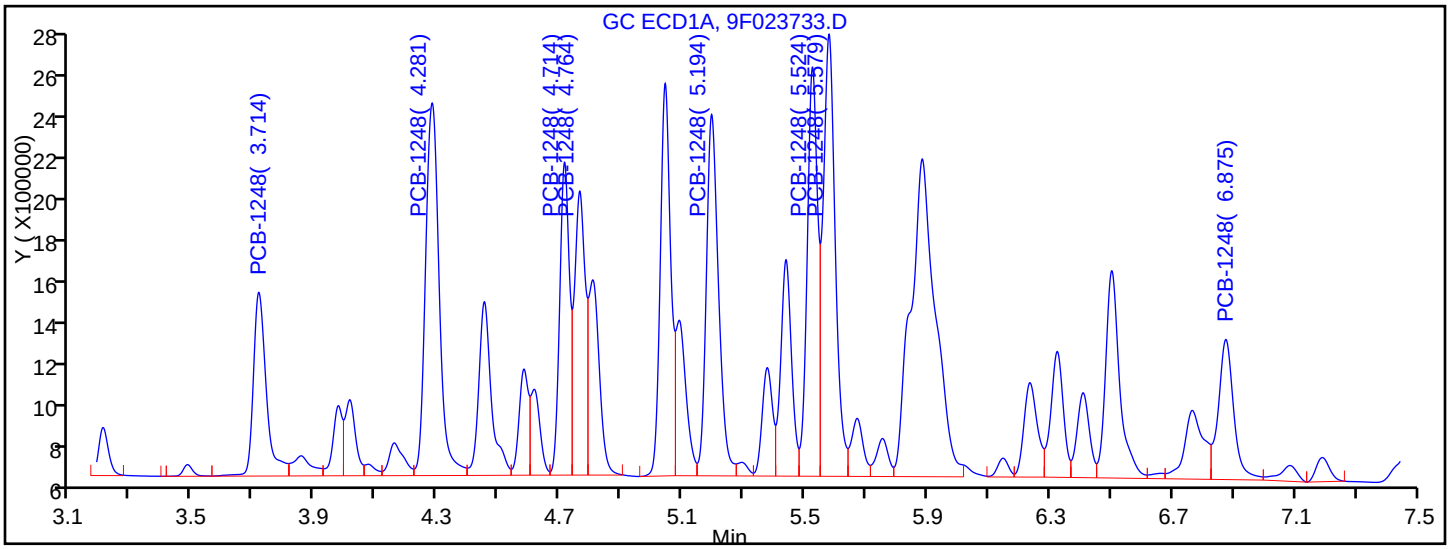
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023733.D
Injection Date: 11-Jun-2016 14:02:35 Instrument ID: CPESTGC9
Lims ID: CCV AR1248
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD1A

6 PCB-1248, CAS: 12672-29-6



Processing Integration Results

RT = 3.714	Response = 2552577	
RT = 4.281	Response = 5442476	
RT = 4.714	Response = 3252117	
RT = 4.764	Response = 3249086	
RT = 5.194	Response = 4646730	M
RT = 5.524	Response = 4437486	M
RT = 5.579	Response = 5561500	M
RT = 6.875	Response = 2287497	



Manual Integration Results

RT = 3.714	Response = 2552577	
RT = 4.281	Response = 5442476	
RT = 4.714	Response = 3252117	
RT = 4.764	Response = 3249086	
RT = 5.194	Response = 4719306	M
RT = 5.524	Response = 4540246	M

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Lab Sample ID: CCV 460-373069/4 Calibration Date: 06/11/2016 14:02

Instrument ID: CPESTGC9 Calib Start Date: 05/12/2016 10:14

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 05/12/2016 11:53

Lab File ID: 9F023733.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrachloro-m-xylene	Ave	0.7630	0.6800		89.1	100	-10.9	20.0
DCB Decachlorobiphenyl	Ave	0.8335	0.6934		83.2	100	-16.8	20.0

FORM VII 8082A

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Lab Sample ID: CCV 460-373069/4 Calibration Date: 06/11/2016 14:02

Instrument ID: CPESTGC9 Calib Start Date: 05/12/2016 10:14

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 05/12/2016 11:53

Lab File ID: 9F023733.D

Analyte	RT	RT WINDOW	
		FROM	TO
Tetrachloro-m-xylene	2.08	2.03	2.13
DCB Decachlorobiphenyl	9.20	9.11	9.31

Form VII 8082A

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023733.D
Lims ID: CCV AR1248
Client ID:
Sample Type: CCV
Inject. Date: 11-Jun-2016 14:02:35 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info:
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub5

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 13-Jun-2016 08:53:25 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: patelji Date: 11-Jun-2016 14:21:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							
1	1.619	1.618	0.001	2673351	20.0	20.0	
2	1.404	1.403	0.001	3394038	20.0	20.0	
						RPD = 0.00	
$ 2 Tetrachloro-m-xylene							M
1	2.585	2.585	0.000	11535481	100.0	104.0	
2	2.081	2.080	0.001	11539240	100.0	89.1	M
						RPD = 15.43	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
6 PCB-1248							M
1	3.714	3.714	0.000	2552577	1000.0	1139.9	
1	4.281	4.281	0.000	5442476	1000.0	1161.9	
1	4.714	4.714	0.000	3252117	1000.0	1107.6	
1	4.764	4.764	0.000	3249086	1000.0	1126.6	
1	5.194	5.194	0.000	4719306	1000.0	1122.3	M
1	5.524	5.524	0.000	4540246	1000.0	1113.6	M
1	5.579	5.579	0.000	5712933	1000.0	1184.3	M
1	6.875	6.875	0.000	2287497	1000.0	1131.6	
		Average of Peak Amounts =				1136.0	
2	2.857	2.857	0.000	2454005	1000.0	995.2	M
2	3.375	3.375	0.000	5605687	1000.0	898.2	M
2	3.759	3.759	0.000	6520985	1000.0	966.7	M
2	4.106	4.106	0.000	3536130	1000.0	916.9	M
2	4.509	4.509	0.000	10885645	1000.0	999.4	M
2	4.765	4.765	0.000	4984410	1000.0	1001.8	M
2	5.233	5.233	0.000	3218206	1000.0	950.7	M
2	5.923	5.923	0.000	1995932	1000.0	927.4	M
		Average of Peak Amounts =				957.0	
						RPD = 17.10	
$ 11 DCB Decachlorobiphenyl							
1	10.149	10.157	-0.008	9156716	100.0	95.9	
2	9.203	9.207	-0.004	11766610	100.0	83.2	
						RPD = 14.21	
S 12 Polychlorinated biphenyls, Total							
1						1136.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1248L3_00025	Amount Added: 1.00	Units: mL	
SGPCBISTD_00006	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 13-Jun-2016 08:53:26 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023733.D

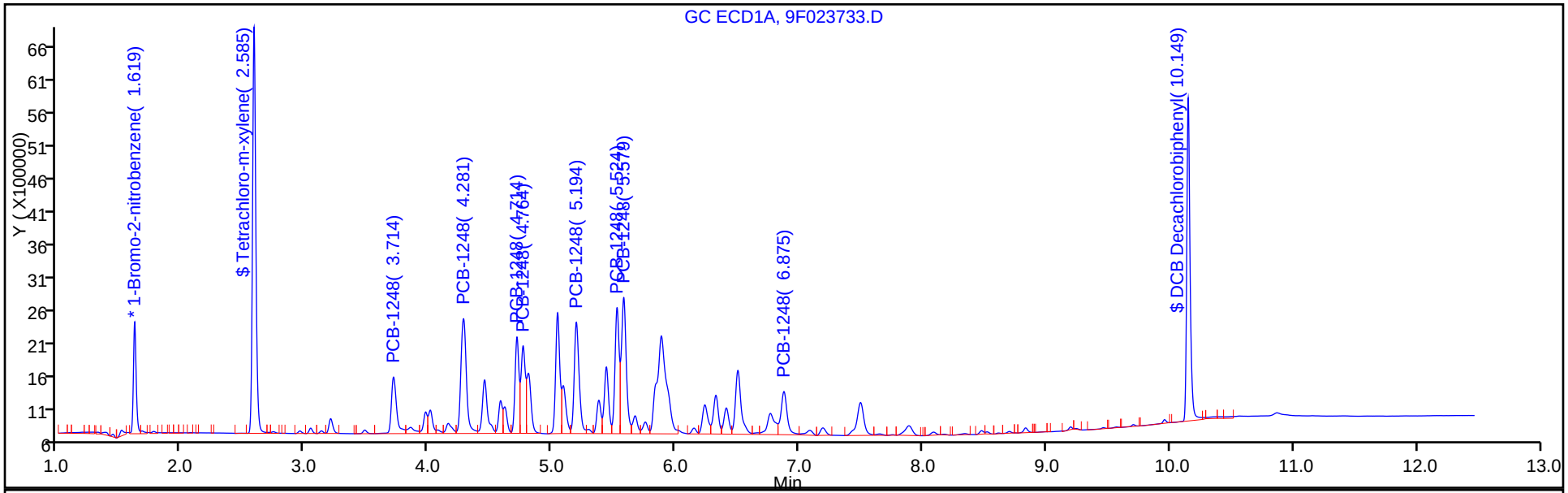
Injection Date: 11-Jun-2016 14:02:35 Instrument ID: CPESTGC9 Operator ID:

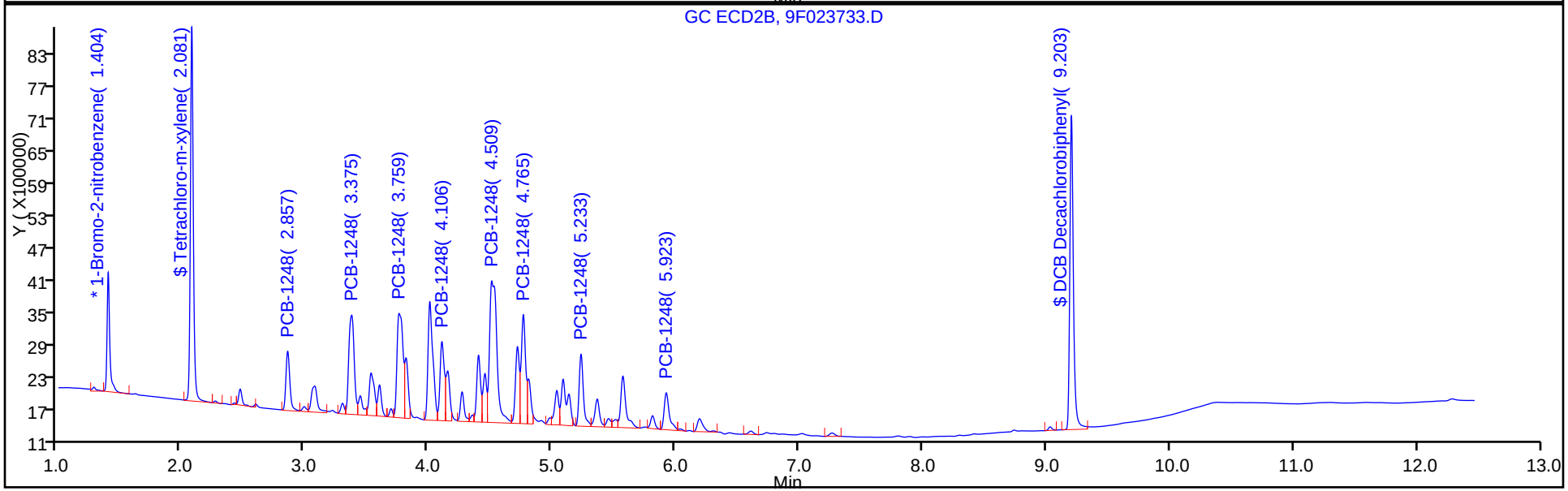
Lims ID: CCV AR1248 Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD





Manual Integration/User Assign Peak Report

TestAmerica Edison

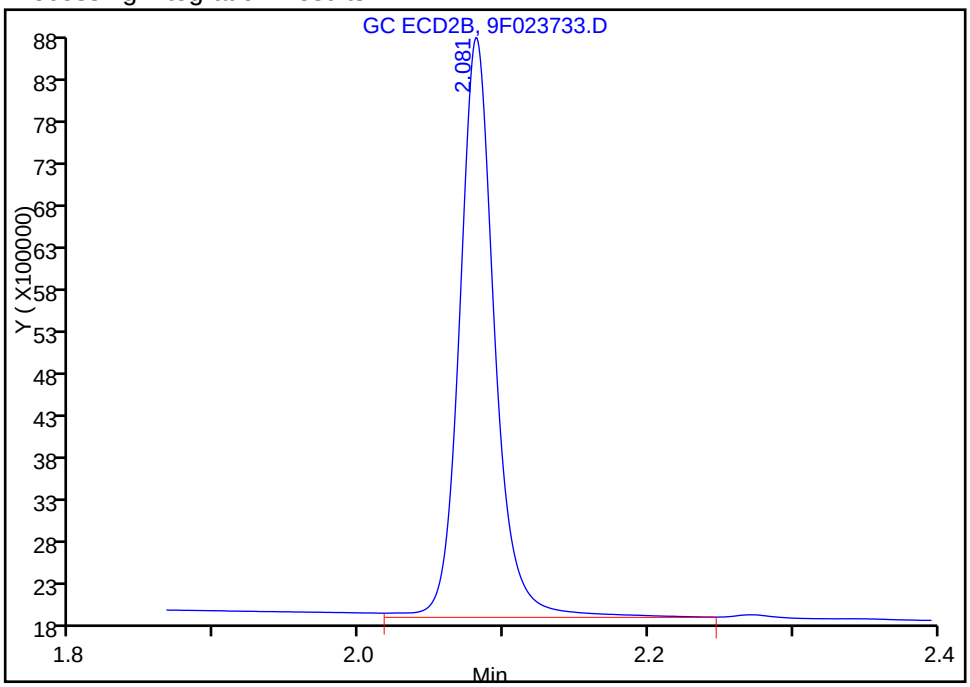
Data File:	\\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023733.D				
Injection Date:	11-Jun-2016 14:02:35	Instrument ID:	CPESTGC9		
Lims ID:	CCV AR1248				
Client ID:					
Operator ID:		ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8082-ISTD	Limit Group:	GC 8082A PCB ISTD		
Column:		Detector	GC ECD2B		

$ 2 Tetrachloro-m-xylene, CAS: 877-09-8

Signal: 2

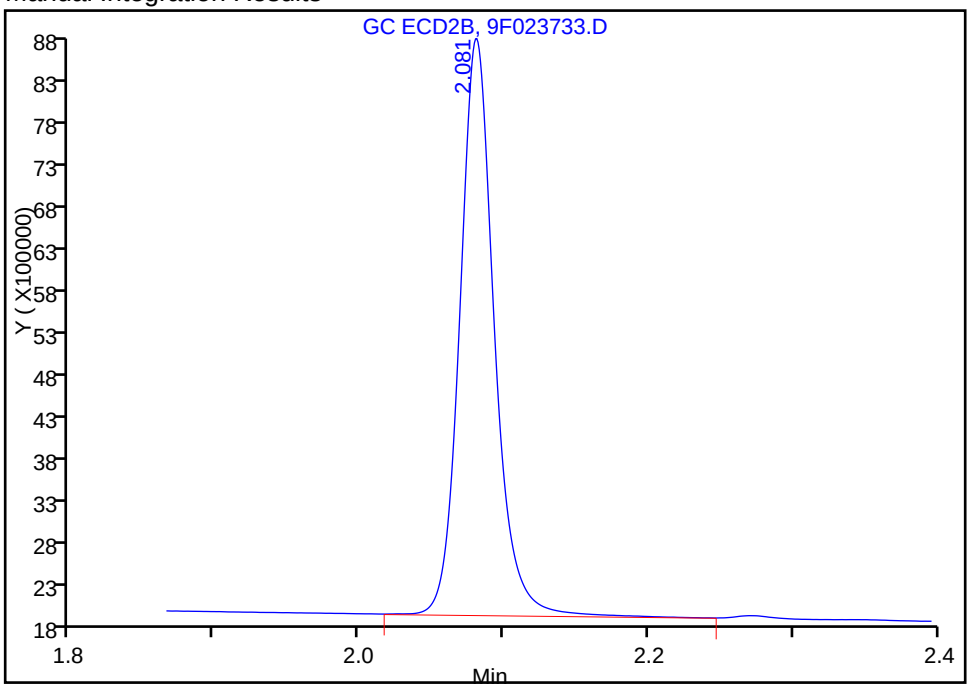
Processing Integration Results

RT: 2.08
Area: 11835319
Amount: 91.403880
Amount Units: ug/l



Manual Integration Results

RT: 2.08
Area: 11539240
Amount: 89.117269
Amount Units: ug/l



Reviewer: patelji, 13-Jun-2016 07:44:57

Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Lab Sample ID: CCV 460-373069/4 Calibration Date: 06/11/2016 14:02

Instrument ID: CPESTGC9 Calib Start Date: 05/12/2016 13:35

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 05/12/2016 13:35

Lab File ID: 9F023733.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Ave	0.0145	0.0145		995	1000	-0.5	20.0
PCB-1248 Peak 2	Ave	0.0368	0.0330		898	1000	-10.2	20.0
PCB-1248 Peak 3	Ave	0.0398	0.0384		967	1000	-3.3	20.0
PCB-1248 Peak 4	Ave	0.0227	0.0208		917	1000	-8.3	20.0
PCB-1248 Peak 5	Ave	0.0642	0.0642		999	1000	-0.0	20.0
PCB-1248 Peak 6	Ave	0.0293	0.0294		1000	1000	0.2	20.0
PCB-1248 Peak 7	Ave	0.0199	0.0190		951	1000	-4.9	20.0
PCB-1248 Peak 8	Ave	0.0127	0.0118		927	1000	-7.3	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Lab Sample ID: CCV 460-373069/4 Calibration Date: 06/11/2016 14:02

Instrument ID: CPESTGC9 Calib Start Date: 05/12/2016 13:35

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 05/12/2016 13:35

Lab File ID: 9F023733.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	2.86	2.79	2.93
PCB-1248 Peak 2	3.38	3.31	3.45
PCB-1248 Peak 3	3.76	3.69	3.83
PCB-1248 Peak 4	4.11	4.04	4.18
PCB-1248 Peak 5	4.51	4.44	4.58
PCB-1248 Peak 6	4.77	4.70	4.84
PCB-1248 Peak 7	5.23	5.16	5.30
PCB-1248 Peak 8	5.92	5.85	5.99

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023733.D
Lims ID: CCV AR1248
Client ID:
Sample Type: CCV
Inject. Date: 11-Jun-2016 14:02:35 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info:
Operator ID: Instrument ID: CPESTGC9
Sublist: chrom-8082-ISTD*sub5

Method: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\8082-ISTD.m
Limit Group: GC 8082A PCB ISTD
Last Update: 13-Jun-2016 08:53:25 Calib Date: 12-May-2016 14:29:29
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001892.D

Column 1 : Det: GC ECD1A
Column 2 : Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: patelji Date: 11-Jun-2016 14:21:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 13 1-Bromo-2-nitrobenzene							
1	1.619	1.618	0.001	2673351	20.0	20.0	
2	1.404	1.403	0.001	3394038	20.0	20.0	
						RPD = 0.00	
$ 2 Tetrachloro-m-xylene							M
1	2.585	2.585	0.000	11535481	100.0	104.0	
2	2.081	2.080	0.001	11539240	100.0	89.1	M
						RPD = 15.43	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
6 PCB-1248							M
1	3.714	3.714	0.000	2552577	1000.0	1139.9	
1	4.281	4.281	0.000	5442476	1000.0	1161.9	
1	4.714	4.714	0.000	3252117	1000.0	1107.6	
1	4.764	4.764	0.000	3249086	1000.0	1126.6	
1	5.194	5.194	0.000	4719306	1000.0	1122.3	M
1	5.524	5.524	0.000	4540246	1000.0	1113.6	M
1	5.579	5.579	0.000	5712933	1000.0	1184.3	M
1	6.875	6.875	0.000	2287497	1000.0	1131.6	
		Average of Peak Amounts =				1136.0	
2	2.857	2.857	0.000	2454005	1000.0	995.2	M
2	3.375	3.375	0.000	5605687	1000.0	898.2	M
2	3.759	3.759	0.000	6520985	1000.0	966.7	M
2	4.106	4.106	0.000	3536130	1000.0	916.9	M
2	4.509	4.509	0.000	10885645	1000.0	999.4	M
2	4.765	4.765	0.000	4984410	1000.0	1001.8	M
2	5.233	5.233	0.000	3218206	1000.0	950.7	M
2	5.923	5.923	0.000	1995932	1000.0	927.4	M
		Average of Peak Amounts =				957.0	
						RPD = 17.10	
$ 11 DCB Decachlorobiphenyl							
1	10.149	10.157	-0.008	9156716	100.0	95.9	
2	9.203	9.207	-0.004	11766610	100.0	83.2	
						RPD = 14.21	
S 12 Polychlorinated biphenyls, Total							
1						1136.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SG1248L3_00025	Amount Added: 1.00	Units: mL	
SGPCBISTD_00006	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 13-Jun-2016 08:53:26 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023733.D

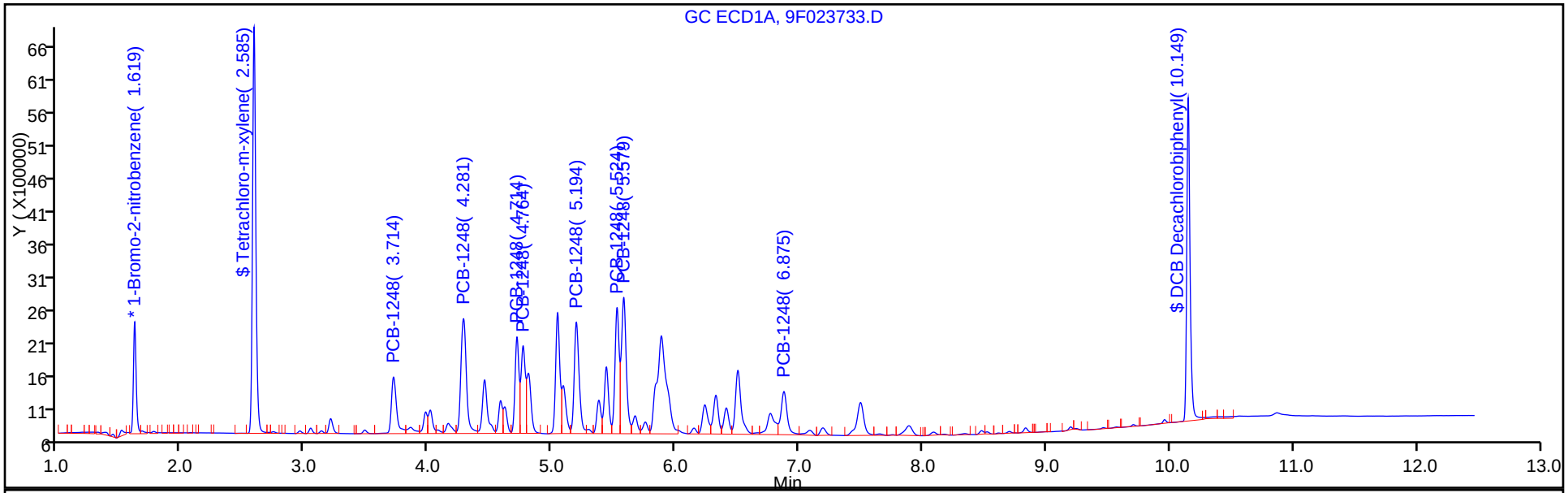
Injection Date: 11-Jun-2016 14:02:35 Instrument ID: CPESTGC9 Operator ID:

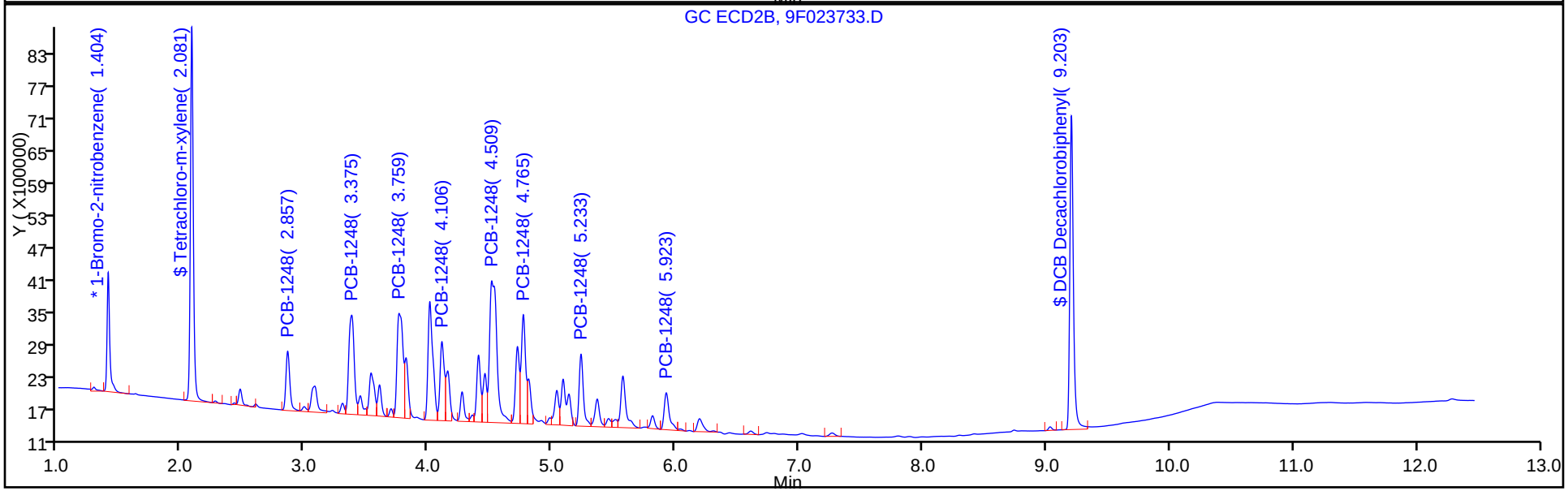
Lims ID: CCV AR1248 Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD





Report Date: 13-Jun-2016 08:53:26 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023733.D

Injection Date: 11-Jun-2016 14:02:35 Instrument ID: CPESTGC9

Lims ID: CCV AR1248

Client ID:

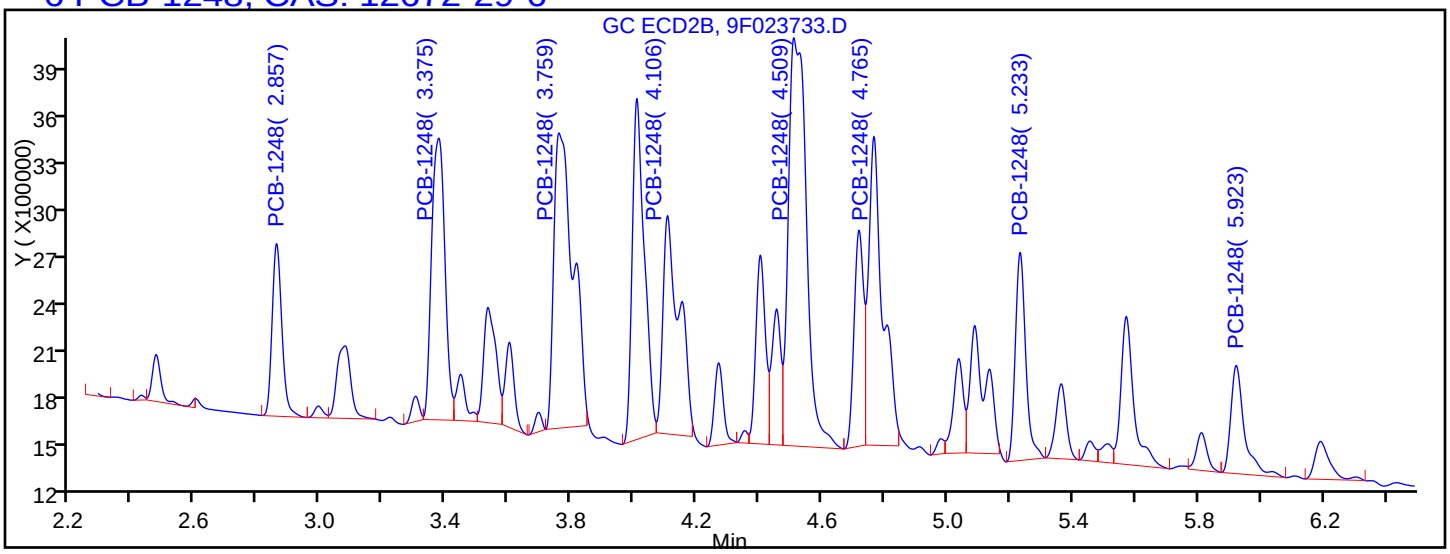
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

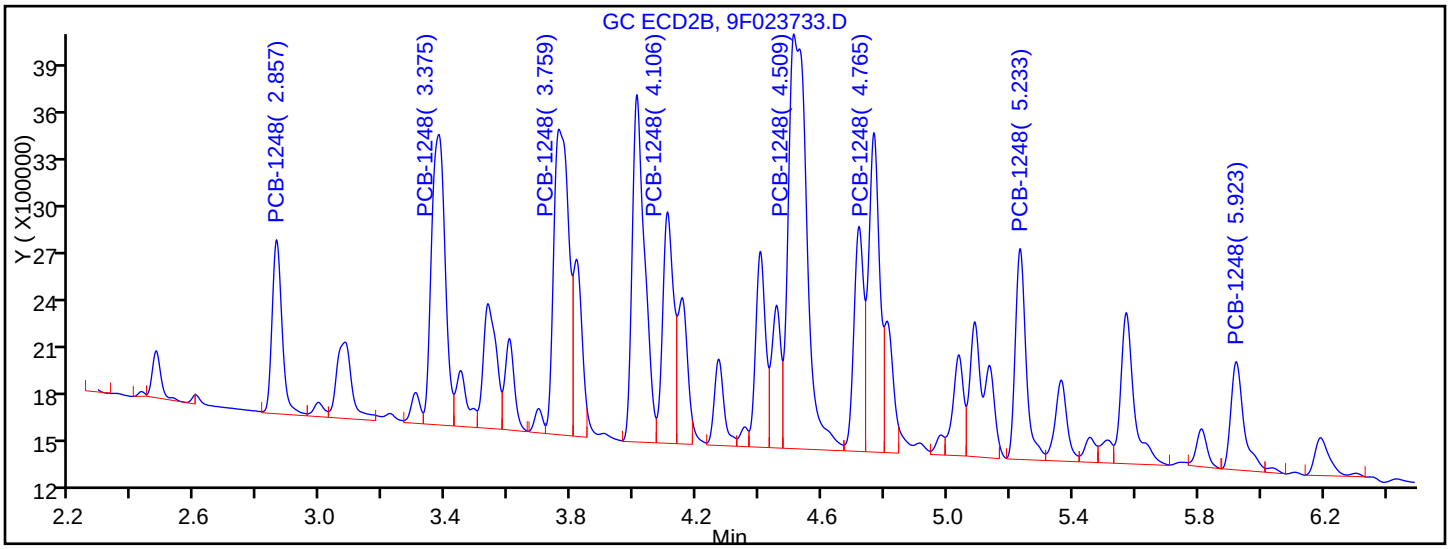
Column: Detector GC ECD2B

6 PCB-1248, CAS: 12672-29-6



Processing Integration Results

RT = 2.857	Response = 2371181	M
RT = 3.375	Response = 5281599	M
RT = 3.759	Response = 8007614	M
RT = 4.106	Response = 4979509	M
RT = 4.509	Response = 10434982	M
RT = 4.765	Response = 6111123	M
RT = 5.233	Response = 3048627	M
RT = 5.923	Response = 2072047	M



Manual Integration Results

RT = 2.857	Response = 2454005	M
RT = 3.375	Response = 5605687	M
RT = 3.759	Response = 6520985	M
RT = 4.106	Response = 3536130	M
RT = 4.509	Response = 10885645	M
RT = 4.765	Response = 4984410	M

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Instrument ID: CPESTGC9 Start Date: 05/12/2016 09:42

Analysis Batch Number: 367709 End Date: 05/12/2016 14:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		05/12/2016 09:42	1		CLP-2 0.53(mm)
ZZZZZ		05/12/2016 09:42	1		CLP-1 0.53(mm)
IC 460-367709/2		05/12/2016 10:14	1	9F001880.D	CLP-2 0.53(mm)
IC 460-367709/2		05/12/2016 10:14	1	9F001880.D	CLP-1 0.53(mm)
IC 460-367709/3		05/12/2016 10:32	1	9F001881.D	CLP-2 0.53(mm)
IC 460-367709/3		05/12/2016 10:32	1	9F001881.D	CLP-1 0.53(mm)
IC 460-367709/4 ICRT		05/12/2016 10:50	1	9F001882.D	CLP-2 0.53(mm)
IC 460-367709/4 ICRT		05/12/2016 10:50	1	9F001882.D	CLP-1 0.53(mm)
IC 460-367709/5		05/12/2016 11:08	1	9F001883.D	CLP-2 0.53(mm)
IC 460-367709/5		05/12/2016 11:08	1	9F001883.D	CLP-1 0.53(mm)
IC 460-367709/6		05/12/2016 11:53	1	9F001884.D	CLP-2 0.53(mm)
IC 460-367709/6		05/12/2016 11:53	1	9F001884.D	CLP-1 0.53(mm)
ICV 460-367709/7		05/12/2016 12:13	1		CLP-2 0.53(mm)
ICV 460-367709/7		05/12/2016 12:13	1		CLP-1 0.53(mm)
IC 460-367709/8		05/12/2016 12:41	1	9F001886.D	CLP-2 0.53(mm)
IC 460-367709/8		05/12/2016 12:41	1	9F001886.D	CLP-1 0.53(mm)
IC 460-367709/9		05/12/2016 12:59	1	9F001887.D	CLP-2 0.53(mm)
IC 460-367709/9		05/12/2016 12:59	1	9F001887.D	CLP-1 0.53(mm)
IC 460-367709/10		05/12/2016 13:17	1	9F001888.D	CLP-2 0.53(mm)
IC 460-367709/10		05/12/2016 13:17	1	9F001888.D	CLP-1 0.53(mm)
IC 460-367709/11		05/12/2016 13:35	1	9F001889.D	CLP-2 0.53(mm)
IC 460-367709/11		05/12/2016 13:35	1	9F001889.D	CLP-1 0.53(mm)
IC 460-367709/12		05/12/2016 13:53	1	9F001890.D	CLP-2 0.53(mm)
IC 460-367709/12		05/12/2016 13:53	1	9F001890.D	CLP-1 0.53(mm)
IC 460-367709/13		05/12/2016 14:11	1	9F001891.D	CLP-2 0.53(mm)
IC 460-367709/13		05/12/2016 14:11	1	9F001891.D	CLP-1 0.53(mm)
IC 460-367709/14		05/12/2016 14:29	1	9F001892.D	CLP-2 0.53(mm)
IC 460-367709/14		05/12/2016 14:29	1	9F001892.D	CLP-1 0.53(mm)

8082A

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Instrument ID: CPESTGC9 Start Date: 06/11/2016 13:02

Analysis Batch Number: 373069 End Date: 06/11/2016 15:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		06/11/2016 13:02	1		CLP-2 0.53(mm)
ZZZZZ		06/11/2016 13:02	1		CLP-1 0.53(mm)
ZZZZZ		06/11/2016 13:20	1		CLP-2 0.53(mm)
ZZZZZ		06/11/2016 13:20	1		CLP-1 0.53(mm)
CCVIS 460-373069/3		06/11/2016 13:42	1	9F023732.D	CLP-2 0.53(mm)
CCVIS 460-373069/3		06/11/2016 13:42	1	9F023732.D	CLP-1 0.53(mm)
CCV 460-373069/4		06/11/2016 14:02	1	9F023733.D	CLP-2 0.53(mm)
CCV 460-373069/4		06/11/2016 14:02	1	9F023733.D	CLP-1 0.53(mm)
ZZZZZ		06/11/2016 14:20	1		CLP-2 0.53(mm)
ZZZZZ		06/11/2016 14:20	1		CLP-1 0.53(mm)
ZZZZZ		06/11/2016 14:42	1		CLP-2 0.53(mm)
ZZZZZ		06/11/2016 14:42	1		CLP-1 0.53(mm)
460-114699-1		06/11/2016 15:00	1	9F023736.D	CLP-2 0.53(mm)
460-114699-1		06/11/2016 15:00	1	9F023736.D	CLP-1 0.53(mm)
460-114699-2		06/11/2016 15:18	1	9F023737.D	CLP-2 0.53(mm)
460-114699-2		06/11/2016 15:18	1	9F023737.D	CLP-1 0.53(mm)
460-114699-3 DL		06/11/2016 15:36	2	9F023738.D	CLP-2 0.53(mm)
460-114699-3 DL		06/11/2016 15:36	2	9F023738.D	CLP-1 0.53(mm)
460-114699-4		06/11/2016 15:54	1	9F023739.D	CLP-2 0.53(mm)
460-114699-4		06/11/2016 15:54	1	9F023739.D	CLP-1 0.53(mm)

8082A

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Batch Number: 372775 Batch Start Date: 06/10/16 02:05 Batch Analyst: Alinea, Archilles R

Batch Method: 3546 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	OPPSTPCBSURR 00007			
460-114699-A-1	Manhole 1-1	3546, 8082A	T	15.0215 g	10 mL	50 uL			
460-114699-A-2	Manhole 1-2	3546, 8082A	T	15.0117 g	10 mL	50 uL			
460-114699-A-3	Manhole 2-2	3546, 8082A	T	15.0183 g	10 mL	50 uL			
460-114699-A-4	Manhole 2-1	3546, 8082A	T	15.0033 g	10 mL	50 uL			

Batch Notes	
Acid used for Clean Up ID	(SW3660)
Balance ID	30
Batch Comment	PCB-SOIL
Analyst ID - Concentration	archie
Exchange Solvent ID	130855
Exchange Solvent Name	hexane
Final Concentrator Volume	10 mL
Sulfuric Acid Lot Number	137221
Hexane ID	130855
MeCl2 / Acetone ID	139507
Microwave Start Time	4am
Microwave Stop Time	4:30am
Na2SO4 ID	433101 (Silica sand Lot #131774)
Person's name who did the prep	archie
Analyst ID - Spike Analyst	archie
TBA ID	(SW3665) LOT# 1658
Water Bath ID	n-evap temp. uncorrected 37c

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-114699-1

SDG No.:

Project: Alcoa

Client Sample ID	Lab Sample ID
Manhole 1-1	460-114699-1
Manhole 1-2	460-114699-2
Manhole 2-2	460-114699-3
Manhole 2-1	460-114699-4

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-114699-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture RL Date: 02/15/2007 17:07

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		1	
Percent Solids		1	

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-114699-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 01/01/2007 16:49

Analyte	Wavelength/ Mass	XRL (%)	
Percent Moisture		1	
Percent Solids		1	

FORM IX - IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 06/06/2016 13:45 End Date: 06/06/2016 13:45

Lab Sample ID	D/F	Type	Time	Analytes																			
				% Sol	Moist																		
ZZZZZZ			13:45																				
ZZZZZZ			13:45																				
ZZZZZZ			13:45																				
ZZZZZZ			13:45																				
ZZZZZZ			13:45																				
ZZZZZZ			13:45																				
ZZZZZZ			13:45																				
460-114699-1	1	T	13:45	X	X																		
460-114699-2	1	T	13:45	X	X																		
460-114699-3	1	T	13:45	X	X																		
460-114699-4	1	T	13:45	X	X																		
ZZZZZZ			13:45																				
ZZZZZZ			13:45																				
ZZZZZZ			13:45																				
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ZZZZZZ			13:45																				
ZZZZZZ			13:45																				
ZZZZZZ			13:45																				
ZZZZZZ			13:45																				
460-114486-C-10 DU	1	T	13:45	X	X																		

Prep Types
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-114699-1

SDG No.:

Batch Number: 371910 Batch Start Date: 06/06/16 13:45 Batch Analyst: Villadarez, Gerson Timoth

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
460-114699-A-1	Manhole 1-1	Moisture	T	35	1.00 g	6.42 g	5.97 g		
460-114699-A-2	Manhole 1-2	Moisture	T	36	1.01 g	6.23 g	5.06 g		
460-114699-A-3	Manhole 2-2	Moisture	T	37	1.00 g	6.35 g	5.41 g		
460-114699-A-4	Manhole 2-1	Moisture	T	38	1.02 g	6.14 g	5.24 g		
460-114486-C-10 DU		Moisture	T	49	1.01 g	6.28 g	5.79 g		

Batch Notes	
Balance ID	104 No Unit
Date samples were placed in the oven	06-06-16
Oven Temp In	109 Degrees C
Time samples were place in the oven	14:15
Date samples were removed from oven	6/7/16
Oven Temp Out	103 Degrees C
Time Samples were removed from oven	07:52
Oven ID	2
Thermometer ID	116941
Uncorrected In Temperature	109 Celsius
Uncorrected Out Temperature	103 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS

460-114699 Chain of Custody

nd
8817
0 Fax: (732) 549-3679

Name (for report and invoice): W. James Llewellyn

Samplers Name (Printed): Patrizia Cornacchia

Site/Project Identification: Alcoa

Company: Appalachia Consulting

P. O. #:

State (Location of site): NJ: [X] NY: [ ] Other:

Regulatory Program:

DKQP: [ ]

Address: 678 Rt 202/206 N

City: Bridgewater State: NJ

Phone: 888-240-1984 Fax: 908-450-7454

Analysis Turnaround Time
Standard [X]
Rush Charges Authorized For:
2 Week [ ]
1 Week [ ]
Other [ ] _____

LAB USE ONLY
Project No:
Job No: 114699

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

Sample Identification	Date	Time	Matrix	No. of. Cont.	PCBs	Sample Numbers
Manhole 1-1	5/31/16	840	S	1	X	1
Manhole 1-2	5/31/16	830	S	1	X	2
Manhole 2-2	5/31/16	1205	S	1	X	3
Manhole 2-1	5/31/16	1055	S	1	X	4

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH
6 = Other _____, 7 = Other _____

Soil: 1
Water:

Special Instructions

Water Metals Filtered (Yes/No)?

Relinquished by	Company	Date / Time	Received by	Company
Patrizia Cornacchia	Appalachia	6/1 1015	1)	
2)		6/1 1320	2)	
3)			3)	6/1/16 13:20
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

TAL - 0016 (0715)

Massachusetts (M-NJ312), North Carolina (No. 578) 3°C/4 4°C/5°C

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 114699

Number of Coolers: 2 IR Gun # 6

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	3 °C	4 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	4 °C	5 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

**Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: KL Date: 6/1

EDS-WI-038, Rev 4, 06/09/2014

Login Sample Receipt Checklist

Client: Appalachia Hydrologic and Env Consulting

Job Number: 460-114699-1

Login Number: 114699
List Number: 1
Creator: Hall, Alonzo

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.0,4.0° C I R#6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

APPENDIX F

TRILLIUM DATA VALIDATION REPORT
CONCRETE CHIP SAMPLES

DATA VALIDATION (LABEL S4VM)

FOR

ALCOA SITE
EDGEWATER, NEW JERSEY

ORGANIC ANALYSIS DATA
Polychlorinated Biphenyls (PCBs) in Concrete Chip Samples

Laboratory Job No. 460-114699-1
Samples Collected May 31, 2016

Chemical Analyses Performed by:
TestAmerica Edison
Edison, New Jersey

For:

Appalachia Hydrogeologic & Environmental Consultants
Bridgewater, New Jersey

Validation Performed By:

Trillium, Inc.
27 LaFayette Circle
Downingtown, Pennsylvania 19335
(610) 458-0289

July 8, 2016

16201/EKD/PAC
\Alcoa Edgewater 460-114699-1 PCB

EXECUTIVE SUMMARY

Validation of the organic analysis data (PCBs) prepared by TestAmerica Edison for four concrete chip samples from the Alcoa site property sampling effort in Edgewater, New Jersey, has been completed by Trillium, Inc. The data were reported by the laboratory in a single data package under laboratory Job No. 460-114699-1. This sample delivery group (SDG) includes the following samples:

Manhole 1-1	Manhole 1-2	Manhole 2-2	Manhole 2-1

Based on the validation effort, sample results were determined to be valid as reported by the laboratory, with the following exceptions:

- The result for Aroclor 1248 in Manhole 1-2 was qualified as estimated (J).
- Results for Aroclor 1248 and Aroclor 1260 in Manhole 2-1 were qualified as estimated (J).

The "J" qualifier applied by the laboratory to the result for Aroclor 1248 in Manhole 1-2 to denote a concentration below the reporting limit (RL) was not removed by the validator.

A brief explanation of the reason for the actions taken above may be found in the Overall Assessment (Section XII). Details of the validation findings and conclusions based on review of the results for each quality control requirement are provided in the remaining sections of this report. Documentation issues are discussed in Section XI.

This validation report should be considered <u>part of the data package</u> for all future distributions of the PCBs data.

INTRODUCTION

Extractions of the soil samples were performed according to EPA Method 3546, and the PCBs analyses were performed according to EPA Method 8082A. Both of these methods are found in SW-846, Test Methods for Evaluating Solid Waste. Results of sample analyses were reported by the laboratory as either qualified or unqualified; various qualifier codes were used by the laboratory to denote specific information regarding the analytical results.

The data were validated by Trillium, Inc., in conformance with the EPA Region 2 Standard Operating Procedure (SOP) HW-45, "Validating PCB Compounds, PCBs by Gas Chromatography SW-846 Method 8082A" (Rev. 1, 10/06). Professional judgment was applied as necessary and appropriate. The validation effort has the label Stage_4_Validation_Manual (S4VM).

The data validation process is intended to evaluate data on a technical basis rather than a contract or method compliance basis. This requires that the data package contain sufficient raw data documentation to facilitate the validation process and allow verification of all reported results. It is assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate and sufficient quality review prior to submission for validation.

During the validation process, laboratory data are verified against all available supporting documentation. Based on the findings of the evaluation, qualifier codes may be added, deleted, or modified by the data validator. Validated results are, therefore, either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Final validated results are annotated with the following codes as defined in the Region 2 SOP:

U - The analyte was analyzed for but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified," and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the

actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

These codes are recorded on the data summary form contained in Attachment A and on the PCBs Organics Analysis Data Sheets in Attachment B of this validation report to indicate qualifications placed on the data as a result of the validation effort.

Two facts should be noted by all data users. First, **the "R" qualifier means that the laboratory-reported result is unusable.** In other words, due to significant quality control problems, the analysis is invalid and provides no information as to whether the analyte is present or not. Rejected results should not appear on data tables because they cannot be relied upon, even as a last resort. Second, **no analyte concentration is guaranteed to be accurate even if all associated quality control is acceptable.** Strict quality control conformance serves only to increase confidence in reported results; any analytical result will always contain some error.

The data user is also cautioned that the validation effort is based on the raw data printouts as provided by the laboratory. Software manipulation cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

I. Holding Times, Preservation, and Sample Integrity

The samples were collected on 5/31/16 and were extracted on 6/10/16. Method 8082A does not specify a maximum holding time for collection to extraction; a holding time of 40 days from extraction to analysis is recommended. The concrete chip sample extracts were analyzed on 6/11/16, well within the 40-day period.

The cooler temperatures on receipt at the laboratory (4.0°C and 5.0°C) were acceptable (QC 4°C ±2°C) and were documented on the chain of custody record and in the laboratory case narrative. All samples were received intact, but there were no custody seals on the coolers.

II. Calibration and Instrument Performance

All sample analyses were performed on two gas chromatograph/electron capture detector (GC/ECD) systems identified as CPESTGC8 and CPESTGC9. Both instruments were equipped with CLP-1 and CLP-2 columns.

A. Initial Calibration (IC)

Two ICs were performed in support of the PCBs analyses reported in this data package. The ICs were run on 2/24/16 on Instrument CPESTGC8 and on 5/12/16 on Instrument CPESTGC9. A calibration range of 50 µg/L to 2500 µg/L (equivalent to 0.033 mg/kg to 1.7 mg/kg in a solid) was established using five concentration levels for Aroclors 1016 and 1260 in each IC. Single-point calibrations were run in association with both ICs on both columns for Aroclors 1221, 1232, 1242, 1248, 1254, 1262, and 1268; these were all at 1000 µg/L (equivalent to 0.67 mg/kg in a solid).

Documentation of all individual IC standards analyzed was provided. Calibration factors (CFs) and percent relative standard deviation (%RSD) values were correctly calculated and accurately reported. All %RSD values were less than the maximum acceptance limit of 20%.

Laboratory-established retention time (RT) windows were not reported in the data package for the selected target Aroclor peaks and surrogate compound. Absolute RTs on both instruments were very consistent throughout the reported analyses.

B. Continuing Calibration (CC)

The analysis of the 1000 µg/L concentration of the Aroclor 1016/1260 mixture or Aroclor 1248 constituted the continuing calibration. Three CC standards were reported in support of the PCBs analyses, and documentation of all three CC standard analyses on both columns was provided. The percent difference (%D) values in the CC standards were less than the method-specified maximum acceptance limit of 20%, with the exception of the fourth selected Aroclor 1260 peak (Aroclor 1260-4) on the CLP-2 column of the CC standard run on 6/11/16 at 13:42 on CPESTGC9 (23.1%). Based on professional judgment, since the average %D for all eight selected Aroclor 1260

peaks in this CC standard (11.3%) was less than 20%, no action was taken based on the high %D for one of the selected peaks.

III. Blanks

A solid-matrix method blank was prepared and analyzed with the site samples. No target Aroclors were detected in the method blank.

No field-submitted blanks were included with this set of samples.

IV. Surrogate Recovery

Decachlorobiphenyl (DCB) was used as the surrogate compound for these analyses. Percent recoveries for DCB in all reported site and laboratory QC sample analyses were within the laboratory-specified acceptance limits of 47-150%.

V. Spiked Analyses

A. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD results for a sample identified as 460-114610-1 were reported in the data package. Since 460-114610-1 is not a site sample, the MS/MSD results have no relevance to the samples in this data set, and they were not considered in the validation effort.

B. Laboratory Control Sample (LCS)

A solid-matrix LCS was prepared and analyzed with the concrete chip samples in this data set. Aroclors 1016 and 1260 were included in the LCS, each at a concentration of 0.333 mg/kg. Recoveries of both Aroclors on both columns in the LCS analysis (118% to 133%) were within the laboratory-specified acceptance limits of 70-149% for Aroclor 1016 and 71-150% for Aroclor 1260.

VI. Field Duplicate

No field duplicate was identified in this data set.

VII. Compound Identification

Reported target Aroclors were appropriately identified in the site samples based on the presence of characteristic chromatographic peak patterns and the presence of these peaks at the appropriate retention times relative to the calibration standards.

VIII. Compound Quantitation and Reporting Limits

Aroclor concentrations and sample-specific RLs were correctly calculated and accurately reported for the samples in this data set, including appropriate adjustments for actual sample weight, percent solids, and necessary dilutions. Results for Manhole 2-2 were reported by the laboratory from a 2-fold diluted analysis. No undiluted analysis results for this sample were provided in the data package.

A "J" qualifier was applied by the laboratory to the result for Aroclor 1248 in Manhole 1-2 because the concentration of this analyte was less than the sample-specific RL. This qualifier was not removed by the validator.

The laboratory reported the higher of the two column measurements for detected Aroclors, as specified by Method 8082A. The validation SOP specifies that the lower of the two column concentrations be reported. However, based on professional judgment, since the higher measurement reflects the more conservative estimate of Aroclor concentrations in the samples and the laboratory is method compliant, no action was taken on this basis.

Relative percent differences (RPDs) between the two column measurements for all detected Aroclors (2-34 RPD) were less than the method-specified maximum acceptance limit of 40 RPD. However, the validation SOP specifies that agreement between the two column measurements be evaluated based on the %D, and the maximum acceptance limit specified by the validation SOP is 25%D. Since the validation SOP specification is more conservative, the sample results were validated using this criterion. Agreement between the two column measurements was acceptable (2-25%D; validation SOP QC $\leq$25%D), with the exception of Aroclor 1248 in Manhole 1-2 (33%D) and Aroclor 1248 (28%D) and Aroclor 1260 (36%D) in Manhole 2-1. Results for Aroclor 1248 in Manhole 1-2 and Aroclor 1248 and Aroclor 1260 in Manhole 2-1 were qualified as estimated (J) due to lack of agreement between the two column measurements.

The unadjusted laboratory-reported RL for the Aroclors (0.067 mg/kg in a solid) is greater than the lowest concentration Aroclor 1016/1260 IC standard mixture analyzed in association with this data set. This unadjusted RL is supported by the available raw data.

A total solids worksheet was provided, documenting these measurements for the concrete chip samples reported in this data set. All percent solids results were correctly calculated and accurately reported.

The data summary form in Attachment A lists all individual sample analyte results. Only *positive* results are presented on this form, whether or not the value or qualifier was changed as a result of the validation. Where no result is listed, the analyte was not detected and the RL was not qualified. Sample-specific RLs may be found on the PCBs Organics Analysis Data Sheets for the samples (Attachment B), or may be calculated for the concrete chip samples from the information on the data summary form as follows: unadjusted RL (far left column) multiplied by the dilution factor, and divided by (percent solids divided by 100).

IX. Internal Standard Performance

Peak areas and retention times for internal standard compound 1-bromo-2-nitrobenzene in all reported analyses were within the acceptance limits documented on the summary forms (RTs within ±7 seconds from the RT in the series-beginning Aroclor 1016/1260 CC standard and peak areas within 50% to 200% of the corresponding area in that CC standard).

X. System Performance

Based on evaluation of the available raw data, the analytical systems were working within method specifications at the time of these analyses.

XI. Documentation

The chain of custody record provided in the data package included the reported samples and was accurately completed.

Summary forms and raw data for the method blank, LCS, and MS/MSD pair, as well as for the calibration standards associated with these analyses, were not included in the data package as received. The missing data and applicable corrected documentation were provided in a revised data package received from the laboratory on 7/1/16.

Responses for Aroclor 1260-7 on the CLP-1 column of the lowest concentration standard of the 5/12/16 IC on CPESTGC9 were not reported on the quantitation report for this standard, and this peak was not included in the %RSD calculation reported on the IC summary form. No explanation was provided by the laboratory for omitting this peak. It is not appropriate to omit selected Aroclor peaks when evaluating IC or any other laboratory quality control results.

Although RT, CF, and %D values were reported on the summary forms for Aroclor 1260-4 on the CLP-2 column of the CC standard run on 6/11/16 at 13:42 on CPESTGC9, responses for this peak were not found on the CC standard quantitation report. It was assumed for validation purposes that the summary form information was correct.

XII. Overall Assessment

Based on the validation effort, sample results were determined to be valid as reported by the laboratory, with the following exceptions:

- The result for Aroclor 1248 in Manhole 1-2 was qualified as estimated (J) due to lack of agreement between the two column measurements.

- Results for Aroclor 1248 and Aroclor 1260 in Manhole 2-1 were qualified as estimated (J) due to lack of agreement between the two column measurements.

The “J” qualifier applied by the laboratory to the result for Aroclor 1248 in Manhole 1-2 to denote a concentration below the RL was not removed by the validator.

Documentation issues are discussed in Section XI.

This validation report should be considered part of the data package for all future distributions of the PCBs data.

TRILLIUM INC.

ATTACHMENT A

DATA SUMMARY FORM
Laboratory Job No. 460-114699-1
Samples Collected May 31, 2016

DATA SUMMARY FORM: PCBs
CONCRETE SAMPLES
(mg/kg)

Site Name: Alcoa

Sampling Date: May 31, 2016

Laboratory Job No. 460-114699-1

Trillium Project No. 16201

	Sample Number	Manhole 1-1		Manhole 1-2		Manhole 2-2		Manhole 2-1			
	Lab ID	460-114699-1		460-114699-2		460-114699-3		460-114699-4			
	Dilution Factor	1		1		2		1			
	% Solids	91.7		77.6		82.4		82.4			
RL											
0.067	Aroclor 1016										
0.067	Aroclor 1221										
0.067	Aroclor 1232										
0.067	Aroclor 1242										
0.067	Aroclor 1248	0.22		0.076	J	2.3		0.50	J		
0.067	Aroclor 1254										
0.067	Aroclor 1260	0.099				1.0		0.12	J		
0.067	Aroclor 1262										
0.067	Aroclor 1268										

EPA Method 8082A

ATTACHMENT B

PCBS ORGANICS ANALYSIS DATA SHEETS (Form 1)
Laboratory Job No. 460-114699-1
Samples Collected May 31, 2016

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-114699-1

SDG No.:

Client Sample ID: Manhole 1-1 | Lab Sample ID: 460-114699-1

Matrix: Solid | Lab File ID: 9F023736.D

Analysis Method: 8082A | Date Collected: 05/31/2016 08:40

Extraction Method: 3546 | Date Extracted: 06/10/2016 02:05

Sample wt/vol: 15.0215(g) | Date Analyzed: 06/11/2016 15:00

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 8.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 373069 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12672-29-6	Aroclor 1248	0.22		0.073	0.0097
11096-82-5	Aroclor 1260	0.099		0.073	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	127		47-150

FORM I 8082A

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-114699-1

SDG No.:

Client Sample ID: Manhole 1-1 | Lab Sample ID: 460-114699-1

Matrix: Solid | Lab File ID: 9F023736.D

Analysis Method: 8082A | Date Collected: 05/31/2016 08:40

Extraction Method: 3546 | Date Extracted: 06/10/2016 02:05

Sample wt/vol: 15.0215(g) | Date Analyzed: 06/11/2016 15:00

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 8.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 373069 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor 1016	0.0097	U	0.073	0.0097
11104-28-2	Aroclor 1221	0.0097	U	0.073	0.0097
11141-16-5	Aroclor 1232	0.0097	U	0.073	0.0097
53469-21-9	Aroclor 1242	0.0097	U	0.073	0.0097
11097-69-1	Aroclor 1254	0.010	U	0.073	0.010
37324-23-5	Aroclor 1262	0.010	U	0.073	0.010
11100-14-4	Aroclor 1268	0.010	U	0.073	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	111		47-150

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-114699-1

SDG No.:

Client Sample ID: Manhole 1-2 | Lab Sample ID: 460-114699-2

Matrix: Solid | Lab File ID: 9F023737.D

Analysis Method: 8082A | Date Collected: 05/31/2016 08:30

Extraction Method: 3546 | Date Extracted: 06/10/2016 02:05

Sample wt/vol: 15.0117(g) | Date Analyzed: 06/11/2016 15:18

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 22.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 373069 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12672-29-6	Aroclor 1248	0.076	J	0.086	0.011

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	122		47-150

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-114699-1

SDG No.:

Client Sample ID: Manhole 1-2 | Lab Sample ID: 460-114699-2

Matrix: Solid | Lab File ID: 9F023737.D

Analysis Method: 8082A | Date Collected: 05/31/2016 08:30

Extraction Method: 3546 | Date Extracted: 06/10/2016 02:05

Sample wt/vol: 15.0117(g) | Date Analyzed: 06/11/2016 15:18

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: 22.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 373069 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor 1016	0.011	U	0.086	0.011
11104-28-2	Aroclor 1221	0.011	U	0.086	0.011
11141-16-5	Aroclor 1232	0.011	U	0.086	0.011
53469-21-9	Aroclor 1242	0.011	U	0.086	0.011
11097-69-1	Aroclor 1254	0.012	U	0.086	0.012
11096-82-5	Aroclor 1260	0.012	U	0.086	0.012
37324-23-5	Aroclor 1262	0.012	U	0.086	0.012
11100-14-4	Aroclor 1268	0.012	U	0.086	0.012

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	108		47-150

FORM I 8082A

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-114699-1

SDG No.:

Client Sample ID: Manhole 2-2 DL | Lab Sample ID: 460-114699-3 DL

Matrix: Solid | Lab File ID: 9F023738.D

Analysis Method: 8082A | Date Collected: 05/31/2016 12:05

Extraction Method: 3546 | Date Extracted: 06/10/2016 02:05

Sample wt/vol: 15.0183(g) | Date Analyzed: 06/11/2016 15:36

Con. Extract Vol.: 10(mL) | Dilution Factor: 2

Injection Volume: 1(uL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 17.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 373069 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12672-29-6	Aroclor 1248	2.3	~~D~~	0.16	0.022
11096-82-5	Aroclor 1260	1.0	~~D~~	0.16	0.022

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	144	D	47-150

E. Drew 7/8/16

FORM I 8082A

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison
Job No.: 460-114699-1
SDG No.:
Client Sample ID: Manhole 2-2 DL
Lab Sample ID: 460-114699-3 DL
Matrix: Solid
Lab File ID: 9F023738.D
Analysis Method: 8082A
Date Collected: 05/31/2016 12:05
Extraction Method: 3546
Date Extracted: 06/10/2016 02:05
Sample wt/vol: 15.0183(g)
Date Analyzed: 06/11/2016 15:36
Con. Extract Vol.: 10(mL)
Dilution Factor: 2
Injection Volume: 1(uL)
GC Column: CLP-1 ID: 0.53(mm)
% Moisture: 17.6
GPC Cleanup:(Y/N) N
Analysis Batch No.: 373069
Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor 1016	0.022	U	0.16	0.022
11104-28-2	Aroclor 1221	0.022	U	0.16	0.022
11141-16-5	Aroclor 1232	0.022	U	0.16	0.022
53469-21-9	Aroclor 1242	0.022	U	0.16	0.022
11097-69-1	Aroclor 1254	0.022	U	0.16	0.022
37324-23-5	Aroclor 1262	0.022	U	0.16	0.022
11100-14-4	Aroclor 1268	0.022	U	0.16	0.022

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	137	D	47-150

FORM I 8082A

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-114699-1

SDG No.:

Client Sample ID: Manhole 2-1 | Lab Sample ID: 460-114699-4

Matrix: Solid | Lab File ID: 9F023739.D

Analysis Method: 8082A | Date Collected: 05/31/2016 10:55

Extraction Method: 3546 | Date Extracted: 06/10/2016 02:05

Sample wt/vol: 15.0033(g) | Date Analyzed: 06/11/2016 15:54

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 17.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 373069 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12672-29-6	Aroclor 1248	0.50	J	0.081	0.011
11096-82-5	Aroclor 1260	0.12	J	0.081	0.011

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	128		47-150

E. Dick 7/8/16

FORM I 8082A

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison
Job No.: 460-114699-1
SDG No.:
Client Sample ID: Manhole 2-1
Lab Sample ID: 460-114699-4
Matrix: Solid
Lab File ID: 9F023739.D
Analysis Method: 8082A
Date Collected: 05/31/2016 10:55
Extraction Method: 3546
Date Extracted: 06/10/2016 02:05
Sample wt/vol: 15.0033(g)
Date Analyzed: 06/11/2016 15:54
Con. Extract Vol.: 10(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
GC Column: CLP-1 ID: 0.53(mm)
% Moisture: 17.6
GPC Cleanup:(Y/N) N
Analysis Batch No.: 373069
Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor 1016	0.011	U	0.081	0.011
11104-28-2	Aroclor 1221	0.011	U	0.081	0.011
11141-16-5	Aroclor 1232	0.011	U	0.081	0.011
53469-21-9	Aroclor 1242	0.011	U	0.081	0.011
11097-69-1	Aroclor 1254	0.011	U	0.081	0.011
37324-23-5	Aroclor 1262	0.011	U	0.081	0.011
11100-14-4	Aroclor 1268	0.011	U	0.081	0.011

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	105		47-150

FORM I 8082A

APPENDIX G

SOIL STOCKPILE WASTE CLASSIFICATION SUMMARY TABLE AND LABORATORY REPORT JC13575

Former Alcoa Building 12 Soil Stockpile Waste Classification Results

Job Number:	**JC13575, SGS Accutest**
Account:	**LSRP Consulting LLC**
Project:	**Former Alcoa Building 12, 660 River Road, Edgewater, NJ**

Client Sample ID:		**COMPOSITE SOILPILE AI020216 BORINGS: AL020216-N1,N2, N3,N4,N5**	**BORING AL020216-N1**	**COMPOSITE SOILPILE AI020216 BORINGS: AL020216-S1,S2, S3,S4,S5**	**BORING AL020216-S1**	**COMPOSITE SOILPILE AI020216 BORINGS: AL020216-N6,N7, N8,N9,N10**	**BORING AL020216-N6**	**COMPOSITE SOILPILE AI020216 BORINGS: AL020216-S6,S7, S8,S9,S10**	**BORING AL020216-S6**
Lab Sample ID:		**JC13575-1**	**JC13575-2**	**JC13575-3**	**JC13575-4**	**JC13575-5**	**JC13575-6**	**JC13575-7**	**JC13575-8**
Date Sampled:		**2/2/2016**	**2/2/2016**	**2/2/2016**	**2/2/2016**	**2/2/2016**	**2/2/2016**	**2/2/2016**	**2/2/2016**
Matrix:		**Soil**	**Soil**	**Soil**	**Soil**	**Soil**	**Soil**	**Soil**	**Soil**
GC Volatiles (SW846 8015C)									
TPH-GRO (C6-C10)	mg/kg	-	ND (2.1)	-	ND (2.1)	-	ND (2.1)	-	ND (2.2)
GC Semi-volatiles (SW846 8015C)									
TPH-DRO (C10-C28)	mg/kg	-	62.5	-	270	-	299	-	319
GC Semi-volatiles (SW846 8082A)									
Aroclor 1016	mg/kg	ND (0.013)	-	ND (0.013)	-	ND (0.012)	-	ND (0.012)	-
Aroclor 1221	mg/kg	ND (0.031)	-	ND (0.031)	-	ND (0.028)	-	ND (0.029)	-
Aroclor 1232	mg/kg	ND (0.016)	-	ND (0.016)	-	ND (0.014)	-	ND (0.015)	-
Aroclor 1242	mg/kg	ND (0.014)	-	ND (0.014)	-	ND (0.013)	-	ND (0.013)	-
Aroclor 1248	mg/kg	79.7	-	65.2	-	81.3	-	55.1	-
Aroclor 1254	mg/kg	ND (0.022)	-	ND (0.022)	-	ND (0.020)	-	ND (0.020)	-
Aroclor 1260	mg/kg	8.01	-	8.89	-	8.74	-	6.14	-
Aroclor 1268	mg/kg	ND (0.0096)	-	ND (0.0095)	-	ND (0.0088)	-	ND (0.009)	-
Aroclor 1262	mg/kg	ND (0.013)	-	ND (0.013)	-	ND (0.012)	-	ND (0.012)	-
Total PCBs	mg/kg	87.71	-	74.09	-	90.04	-	61.24	-
General Chemistry									
Corrosivity as pH	su	8.43 NC	-	8.45 NC	-	8.23 NC	-	8.29 NC	-
Cyanide Reactivity	mg/kg	<11	-	<11	-	<11	-	<11	-
Ignitability (Flashpoint)	Deg. F	>200	-	>200	-	>200	-	>200	-
Solids, Percent	%	88.1	90.2	91.6	88.6	91.2	90.4	88.8	85.8
Sulfide Reactivity	mg/kg	<110	-	<110	-	<110	-	<110	-
GC/MS Volatiles (SW846 8260C)									
Benzene	mg/l	-	ND (0.0012)	-	ND (0.0012)	-	-	-	-
2-Butanone (MEK)	mg/l	-	ND (0.028)	-	ND (0.028)	-	-	-	-
Carbon tetrachloride	mg/l	-	ND (0.0011)	-	ND (0.0011)	-	-	-	-
Chlorobenzene	mg/l	-	ND (0.00093)	-	ND (0.00093)	-	-	-	-
Chloroform	mg/l	-	ND (0.00094)	-	ND (0.00094)	-	-	-	-
1,4-Dichlorobenzene	mg/l	-	ND (0.0014)	-	ND (0.0014)	-	-	-	-
1,2-Dichloroethane	mg/l	-	ND (0.00090)	-	ND (0.00090)	-	-	-	-
1,1-Dichloroethene	mg/l	-	ND (0.0026)	-	ND (0.0026)	-	-	-	-
Tetrachloroethene	mg/l	-	ND (0.0020)	-	ND (0.0020)	-	-	-	-
Trichloroethene	mg/l	-	ND (0.0011)	-	ND (0.0011)	-	-	-	-
Vinyl chloride	mg/l	-	ND (0.00074)	-	ND (0.00074)	-	-	-	-
GC/MS Semi-volatiles (SW846 8270D)									
2-Methylphenol	mg/l	ND (0.0082)	-	ND (0.0082)	-	-	-	-	-
3&4-Methylphenol	mg/l	0.0189 J	-	ND (0.0067)	-	-	-	-	-
Pentachlorophenol	mg/l	ND (0.014)	-	ND (0.014)	-	-	-	-	-
2,4,5-Trichlorophenol	mg/l	ND (0.015)	-	ND (0.015)	-	-	-	-	-
2,4,6-Trichlorophenol	mg/l	ND (0.014)	-	ND (0.014)	-	-	-	-	-
1,4-Dichlorobenzene	mg/l	ND (0.0023)	-	ND (0.0023)	-	-	-	-	-
2,4-Dinitrotoluene	mg/l	ND (0.0026)	-	ND (0.0026)	-	-	-	-	-
Hexachlorobenzene	mg/l	ND (0.0042)	-	ND (0.0042)	-	-	-	-	-
Hexachlorobutadiene	mg/l	ND (0.0036)	-	ND (0.0036)	-	-	-	-	-
Hexachloroethane	mg/l	ND (0.0022)	-	ND (0.0022)	-	-	-	-	-
Nitrobenzene	mg/l	ND (0.0046)	-	ND (0.0046)	-	-	-	-	-
Pyridine	mg/l	ND (0.0027)	-	ND (0.0027)	-	-	-	-	-
Metals Analysis									
Arsenic	mg/l	<0.50	-	<0.50	-	-	-	-	-
Barium	mg/l	<1.0	-	<1.0	-	-	-	-	-
Cadmium	mg/l	<0.025	-	<0.025	-	-	-	-	-
Chromium	mg/l	<0.050	-	<0.050	-	-	-	-	-
Lead	mg/l	<0.50	-	<0.50	-	-	-	-	-
Mercury	mg/l	<0.00020	-	<0.00020	-	-	-	-	-
Selenium	mg/l	<0.50	-	<0.50	-	-	-	-	-
Silver	mg/l	<0.050	-	<0.050	-	-	-	-	-

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e-Hardcopy 2.0
Automated Report

Technical Report for

LSRP Consulting, LLC

Alcoa Building 12, 734 River Road, Edgewater, NJ

150176

SGS Accutest Job Number: JC13575

Sampling Date: 02/02/16

Report to:

LSRP Consulting, LLC
11 Lake Michigan Drive
Little Egg Harbor Township, NJ 08087
KGagnon@LSRPConsulting.com

ATTN: Keith Gagnon

Total number of pages in report: **404**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Nancy Cole
Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, TX, VA, WV, DoD ELAP (L-A-B L2248)

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SGS Accutest

Sample Summary

LSRP Consulting, LLC

Job No: JC13575

Alcoa Building 12, 734 River Road, Edgewater, NJ
Project No: 150176

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC13575-1	02/02/16	09:50	HM	02/02/16	SO	Soil	COMPOSITE SOILPILE AI020216 BORINGS: AL020216-N1,N2,N3, N4,N5
JC13575-2	02/02/16	09:30	HM	02/02/16	SO	Soil	BORING AL020216-N1
JC13575-3	02/02/16	11:00	HM	02/02/16	SO	Soil	COMPOSITE SOILPILE AI020216 BORINGS: AL020216-S1,S2,S3, S4,S5
JC13575-4	02/02/16	10:40	HM	02/02/16	SO	Soil	BORING AL020216-S1
JC13575-5	02/02/16	10:20	HM	02/02/16	SO	Soil	COMPOSITE SOILPILE AI020216 BORINGS:AL020216-N6,N7,N8, N9,N10
JC13575-6	02/02/16	10:00	HM	02/02/16	SO	Soil	BORING AL020216-N6
JC13575-7	02/02/16	11:30	HM	02/02/16	SO	Soil	COMPOSITE SOILPILE AI020216 BORINGS:AL020216-S6,S7,S8, S9,S10
JC13575-8	02/02/16	11:10	HM	02/02/16	SO	Soil	BORING AL020216-S6

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	LSRP Consulting, LLC	**Job No**	JC13575
Site:	Alcoa Building 12, 734 River Road, Edgewater, NJ	**Report Date**	2/17/2016 9:07:31 AM

On 02/02/2016, 8 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a maximum corrected temperature of 1.9 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JC13575 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Please refer to certification exceptions summary for additional certification information

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

Volatiles by GCMS By Method SW846 8260C

Matrix: LEACHATE **Batch ID:** V2V1176

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC13575-2LS, JC13575-2MS, JC13575-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: LEACHATE **Batch ID:** V2V1180

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC13575-4MS, JC13575-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GCMS By Method SW846 8270D

Matrix: LEACHATE **Batch ID:** OP91010

- All samples were extracted within the recommended method holding time.
- Sample(s) JC13575-1LS, JC13575-1MS, JC13575-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for MS/MSD for 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, Pentachlorophenol are outside control limits. Analytical precision exceeds in-house control limits.

Volatiles by GC By Method SW846 8015C

Matrix: SO **Batch ID:** GPF3997

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC13520-2MS, JC13520-2MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015C

Matrix: SO **Batch ID:** OP90971

- All samples were extracted within the recommended method holding time.
- Sample(s) JC13570-1MS, JC13570-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GC By Method SW846 8082A

Matrix: SO	Batch ID: OP90954

- All samples were extracted within the recommended method holding time.
- Sample(s) JC13527-1MS, JC13527-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JC13575-7 for Decachlorobiphenyl: Outside control limits due to dilution.
- JC13575-5 for Tetrachloro-m-xylene: Outside control limits due to dilution.
- JC13575-5 for Tetrachloro-m-xylene: Outside control limits due to matrix interference.
- JC13575-5 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JC13575-3 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JC13575-7 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JC13575-1 for Tetrachloro-m-xylene: Outside control limits due to matrix interference.
- JC13575-7 for Tetrachloro-m-xylene: Outside control limits due to dilution.
- JC13575-1 for Decachlorobiphenyl: Outside control limits due to matrix interference.
- JC13575-1 for Tetrachloro-m-xylene: Outside control limits due to dilution.
- JC13575-1 for Decachlorobiphenyl: Outside control limits due to dilution.
- JC13575-3 for Decachlorobiphenyl: Outside control limits due to dilution.
- JC13575-5 for Decachlorobiphenyl: Outside control limits due to dilution.
- JC13575-3 for Tetrachloro-m-xylene: Outside control limits due to dilution.

Metals By Method SW846 6010C

Matrix: LEACHATE	Batch ID: MP91873

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC13480-1AMS, JC13480-1AMSD, JC13480-1ASDL were used as the QC samples for metals.

Metals By Method SW846 7470A

Matrix: LEACHATE	Batch ID: MP91877

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC13480-1AMS, JC13480-1AMSD were used as the QC samples for metals.

Wet Chemistry By Method SM2540 G-97

Matrix: SO	Batch ID: GN40200

- The data for SM2540 G-97 meets quality control requirements.

Wet Chemistry By Method SW846 1010A/ASTM D93

Matrix: SO	Batch ID: GN40495

- Sample(s) JC13575-7DUP were used as the QC samples for Ignitability (Flashpoint).

Wet Chemistry By Method SW846 9045D/CHPT 7

Matrix: SO	Batch ID: GN40503

- The data for SW846 9045D/CHPT 7 meets quality control requirements.

Wet Chemistry By Method SW846 CHAP7/9012 B

Matrix: SO	**Batch ID:** GP95434

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC13621-1ADUP were used as the QC samples for Cyanide Reactivity.

Wet Chemistry By Method SW846 CHAP7/9034

Matrix: SO	**Batch ID:** GP95435

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC13621-1ADUP, JC13621-1AMS were used as the QC samples for Sulfide Reactivity.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Summary of Hits

Job Number: JC13575
Account: LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ
Collected: 02/02/16

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Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC13575-1	**COMPOSITE SOILPILE AI020216 BORINGS: AL020216-N1,N2,N3,N4,N5**					
Aroclor 1248		79700	3700	1100	ug/kg	SW846 8082A
Aroclor 1260		8010	3700	1000	ug/kg	SW846 8082A
Corrosivity as pH		8.43 NC			su	SW846 9045D/CHPT 7
Ignitability (Flashpoint)		> 200			Deg. F	SW846 1010A/ASTM D93
3&4-Methylphenol		0.0189 J	0.020	0.0067	mg/l	SW846 8270D
JC13575-2	**BORING AL020216-N1**					
TPH-DRO (C10-C28)		62.5	11	3.2	mg/kg	SW846 8015C
JC13575-3	**COMPOSITE SOILPILE AI020216 BORINGS: AL020216-S1,S2,S3,S4,S5**					
Aroclor 1248		65200	3600	1100	ug/kg	SW846 8082A
Aroclor 1260		8890	3600	1000	ug/kg	SW846 8082A
Corrosivity as pH		8.45 NC			su	SW846 9045D/CHPT 7
Ignitability (Flashpoint)		> 200			Deg. F	SW846 1010A/ASTM D93
JC13575-4	**BORING AL020216-S1**					
TPH-DRO (C10-C28)		270	9.8	2.8	mg/kg	SW846 8015C
JC13575-5	**COMPOSITE SOILPILE AI020216 BORINGS:AL020216-N6,N7,N8,N9,N10**					
Aroclor 1248		81300	3300	1000	ug/kg	SW846 8082A
Aroclor 1260		8740	3300	950	ug/kg	SW846 8082A
Corrosivity as pH		8.23 NC			su	SW846 9045D/CHPT 7
Ignitability (Flashpoint)		> 200			Deg. F	SW846 1010A/ASTM D93
JC13575-6	**BORING AL020216-N6**					
TPH-DRO (C10-C28)		299	10	3.0	mg/kg	SW846 8015C
JC13575-7	**COMPOSITE SOILPILE AI020216 BORINGS:AL020216-S6,S7,S8,S9,S10**					
Aroclor 1248		55100	3400	1100	ug/kg	SW846 8082A
Aroclor 1260		6140	3400	980	ug/kg	SW846 8082A
Corrosivity as pH		8.29 NC			su	SW846 9045D/CHPT 7
Ignitability (Flashpoint)		> 200			Deg. F	SW846 1010A/ASTM D93
JC13575-8	**BORING AL020216-S6**					
TPH-DRO (C10-C28)		319	11	3.2	mg/kg	SW846 8015C

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID:	COMPOSITE SOILPILE AI020216 BORINGS: AL020216-N1,N2,N3,N4,N5		
Lab Sample ID:	JC13575-1	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	88.1
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3P50584.D	1	02/06/16	JJ	02/05/16	OP91010	E3P2295
Run #2							

	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate **TCLP Leachate method SW846 1311**

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.020	0.0082	mg/l	
	3&4-Methylphenol	0.0189	D024	200	0.020	0.0067	mg/l	J
87-86-5	Pentachlorophenol	ND	D037	100	0.10	0.014	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.015	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.014	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.020	0.0023	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.020	0.0026	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.020	0.0042	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.010	0.0036	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.0022	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.020	0.0046	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.020	0.0027	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%		14-88%
4165-62-2	Phenol-d5	31%		10-110%
118-79-6	2,4,6-Tribromophenol	94%		39-149%
4165-60-0	Nitrobenzene-d5	86%		32-128%
321-60-8	2-Fluorobiphenyl	77%		35-119%
1718-51-0	Terphenyl-d14	84%		10-126%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 6/96) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	COMPOSITE SOILPILE AI020216 BORINGS: AL020216-N1,N2,N3,N4,N5		
Lab Sample ID:	JC13575-1	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
Method:	SW846 8082A SW846 3546	**Percent Solids:**	88.1
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF153675.D	1	02/05/16	CC	02/03/16	OP90954	GEF5564
Run #2	EF153688.D	100	02/05/16	CC	02/03/16	OP90954	GEF5565

	Initial Weight	Final Volume
Run #1	15.5 g	10.0 ml
Run #2	15.5 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	13	ug/kg	
11104-28-2	Aroclor 1221	ND	37	31	ug/kg	
11141-16-5	Aroclor 1232	ND	37	16	ug/kg	
53469-21-9	Aroclor 1242	ND	37	14	ug/kg	
12672-29-6	Aroclor 1248	79700 [a]	3700	1100	ug/kg	
11097-69-1	Aroclor 1254	ND	37	22	ug/kg	
11096-82-5	Aroclor 1260	8010 [a]	3700	1000	ug/kg	
11100-14-4	Aroclor 1268	ND	37	9.6	ug/kg	
37324-23-5	Aroclor 1262	ND	37	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	170% [c]	0% [b]	20-152%
877-09-8	Tetrachloro-m-xylene	78%	0% [b]	20-152%
2051-24-3	Decachlorobiphenyl	298% [c]	0% [b]	12-157%
2051-24-3	Decachlorobiphenyl	226% [c]	0% [b]	12-157%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.
(c) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	COMPOSITE SOILPILE AI020216 BORINGS: AL020216-N1,N2,N3,N4,N5		
Lab Sample ID:	JC13575-1	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
		Percent Solids:	88.1
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 0.50	D004	5.0	0.50	mg/l	5	02/05/16	02/05/16	MS	SW846 6010C [2]	SW846 3010A [3]
Barium	< 1.0	D005	100	1.0	mg/l	5	02/05/16	02/05/16	MS	SW846 6010C [2]	SW846 3010A [3]
Cadmium	< 0.025	D006	1.0	0.025	mg/l	5	02/05/16	02/05/16	MS	SW846 6010C [2]	SW846 3010A [3]
Chromium	< 0.050	D007	5.0	0.050	mg/l	5	02/05/16	02/05/16	MS	SW846 6010C [2]	SW846 3010A [3]
Lead	< 0.50	D008	5.0	0.50	mg/l	5	02/05/16	02/05/16	MS	SW846 6010C [2]	SW846 3010A [3]
Mercury	< 0.00020	D009	0.20	0.00020	mg/l	1	02/04/16	02/04/16	VM	SW846 7470A [1]	SW846 7470A [4]
Selenium	< 0.50	D010	1.0	0.50	mg/l	5	02/05/16	02/05/16	MS	SW846 6010C [2]	SW846 3010A [3]
Silver	< 0.050	D011	5.0	0.050	mg/l	5	02/05/16	02/05/16	MS	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA38670
(2) Instrument QC Batch: MA38672
(3) Prep QC Batch: MP91873
(4) Prep QC Batch: MP91877

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	COMPOSITE SOILPILE AI020216 BORINGS: AL020216-N1,N2,N3,N4,N5		
Lab Sample ID:	JC13575-1	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
		Percent Solids:	88.1
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	8.43 NC		su	1	02/10/16 13:17	SP	SW846 9045D/CHPT 7
Cyanide Reactivity	< 11	11	mg/kg	1	02/08/16 13:37	BM	SW846 CHAP7/9012 B
Ignitability (Flashpoint)	> 200		Deg. F	1	02/10/16	RI	SW846 1010A/ASTM D93
Solids, Percent	88.1		%	1	02/03/16 17:00	SP	SM2540 G-97
Sulfide Reactivity	< 110	110	mg/kg	1	02/08/16 16:10	MP	SW846 CHAP7/9034

RL = Reporting Limit

SGS Accutest

Report of Analysis

Client Sample ID:	BORING AL020216-N1		
Lab Sample ID:	JC13575-2	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
Method:	SW846 8260C SW846 1311	**Percent Solids:**	90.2
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2V29717.D	5	02/04/16	HA	02/03/16	GP95352	V2V1176
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate **TCLP Leachate method SW846 1311**

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.0025	0.0012	mg/l	
78-93-3	2-Butanone (MEK)	ND	D035	200	0.10	0.028	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.0050	0.0011	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.0050	0.00093	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.0050	0.00094	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.0050	0.0014	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.0050	0.00090	mg/l	
75-35-4	1,1-Dichloroethene	ND	D029	0.70	0.0050	0.0026	mg/l	
127-18-4	Tetrachloroethene	ND	D039	0.70	0.0050	0.0020	mg/l	
79-01-6	Trichloroethene	ND	D040	0.50	0.0050	0.0011	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.0050	0.00074	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		76-120%
17060-07-0	1,2-Dichloroethane-D4	106%		64-135%
2037-26-5	Toluene-D8	96%		76-117%
460-00-4	4-Bromofluorobenzene	95%		72-122%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 6/96) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	BORING AL020216-N1		
Lab Sample ID:	JC13575-2	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
Method:	SW846 8015C	**Percent Solids:**	90.2
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PF130124.D	1	02/03/16	XPL	n/a	n/a	GPF3997
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.0 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	12	2.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	96%		70-116%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	BORING AL020216-N1		
Lab Sample ID:	JC13575-2	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
Method:	SW846 8015C SW846 3546	**Percent Solids:**	90.2
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y74278.D	1	02/04/16	TL	02/04/16	OP90971	G2Y2884
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	62.5	11	3.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	100%		13-142%
16416-32-3	Tetracosane-d50	106%		12-141%
438-22-2	5a-Androstane	106%		13-142%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	COMPOSITE SOILPILE AI020216 BORINGS: AL020216-S1,S2,S3,S4,S5		
Lab Sample ID:	JC13575-3	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	91.6
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3P50585.D	1	02/06/16	JJ	02/05/16	OP91010	E3P2295
Run #2							

	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate **TCLP Leachate method SW846 1311**

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.020	0.0082	mg/l	
	3&4-Methylphenol	ND	D024	200	0.020	0.0067	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.10	0.014	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.015	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.014	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.020	0.0023	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.020	0.0026	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.020	0.0042	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.010	0.0036	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.0022	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.020	0.0046	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.020	0.0027	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	41%		14-88%
4165-62-2	Phenol-d5	30%		10-110%
118-79-6	2,4,6-Tribromophenol	98%		39-149%
4165-60-0	Nitrobenzene-d5	88%		32-128%
321-60-8	2-Fluorobiphenyl	83%		35-119%
1718-51-0	Terphenyl-d14	89%		10-126%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 6/96) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	COMPOSITE SOILPILE AI020216 BORINGS: AL020216-S1,S2,S3,S4,S5		
Lab Sample ID:	JC13575-3	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
Method:	SW846 8082A SW846 3546	**Percent Solids:**	91.6
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF153676.D	1	02/05/16	CC	02/03/16	OP90954	GEF5564
Run #2	EF153689.D	100	02/05/16	CC	02/03/16	OP90954	GEF5565

	Initial Weight	Final Volume
Run #1	15.0 g	10.0 ml
Run #2	15.0 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	13	ug/kg	
11104-28-2	Aroclor 1221	ND	36	31	ug/kg	
11141-16-5	Aroclor 1232	ND	36	16	ug/kg	
53469-21-9	Aroclor 1242	ND	36	14	ug/kg	
12672-29-6	Aroclor 1248	65200 [a]	3600	1100	ug/kg	
11097-69-1	Aroclor 1254	ND	36	22	ug/kg	
11096-82-5	Aroclor 1260	8890 [a]	3600	1000	ug/kg	
11100-14-4	Aroclor 1268	ND	36	9.5	ug/kg	
37324-23-5	Aroclor 1262	ND	36	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	119%	0% [b]	20-152%
877-09-8	Tetrachloro-m-xylene	71%	0% [b]	20-152%
2051-24-3	Decachlorobiphenyl	337% [c]	0% [b]	12-157%
2051-24-3	Decachlorobiphenyl	257% [c]	0% [b]	12-157%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.
(c) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	COMPOSITE SOILPILE AI020216 BORINGS: AL020216-S1,S2,S3,S4,S5		
Lab Sample ID:	JC13575-3	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
		Percent Solids:	91.6
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 0.50	D004	5.0	0.50	mg/l	5	02/05/16	02/05/16	MS	SW846 6010C [2]	SW846 3010A [3]
Barium	< 1.0	D005	100	1.0	mg/l	5	02/05/16	02/05/16	MS	SW846 6010C [2]	SW846 3010A [3]
Cadmium	< 0.025	D006	1.0	0.025	mg/l	5	02/05/16	02/05/16	MS	SW846 6010C [2]	SW846 3010A [3]
Chromium	< 0.050	D007	5.0	0.050	mg/l	5	02/05/16	02/05/16	MS	SW846 6010C [2]	SW846 3010A [3]
Lead	< 0.50	D008	5.0	0.50	mg/l	5	02/05/16	02/05/16	MS	SW846 6010C [2]	SW846 3010A [3]
Mercury	< 0.00020	D009	0.20	0.00020	mg/l	1	02/04/16	02/04/16	VM	SW846 7470A [1]	SW846 7470A [4]
Selenium	< 0.50	D010	1.0	0.50	mg/l	5	02/05/16	02/05/16	MS	SW846 6010C [2]	SW846 3010A [3]
Silver	< 0.050	D011	5.0	0.050	mg/l	5	02/05/16	02/05/16	MS	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA38670
(2) Instrument QC Batch: MA38672
(3) Prep QC Batch: MP91873
(4) Prep QC Batch: MP91877

RL = Reporting Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID:	COMPOSITE SOILPILE AI020216 BORINGS: AL020216-S1,S2,S3,S4,S5		
Lab Sample ID:	JC13575-3	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
		Percent Solids:	91.6
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	8.45 NC		su	1	02/10/16 13:17	SP	SW846 9045D/CHPT 7
Cyanide Reactivity	< 11	11	mg/kg	1	02/08/16 13:38	BM	SW846 CHAP7/9012 B
Ignitability (Flashpoint)	> 200		Deg. F	1	02/10/16	RI	SW846 1010A/ASTM D93
Solids, Percent	91.6		%	1	02/03/16 17:00	SP	SM2540 G-97
Sulfide Reactivity	< 110	110	mg/kg	1	02/08/16 16:10	MP	SW846 CHAP7/9034

RL = Reporting Limit

SGS Accutest

Report of Analysis

Client Sample ID:	BORING AL020216-S1		
Lab Sample ID:	JC13575-4	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
Method:	SW846 8260C SW846 1311	**Percent Solids:**	88.6
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2V29865.D	5	02/09/16	HA	02/03/16	GP95352	V2V1180
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate **TCLP Leachate method SW846 1311**

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.0025	0.0012	mg/l	
78-93-3	2-Butanone (MEK)	ND	D035	200	0.10	0.028	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.0050	0.0011	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.0050	0.00093	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.0050	0.00094	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.0050	0.0014	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.0050	0.00090	mg/l	
75-35-4	1,1-Dichloroethene	ND	D029	0.70	0.0050	0.0026	mg/l	
127-18-4	Tetrachloroethene	ND	D039	0.70	0.0050	0.0020	mg/l	
79-01-6	Trichloroethene	ND	D040	0.50	0.0050	0.0011	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.0050	0.00074	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		76-120%
17060-07-0	1,2-Dichloroethane-D4	107%		64-135%
2037-26-5	Toluene-D8	105%		76-117%
460-00-4	4-Bromofluorobenzene	100%		72-122%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 6/96) B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	BORING AL020216-S1		
Lab Sample ID:	JC13575-4	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
Method:	SW846 8015C	**Percent Solids:**	88.6
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PF130125.D	1	02/03/16	XPL	n/a	n/a	GPF3997
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.3 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	12	2.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	93%		70-116%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	BORING AL020216-S1		
Lab Sample ID:	JC13575-4	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
Method:	SW846 8015C SW846 3546	**Percent Solids:**	88.6
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y74279.D	1	02/04/16	TL	02/04/16	OP90971	G2Y2884
Run #2							

	Initial Weight	Final Volume
Run #1	11.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	270	9.8	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	105%		13-142%
16416-32-3	Tetracosane-d50	112%		12-141%
438-22-2	5a-Androstane	113%		13-142%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	COMPOSITE SOILPILE AI020216 BORINGS:AL020216-N6,N7,N8,N9,N10		
Lab Sample ID:	JC13575-5	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
Method:	SW846 8082A SW846 3546	**Percent Solids:**	91.2
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF153681.D	1	02/05/16	CC	02/03/16	OP90954	GEF5564
Run #2	EF153690.D	100	02/05/16	CC	02/03/16	OP90954	GEF5565

	Initial Weight	Final Volume
Run #1	16.4 g	10.0 ml
Run #2	16.4 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	12	ug/kg	
11104-28-2	Aroclor 1221	ND	33	28	ug/kg	
11141-16-5	Aroclor 1232	ND	33	14	ug/kg	
53469-21-9	Aroclor 1242	ND	33	13	ug/kg	
12672-29-6	Aroclor 1248	81300 [a]	3300	1000	ug/kg	
11097-69-1	Aroclor 1254	ND	33	20	ug/kg	
11096-82-5	Aroclor 1260	8740 [a]	3300	950	ug/kg	
11100-14-4	Aroclor 1268	ND	33	8.8	ug/kg	
37324-23-5	Aroclor 1262	ND	33	12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	159% [c]	0% [b]	20-152%
877-09-8	Tetrachloro-m-xylene	72%	0% [b]	20-152%
2051-24-3	Decachlorobiphenyl	483% [c]	0% [b]	12-157%
2051-24-3	Decachlorobiphenyl	345% [c]	0% [b]	12-157%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.
(c) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	COMPOSITE SOILPILE AI020216 BORINGS:AL020216-N6,N7,N8,N9,N10		
Lab Sample ID:	JC13575-5	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
		Percent Solids:	91.2
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	8.23 NC		su	1	02/10/16 13:17	SP	SW846 9045D/CHPT 7
Cyanide Reactivity	< 11	11	mg/kg	1	02/08/16 13:41	BM	SW846 CHAP7/9012 B
Ignitability (Flashpoint)	> 200		Deg. F	1	02/10/16	RI	SW846 1010A/ASTM D93
Solids, Percent	91.2		%	1	02/03/16 17:00	SP	SM2540 G-97
Sulfide Reactivity	< 110	110	mg/kg	1	02/08/16 16:10	MP	SW846 CHAP7/9034

RL = Reporting Limit

SGS Accutest

Report of Analysis

Client Sample ID:	BORING AL020216-N6		
Lab Sample ID:	JC13575-6	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
Method:	SW846 8015C	**Percent Solids:**	90.4
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PF130126.D	1	02/03/16	XPL	n/a	n/a	GPF3997
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.0 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	12	2.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	95%		70-116%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	BORING AL020216-N6		
Lab Sample ID:	JC13575-6	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
Method:	SW846 8015C SW846 3546	**Percent Solids:**	90.4
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y74280.D	1	02/04/16	TL	02/04/16	OP90971	G2Y2884
Run #2							

	Initial Weight	Final Volume
Run #1	10.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	299	10	3.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	101%		13-142%
16416-32-3	Tetracosane-d50	99%		12-141%
438-22-2	5a-Androstane	106%		13-142%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	COMPOSITE SOILPILE AI020216 BORINGS:AL020216-S6,S7,S8,S9,S10		
Lab Sample ID:	JC13575-7	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
Method:	SW846 8082A SW846 3546	**Percent Solids:**	88.8
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF153682.D	1	02/05/16	CC	02/03/16	OP90954	GEF5564
Run #2	EF153691.D	100	02/05/16	CC	02/03/16	OP90954	GEF5565

	Initial Weight	Final Volume
Run #1	16.4 g	10.0 ml
Run #2	16.4 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	34	12	ug/kg	
11104-28-2	Aroclor 1221	ND	34	29	ug/kg	
11141-16-5	Aroclor 1232	ND	34	15	ug/kg	
53469-21-9	Aroclor 1242	ND	34	13	ug/kg	
12672-29-6	Aroclor 1248	55100 [a]	3400	1100	ug/kg	
11097-69-1	Aroclor 1254	ND	34	20	ug/kg	
11096-82-5	Aroclor 1260	6140 [a]	3400	980	ug/kg	
11100-14-4	Aroclor 1268	ND	34	9.0	ug/kg	
37324-23-5	Aroclor 1262	ND	34	12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	143%	0% [b]	20-152%
877-09-8	Tetrachloro-m-xylene	72%	0% [b]	20-152%
2051-24-3	Decachlorobiphenyl	362% [c]	0% [b]	12-157%
2051-24-3	Decachlorobiphenyl	304% [c]	0% [b]	12-157%

(a) Result is from Run# 2
(b) Outside control limits due to dilution.
(c) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	COMPOSITE SOILPILE AI020216 BORINGS:AL020216-S6,S7,S8,S9,S10		
Lab Sample ID:	JC13575-7	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
		Percent Solids:	88.8
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	8.29 NC		su	1	02/10/16 13:17	SP	SW846 9045D/CHPT 7
Cyanide Reactivity	< 11	11	mg/kg	1	02/08/16 13:42	BM	SW846 CHAP7/9012 B
Ignitability (Flashpoint)	> 200		Deg. F	1	02/10/16	RI	SW846 1010A/ASTM D93
Solids, Percent	88.8		%	1	02/03/16 17:00	SP	SM2540 G-97
Sulfide Reactivity	< 110	110	mg/kg	1	02/08/16 16:10	MP	SW846 CHAP7/9034

RL = Reporting Limit

SGS Accutest

Report of Analysis

Client Sample ID:	BORING AL020216-S6		
Lab Sample ID:	JC13575-8	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
Method:	SW846 8015C	**Percent Solids:**	85.8
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PF130127.D	1	02/03/16	XPL	n/a	n/a	GPF3997
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.1 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	13	2.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	92%		70-116%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	BORING AL020216-S6		
Lab Sample ID:	JC13575-8	**Date Sampled:**	02/02/16
Matrix:	SO - Soil	**Date Received:**	02/02/16
Method:	SW846 8015C SW846 3546	**Percent Solids:**	85.8
Project:	Alcoa Building 12, 734 River Road, Edgewater, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y74281.D	1	02/04/16	TL	02/04/16	OP90971	G2Y2884
Run #2							

	Initial Weight	Final Volume
Run #1	10.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	319	11	3.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	116%		13-142%
16416-32-3	Tetracosane-d50	117%		12-141%
438-22-2	5a-Androstane	118%		13-142%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

Parameter Certification Exceptions

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Cyanide Reactivity		**SW846 CHAP7/9012 B**	SO	Accutest is not certified for this parameter.[a]
Sulfide Reactivity		**SW846 CHAP7/9034**	SO	Accutest is not certified for this parameter.[a]

(a) Reactivity analyzed following SW846 Chapter 7 is no longer recognized by regulatory agencies. Use of results should be verified through the program to which the data is being submitted.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

ACCUTEST LABORATORIES

50

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

Page: 1 OF 4. COMP

FED-EX Tracking #
Bottle Order Control #
Accutest Quote #
Accutest Job # JC13575

Client / Reporting Information

Company Name: LSRP Consulting
Street Address: 11 Lake Michigan Drive
City / State / Zip: Little Egg Harbor Twsp. N.J. 08087
Project Contact / E-mail: Mr Keith Gagnon
Phone # / Fax #: kgagnon@lsrpconsulting.com (908) 419-7918
Sampler(s) Name(s) / Phone #: Harold Meissner

Project Information

Project Name: Alcoa Building 12
Street: 734 River Road
City / State: Edgewater, N.J.
Project #: 150176
Client Purchase Order #:
Project Manager: Tammy Mc

Billing Information (if different from Report to)
Company Name:
Street Address:
City / State / Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

TCLP Full		B8015 DRO			Lab to
less Pest & Herb					Composite
RCRA Char		V8015 GRO			all bottles
					into one
PCB		TCLP Vo			Sample

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

Accutest Sample #	Field ID / Point of Collection		Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	FOS							LAB USE ONLY
	Composite Soil Pile Al020216																X						B13
	Borings: AL020216-N1 ,N2, N3, N4, N5.																						C32T3
																							4N1
	Boring	AL020216- N1	2/2/16	9:30	HM	soil	1					1										X	COMP
	Boring	AL020216- N2	2/2/16	9:35	HM	soil	1					1										X	
1	Boring	AL020216- N3	2/2/16	9:40	HM	soil	1					1										X	
	Boring	AL020216- N4	2/2/16	9:45	HM	soil	1					1										X	
	Boring	AL020216- N5	2/2/16	9:50	HM	soil	1					1										X	
2	Boring	AL020216- N1	2/2/16	9:30	HM	soil	3					3							X				

Turnaround Time (Business days)

- [ ] Std. 15 Business Days
- [x] 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)
- [x] NJ Reduced
- [ ] Commercial "C"
- [ ] Other _____
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format _____

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instr Special Instructions

[redacted]

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 [signature] of Accutest	02/02/16 19:00	[signature]	2		
3		3	4		
5		5	Custody Seal # 200 ☑ Intact ☐ Not intact	Preserved where applicable ☐	☑ Cooler Temp. 1.8°C (g)

INITIAL ASESSMENT 2A/ae
LABEL VERIFICATION OB

5.2
5

JC13575: Chain of Custody
Page 1 of 8

CHAIN OF CUSTODY

ACCUTEST LABORATORIES

2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: JC13575

Client / Reporting Information

Company Name: LSRP Consulting
Street Address: 11 Lake Michigan Drive
City State Zip: Little Egg Harbor Twsp. N.J. 08087
Project Contact: Mr Keith Gagnon
E-mail: kgagnon@lsrpconsulting.com
Phone #: (908) 419-7918
Fax #:
Sampler(s) Name(s): Harold Meissner
Phone #:

Project Information

Project Name: Alcoa Building 12
Street: 734 River Road
City State: Edgewater, N.J.
Project #: 150176
Client Purchase Order #:
Project Manager: Tammy Mc

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

TCLP Full less Pest & Herb		B8015 DRO		
RCRA Char		V8015 GRO		
PCB		TCLP Vo		

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

Accutest Sample #	Field ID / Point of Collection	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	FCS	TCLP Full less Pest & Herb	B8015 DRO	RCRA Char	V8015 GRO	PCB	TCLP Vo	Lab to Composite all bottles into one Sample	LAB USE ONLY
	Composite Soil Pile Al020216															X							
	Borings: AL020216-S1 ,S2, S3, S4, S5.																						
	Boring AL020216- S1	2/2/16	10:40	HM	soil	1					1											X	
	Boring AL020216- S2	2/2/16	10:45	HM	soil	1					1											X	
3	Boring AL020216- S3	2/2/16	10:50	HM	soil	1					1											X	
	Boring AL020216- S4	2/2/16	10:55	HM	soil	1					1											X	
	Boring AL020216- S5	2/2/16	11:00	HM	soil	1					1											X	
4	Boring AL020216- S1	2/2/16	10:40	HM	soil	3					3							X					

Turnaround Time (Business days)

- [ ] Std. 15 Business Days
- [x] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3)
- [x] NJ Reduced
- [ ] Commercial "C"
- [ ] Other _____
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format _____

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Insti Special Instructions

[redacted]

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 of Accutest	02/02/16 19:00	1	2		
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		
Relinquished by:	Date Time:	Received By:	Custody Seal # 200	Preserved where applicable	Cooler Temp. 1.9 °C
5		5	[x] Intact [ ] Not intact	[ ]	

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

Page: 3 OF 4.

FED-EX Tracking #
Bottle Order Control #
Accutest Quote #
Accutest Job # JC13575

Client / Reporting Information

Company Name: LSRP Consulting
Street Address: 11 Lake Michigan Drive
City State Zip: Little Egg Harbor Twsp. N.J. 08087
Project Contact: Mr Keith Gagnon
E-mail: kgagnon@lsrpconsulting.com
Phone #: (908) 419-7918
Fax #:
Sampler(s) Name(s): Harold Meissner
Phone #:

Project Information

Project Name: Alcoa Building 12
Street: 734 River Road
City State: Edgewater, N.J.
Project #: 150176
Client Purchase Order #:
Project Manager: Tammy Mc

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

RCRA Char | B8015 DRO | PCB | V8015 GRO

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

Accutest Sample #	Field ID / Point of Collection		Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	FCS	RCRA Char	B8015 DRO	PCB	V8015 GRO	Lab to Composite all bottles into one Sample	LAB USE ONLY
	Composite Soil Pile Al020216																X					
	Borings: AL020216-N6 ,N7, N8, N9, N10.																					
	Boring	AL020216- N6	2/2/16	10:00	HM	soil	1					1									X	
	Boring	AL020216- N7	2/2/16	10:05	HM	soil	1					1									X	
5	Boring	AL020216- N8	2/2/16	10:10	HM	soil	1					1									X	
	Boring	AL020216- N9	2/2/16	10:15	HM	soil	1					1									X	
	Boring	AL020216- N10	2/2/16	10:20	HM	soil	1					1									X	
6	Boring	AL020216- N6	2/2/16	10:00	HM	soil	2					3							X			

Turnaround Time (Business days)

- [ ] Std. 15 Business Days
- [x] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

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- [ ] FULLT1 (Level 3)
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Commercial "B" = Results + QC Summary

Comments / Special Instr Special Instructions

[redacted]

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 KB of Accutest	02/02/16 1700	1	2		
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By:
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 200 [ ] Intact [ ] Not intact	Preserved where applicable [ ]	Cooler Temp. 1-8°C (9)

CHAIN OF CUSTODY

ACCUTEST LABORATORIES

2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

Page: 4 OF 4.

FED-EX Tracking #
Bottle Order Control #
Accutest Quote #
Accutest Job # JC13575

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Company Name: LSRP Consulting
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City State Zip: Little Egg Harbor Twsp. N.J. 08087
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E-mail: kgagnon@lsrpconsulting.com
Phone #: (908) 419-7918
Fax #:
Sampler(s) Name(s): Harold Meissner
Phone #:

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Project Name: Alcoa Building 12
Street: 734 River Road
City State: Edgewater, N.J.
Project #: 150176
Client Purchase Order #:
Project Manager: Tammy Mc

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

RCRA Char | B8015 DRO
PCB | V8015 GRO

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

Lab to Composite all bottles into one Sample

Accutest Sample #	Field ID / Point of Collection		Collection Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	FCS	RCRA Char	B8015 DRO	PCB	V8015 GRO	Lab to Composite all bottles into one Sample	LAB USE ONLY
	Composite Soil Pile AI020216																X					
	Borings: AL020216-S6 ,S7, S8, S9, S10.																					
	Boring AL020216- S6		2/2/16	11:10	HM	soil	1					1									X	
	Boring AL020216- S7		2/2/16	11:15	HM	soil	1					1									X	
7	Boring AL020216- S8		2/2/16	11:20	HM	soil	1					1									X	
	Boring AL020216- S9		2/2/16	11:25	HM	soil	1					1									X	
	Boring AL020216- S10		2/2/16	11:30	HM	soil	1					1									X	
8	Boring AL020216- S6		2/2/16	11:10	HM	soil	2					3						X				

Turnaround Time (Business days)

- [ ] Std. 15 Business Days
- [x] Std. 10 Business Days (by Contract only)
- [ ] 10 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

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- [ ] FULLT1 (Level 3)
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Commercial "B" = Results + QC Summary

Comments / Special Instr Special Instructions

[redacted]

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 KA of Accutest	02/02/16 15:00	1	2		
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By:
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 200 [x] Intact [ ] Not intact	Preserved where applicable [ ]	[x] Cooler Temp. 1.5°C/g

5.2 5

JC13575: Chain of Custody
Page 4 of 8

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JC13575 **Client:** **Project:**

Date / Time Received: 2/2/2016 7:00:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (1.9);

Cooler Temps (Corrected) °C: Cooler 1: (1.9);

Cooler Security	Y	N		Y	N
1. Custody Seals Present:	☑	☐	3. COC Present:	☑	☐
2. Custody Seals Intact:	☑	☐	4. Smpl Dates/Time OK	☑	☐

Cooler Temperature	Y	N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:	IR Gun	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	1	

Quality Control Preservation	Y	N	N/A
1. Trip Blank present / cooler:	☐	☑	☐
2. Trip Blank listed on COC:	☐	☑	☐
3. Samples preserved properly:	☑	☐	
4. VOCs headspace free:	☐	☐	☑

Sample Integrity - Documentation	Y	N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☑	☐

Sample Integrity - Condition	Y	N
1. Sample recvd within HT:	☑	☐
2. All containers accounted for:	☑	☐
3. Condition of sample:	Intact	

Sample Integrity - Instructions	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume recvd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

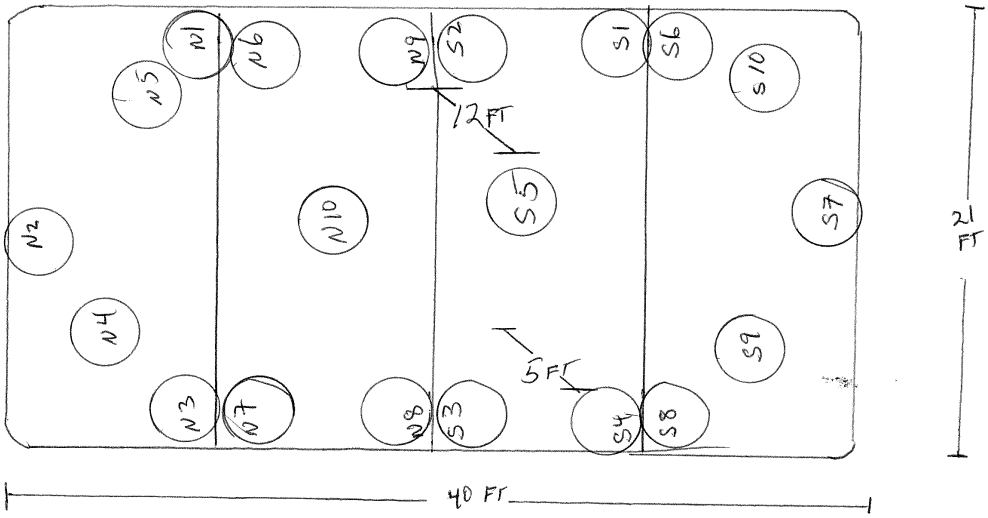
Dayton, New Jersey
www/accutest.com

JC13575

RIVER ROAD

L = 40FT = 13.33yd
W = 21FT = 07.00yd
ha = 8.5FT = 02.83yd
measure as Flat Top Pile
V = (L)(W)(h)
= (13.33)(07.00)(02.83)
= 264yd3
≈ 300yd3

N



CEMETARY

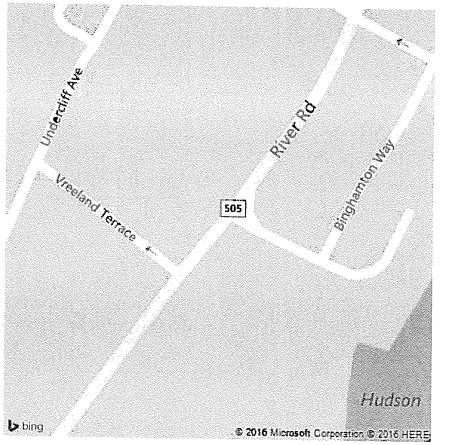
LSRP
ALCOA Edgewater NJ.
Bld 12 Soil Pile
Feb 2, 2016
Not To Scale
HFM

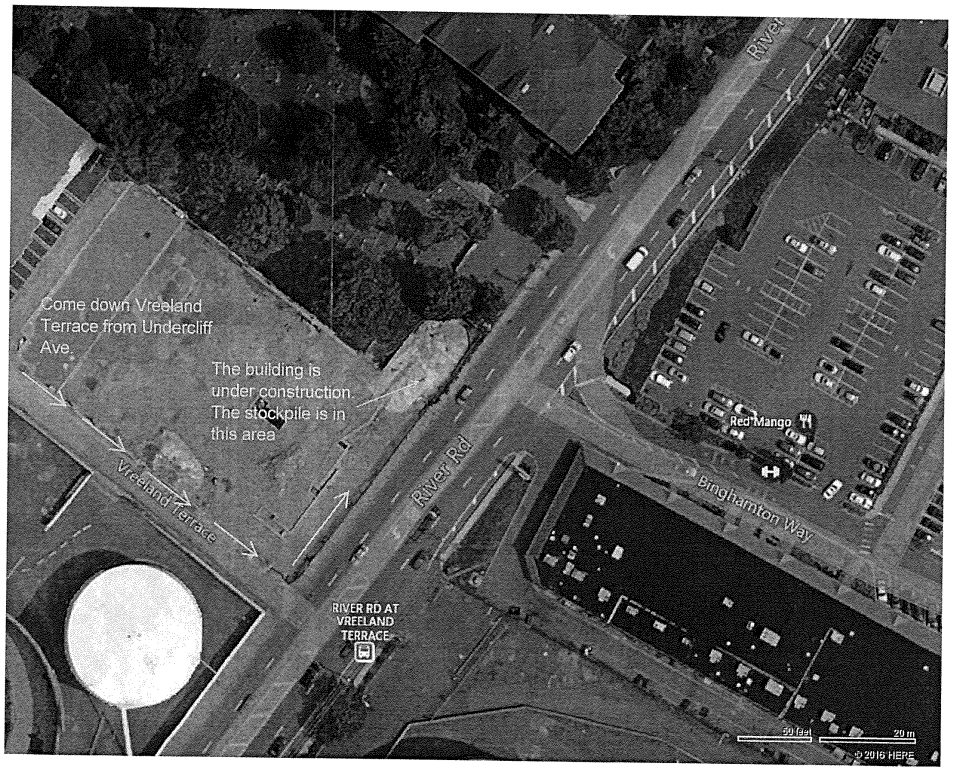
JC13575

bing maps

Notes

Former Alcoa Building 12
Edgewater, NJ





JC13575: Chain of Custody

Page 7 of 8

Harold Meissner J C13575

From: Keith Gagnon, LSRP Consulting <kgagnon@lsrpconsulting.com>
Sent: Monday, February 01, 2016 8:56 AM
To: Harold Meissner
Subject: Alcoa Building 12, Soil Stockpile Sampling
Attachments: Former Alcoa Building 12 stockpile map.pdf

Harold, for the soil stockpile sampling tomorrow (Tuesday) at the former Alcoa Building 12 in Edgewater:

- Map is attached. The site is under construction; bring hard hats
- Collect 4 samples total
- Block 2 Red Two samples for Full TCLP without Herb/Pest, Full RCRA characteristics with TPH GRO and DRO, and PCBs
- Two samples for Full RCRA characteristics with TPH GRO and DRO, and PCBs
- No trips or blanks
- Normal turnaround time
- Waterside Construction will be on-site and will provide an excavator to dig into the pile.
- Site name for the chain is Former Alcoa Building 12. My project # 150176

Please let me know when approximately you'll be there.

Thanks, Keith

Keith Gagnon, LSRP
LSRP Consulting LLC
11 Lake Michigan Drive, Little Egg Harbor Twp, NJ 08087
908-419-7918 • kgagnon@lsrpconsulting.com
www.lsrpconsulting.com

Internal Sample Tracking Chronicle

LSRP Consulting, LLC

Job No: JC13575

Alcoa Building 12, 734 River Road, Edgewater, NJ
Project No: 150176

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC13575-1 Collected: 02-FEB-16 09:50 By: HM Received: 02-FEB-16 By: AS COMPOSITE SOILPILE AI020216 BORINGS: AL020216-N1,N2,N3,N4,N5						
JC13575-1	SM2540 G-97	03-FEB-16 17:00	SP			%SOL
JC13575-1	SW846 7470A	04-FEB-16 13:21	VM	04-FEB-16	VM	EHG
JC13575-1	SW846 6010C	05-FEB-16 01:21	MS	05-FEB-16	YR	EAG,EAS,EBA,ECD,ECR,EPB,ESE
JC13575-1	SW846 8082A	05-FEB-16 09:45	CC	03-FEB-16	FL	P8082PCB11
JC13575-1	SW846 8082A	05-FEB-16 15:42	CC	03-FEB-16	FL	P8082PCB11
JC13575-1	SW846 8270D	06-FEB-16 00:58	JJ	05-FEB-16	RF	AB8270TCLP
JC13575-1	SW846 CHAP7/9012 B	08-FEB-16 13:37	BM	07-FEB-16	IO	CREAC
JC13575-1	SW846 CHAP7/9034	08-FEB-16 16:10	MP	07-FEB-16	IO	SREAC
JC13575-1	SW846 1010A/ASTM D93	03-FEB-16	RI			IGN
JC13575-1	SW846 9045D/CHPT 7	10-FEB-16 13:17	SP			CORR
JC13575-2 Collected: 02-FEB-16 09:30 By: HM Received: 02-FEB-16 By: AS BORING AL020216-N1						
JC13575-2	SM2540 G-97	03-FEB-16 17:00	SP			%SOL
JC13575-2	SW846 8015C	03-FEB-16 18:27	XPL			V8015GRO
JC13575-2	SW846 8015C	04-FEB-16 12:16	TL	04-FEB-16	MA	B8015DRO
JC13575-2	SW846 8260C	04-FEB-16 14:11	HA	03-FEB-16	GD	V8260TCLP
JC13575-3 Collected: 02-FEB-16 11:00 By: HM Received: 02-FEB-16 By: AS COMPOSITE SOILPILE AI020216 BORINGS: AL020216-S1,S2,S3,S4,S5						
JC13575-3	SM2540 G-97	03-FEB-16 17:00	SP			%SOL
JC13575-3	SW846 7470A	04-FEB-16 13:23	VM	04-FEB-16	VM	EHG
JC13575-3	SW846 6010C	05-FEB-16 01:28	MS	05-FEB-16	YR	EAG,EAS,EBA,ECD,ECR,EPB,ESE
JC13575-3	SW846 8082A	05-FEB-16 10:09	CC	03-FEB-16	FL	P8082PCB11
JC13575-3	SW846 8082A	05-FEB-16 16:07	CC	03-FEB-16	FL	P8082PCB11
JC13575-3	SW846 8270D	06-FEB-16 01:25	JJ	05-FEB-16	RF	AB8270TCLP
JC13575-3	SW846 CHAP7/9012 B	08-FEB-16 13:38	BM	07-FEB-16	IO	CREAC
JC13575-3	SW846 CHAP7/9034	08-FEB-16 16:10	MP	07-FEB-16	IO	SREAC
JC13575-3	SW846 1010A/ASTM D93	03-FEB-16	RI			IGN
JC13575-3	SW846 9045D/CHPT 7	10-FEB-16 13:17	SP			CORR
JC13575-4 Collected: 02-FEB-16 10:40 By: HM Received: 02-FEB-16 By: AS BORING AL020216-S1						
JC13575-4	SM2540 G-97	03-FEB-16 17:00	SP			%SOL

Internal Sample Tracking Chronicle

LSRP Consulting, LLC

Job No: JC13575

Alcoa Building 12, 734 River Road, Edgewater, NJ
Project No: 150176

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC13575-4	SW846 8015C	03-FEB-16 18:53	XPL			V8015GRO
JC13575-4	SW846 8015C	04-FEB-16 12:52	TL	04-FEB-16	MA	B8015DRO
JC13575-4	SW846 8260C	09-FEB-16 11:22	HA	03-FEB-16	GD	V8260TCLP
JC13575-5 Collected: 02-FEB-16 10:20 By: HM Received: 02-FEB-16 By: AS COMPOSITE SOILPILE AI020216 BORINGS:AL020216-N6,N7,N8,N9,N10						
JC13575-5	SM2540 G-97	03-FEB-16 17:00	SP			%SOL
JC13575-5	SW846 8082A	05-FEB-16 12:31	CC	03-FEB-16	FL	P8082PCB11
JC13575-5	SW846 8082A	05-FEB-16 16:32	CC	03-FEB-16	FL	P8082PCB11
JC13575-5	SW846 CHAP7/9012 B	08-FEB-16 13:41	BM	07-FEB-16	IO	CREAC
JC13575-5	SW846 CHAP7/9034	08-FEB-16 16:10	MP	07-FEB-16	IO	SREAC
JC13575-5	SW846 1010A/ASTM D93	03-FEB-16	RI			IGN
JC13575-5	SW846 9045D/CHPT 7	10-FEB-16 13:17	SP			CORR
JC13575-6 Collected: 02-FEB-16 10:00 By: HM Received: 02-FEB-16 By: AS BORING AL020216-N6						
JC13575-6	SM2540 G-97	03-FEB-16 17:00	SP			%SOL
JC13575-6	SW846 8015C	03-FEB-16 19:19	XPL			V8015GRO
JC13575-6	SW846 8015C	04-FEB-16 13:27	TL	04-FEB-16	MA	B8015DRO
JC13575-7 Collected: 02-FEB-16 11:30 By: HM Received: 02-FEB-16 By: AS COMPOSITE SOILPILE AI020216 BORINGS:AL020216-S6,S7,S8,S9,S10						
JC13575-7	SM2540 G-97	03-FEB-16 17:00	SP			%SOL
JC13575-7	SW846 8082A	05-FEB-16 12:56	CC	03-FEB-16	FL	P8082PCB11
JC13575-7	SW846 8082A	05-FEB-16 16:56	CC	03-FEB-16	FL	P8082PCB11
JC13575-7	SW846 CHAP7/9012 B	08-FEB-16 13:42	BM	07-FEB-16	IO	CREAC
JC13575-7	SW846 CHAP7/9034	08-FEB-16 16:10	MP	07-FEB-16	IO	SREAC
JC13575-7	SW846 1010A/ASTM D93	03-FEB-16	RI			IGN
JC13575-7	SW846 9045D/CHPT 7	10-FEB-16 13:17	SP			CORR
JC13575-8 Collected: 02-FEB-16 11:10 By: HM Received: 02-FEB-16 By: AS BORING AL020216-S6						
JC13575-8	SM2540 G-97	03-FEB-16 17:00	SP			%SOL
JC13575-8	SW846 8015C	03-FEB-16 19:45	XPL			V8015GRO
JC13575-8	SW846 8015C	04-FEB-16 14:03	TL	04-FEB-16	MA	B8015DRO

SGS Accutest Internal Chain of Custody

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ
Received: 02/02/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC13575-1.1	Secured Storage	Alfredo Crespo	02/03/16 14:25	Retrieve from Storage
JC13575-1.1	Alfredo Crespo	Secured Staging Area	02/03/16 14:25	Return to Storage
JC13575-1.1	Secured Staging Area	Smit Patel	02/03/16 15:37	Retrieve from Storage
JC13575-1.1	Smit Patel	Secured Storage	02/03/16 16:28	Return to Storage
JC13575-1.1	Secured Storage	Edwin Gonzalez	02/03/16 17:37	Retrieve from Storage
JC13575-1.1	Edwin Gonzalez	Secured Staging Area	02/03/16 17:37	Return to Storage
JC13575-1.1	Secured Staging Area	Rebecca Gluckman	02/03/16 18:05	Retrieve from Storage
JC13575-1.1	Rebecca Gluckman	Secured Storage	02/03/16 23:07	Return to Storage
JC13575-1.1.1	Rebecca Gluckman	Organics Prep	02/03/16 18:13	Extract from JC13575-1.1
JC13575-1.1.1	Organics Prep	Fernanda Lois	02/03/16 21:59	Extract from JC13575-1.1
JC13575-1.1.1	Fernanda Lois	Extract Storage	02/03/16 21:59	Return to Storage
JC13575-1.1.1	Extract Storage	Curtis Casseus	02/04/16 10:43	Retrieve from Storage
JC13575-1.1.1	Curtis Casseus	GCEF	02/04/16 10:43	Load on Instrument
JC13575-1.2	Secured Storage	Sahara Feliciano	02/03/16 12:08	Retrieve from Storage
JC13575-1.2	Sahara Feliciano	Secured Staging Area	02/03/16 12:08	Return to Storage
JC13575-1.2	Secured Staging Area	Sean Wasylyk	02/03/16 12:16	Retrieve from Storage
JC13575-1.2	Secured Staging Area	Gage Donahue	02/03/16 16:37	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC13575-1.2	Shirley Grzybowski	Secured Storage	02/04/16 07:02	Return to Storage
Analyst unavailable for custody transfer.				
JC13575-1.2	Secured Storage	Luis Villanueva	02/04/16 13:22	Retrieve from Storage
JC13575-1.2	Luis Villanueva	Secured Staging Area	02/04/16 13:22	Return to Storage
JC13575-1.2	Secured Staging Area	Sean Wasylyk	02/04/16 13:27	Retrieve from Storage
JC13575-1.2	Sean Wasylyk	Secured Storage	02/04/16 13:27	Return to Storage
JC13575-1.2	Secured Storage	Dawan Currie	02/07/16 07:07	Retrieve from Storage
JC13575-1.2	Dawan Currie	Secured Staging Area	02/07/16 07:07	Return to Storage
JC13575-1.2	Secured Staging Area	Ifediora Obi	02/07/16 10:14	Retrieve from Storage
JC13575-1.2	Ifediora Obi	Secured Storage	02/07/16 15:16	Return to Storage
JC13575-1.2	Secured Storage	Alfredo Crespo	02/10/16 09:05	Retrieve from Storage
JC13575-1.2	Alfredo Crespo	Secured Staging Area	02/10/16 09:05	Return to Storage
JC13575-1.2	Secured Staging Area	Smit Patel	02/10/16 09:09	Retrieve from Storage
JC13575-1.2	Smit Patel	Secured Storage	02/10/16 13:03	Return to Storage
JC13575-1.2.1	Sean Wasylyk	TCLP	02/03/16 12:16	Leachate from JC13575-1.2
JC13575-1.2.1	TCLP	George Verveniotis	02/04/16 09:21	Leachate from JC13575-1.2
JC13575-1.2.1	George Verveniotis	Secured Storage	02/04/16 14:02	Return to Storage
JC13575-1.2.1	Secured Storage	Jessica Adametz	02/04/16 14:04	Retrieve from Storage
JC13575-1.2.1	Jessica Adametz	Secured Storage	02/04/16 14:51	Return to Storage
JC13575-1.2.2	Gage Donahue	TCLP	02/03/16 16:38	Leachate from JC13575-1.2
JC13575-1.2.2	TCLP	George Verveniotis	02/04/16 09:21	Leachate from JC13575-1.2
JC13575-1.2.2	George Verveniotis	Secured Storage	02/04/16 14:02	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ
Received: 02/02/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC13575-1.2.3	Sean Wasylyk	TCLP	02/04/16 13:27	Leachate from JC13575-1.2
JC13575-1.2.3	TCLP	Yogesh Rane	02/05/16 08:53	Leachate from JC13575-1.2
JC13575-1.2.3	Yogesh Rane	Secured Storage	02/05/16 10:11	Return to Storage
JC13575-1.2.4	Jessica Adametz	Metals Digestion	02/04/16 14:05	Digestate from JC13575-1.2.1
JC13575-1.2.4	Metals Digestion	Jessica Adametz	02/04/16 14:05	Digestate from JC13575-1.2.1
JC13575-1.2.4	Jessica Adametz	Metals Digestate Storage	02/04/16 14:05	Return to Storage
JC13575-1.2.5	TCLP	Yogesh Rane	02/05/16 08:53	Leachate from JC13575-1.2
JC13575-1.2.5	Yogesh Rane	Secured Storage	02/05/16 10:11	Return to Storage
JC13575-1.2.5	Secured Storage	Joseph Baum	02/05/16 14:56	Retrieve from Storage
JC13575-1.2.5	Joseph Baum	Secured Storage	02/05/16 17:50	Return to Storage
JC13575-1.2.6	Joseph Baum	Organics Prep	02/05/16 14:58	Extract from JC13575-1.2.5
JC13575-1.2.6	Organics Prep	Ryan Fantasia	02/05/16 19:23	Extract from JC13575-1.2.5
JC13575-1.2.6	Ryan Fantasia	Extract Storage	02/05/16 19:23	Return to Storage
JC13575-1.2.6	Extract Storage	Sara Davis	02/05/16 22:44	Retrieve from Storage
JC13575-1.2.6	Sara Davis	GCMS3P	02/05/16 22:44	Load on Instrument
JC13575-1.2.6	GCMS3P	Robert LaPosta	02/08/16 09:19	Unload from Instrument
JC13575-1.2.6	Robert LaPosta	Extract Freezer	02/08/16 09:19	Return to Storage
JC13575-1.3	Secured Storage	Alfredo Crespo	02/03/16 08:48	Retrieve from Storage
JC13575-1.3	Alfredo Crespo	Secured Staging Area	02/03/16 08:48	Return to Storage
JC13575-1.3	Secured Staging Area	Gage Donahue	02/03/16 09:36	Retrieve from Storage
JC13575-1.3	Gage Donahue	Secured Storage	02/03/16 11:44	Return to Storage
JC13575-2.1	Secured Storage	Alfredo Crespo	02/03/16 14:25	Retrieve from Storage
JC13575-2.1	Alfredo Crespo	Secured Staging Area	02/03/16 14:25	Return to Storage
JC13575-2.1	Secured Staging Area	Smit Patel	02/03/16 15:37	Retrieve from Storage
JC13575-2.1	Smit Patel	Secured Storage	02/03/16 16:28	Return to Storage
JC13575-2.1	Secured Storage	Arielle Cocozza	02/04/16 03:39	Retrieve from Storage
JC13575-2.1	Arielle Cocozza	Sauvelson Auguste	02/04/16 05:53	Custody Transfer
JC13575-2.1	Sauvelson Auguste	Secured Storage	02/04/16 09:02	Return to Storage
JC13575-2.1.1	Arielle Cocozza	Organics Prep	02/04/16 03:39	Extract from JC13575-2.1
JC13575-2.1.1	Organics Prep	Meilly Arbelo	02/04/16 10:04	Extract from JC13575-2.1
JC13575-2.1.1	Meilly Arbelo	Extract Storage	02/04/16 10:04	Return to Storage
JC13575-2.1.1	Extract Storage	Thomas Lally	02/04/16 11:06	Retrieve from Storage
JC13575-2.1.1	Thomas Lally	GC2Y	02/04/16 11:06	Load on Instrument
JC13575-2.1.1	GC2Y	Khaliah Douglas	02/04/16 23:03	Unload from Instrument
JC13575-2.1.1	Khaliah Douglas	Extract Freezer	02/04/16 23:03	Return to Storage
JC13575-2.2	Secured Storage	Jay Chao	02/03/16 10:49	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ
Received: 02/02/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC13575-2.2	Jay Chao	Secured Storage	02/03/16 10:59	Return to Storage
JC13575-2.2	Secured Storage	Sahara Feliciano	02/03/16 12:08	Retrieve from Storage
JC13575-2.2	Sahara Feliciano	Secured Staging Area	02/03/16 12:08	Return to Storage
JC13575-2.2	Secured Staging Area	Sean Wasylyk	02/03/16 12:16	Retrieve from Storage
JC13575-2.2	Secured Staging Area	Gage Donahue	02/03/16 16:37	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC13575-2.2	Shirley Grzybowski	Secured Storage	02/04/16 07:02	Return to Storage
Analyst unavailable for custody transfer.				
JC13575-2.2.1	Sean Wasylyk	TCLP	02/03/16 12:16	Leachate from JC13575-2.2
JC13575-2.2.1	TCLP	George Verveniotis	02/04/16 09:21	Leachate from JC13575-2.2
JC13575-2.2.1	George Verveniotis	Secured Storage	02/04/16 14:02	Return to Storage
JC13575-2.2.1	Secured Storage	HeeEun Ahn	02/04/16 14:14	Retrieve from Storage
JC13575-2.2.1	HeeEun Ahn	Secured Storage	02/04/16 15:51	Return to Storage
JC13575-2.2.2	Gage Donahue	TCLP	02/03/16 16:38	Leachate from JC13575-2.2
JC13575-2.2.2	TCLP	George Verveniotis	02/04/16 09:21	Leachate from JC13575-2.2
JC13575-2.2.2	George Verveniotis	Secured Storage	02/04/16 14:02	Return to Storage
JC13575-3.1	Secured Storage	Sahara Feliciano	02/03/16 12:08	Retrieve from Storage
JC13575-3.1	Sahara Feliciano	Secured Staging Area	02/03/16 12:08	Return to Storage
JC13575-3.1	Secured Staging Area	Sean Wasylyk	02/03/16 12:16	Retrieve from Storage
JC13575-3.1	Secured Staging Area	Gage Donahue	02/03/16 16:37	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC13575-3.1	Shirley Grzybowski	Secured Storage	02/04/16 07:02	Return to Storage
Analyst unavailable for custody transfer.				
JC13575-3.1	Secured Storage	Dawan Currie	02/07/16 07:07	Retrieve from Storage
JC13575-3.1	Dawan Currie	Secured Staging Area	02/07/16 07:07	Return to Storage
JC13575-3.1	Secured Staging Area	Ifediora Obi	02/07/16 10:14	Retrieve from Storage
JC13575-3.1	Ifediora Obi	Secured Storage	02/07/16 15:16	Return to Storage
JC13575-3.1	Secured Storage	Alfredo Crespo	02/10/16 09:05	Retrieve from Storage
JC13575-3.1	Alfredo Crespo	Secured Staging Area	02/10/16 09:05	Return to Storage
JC13575-3.1	Secured Staging Area	Smit Patel	02/10/16 09:09	Retrieve from Storage
JC13575-3.1	Smit Patel	Secured Storage	02/10/16 13:03	Return to Storage
JC13575-3.1.1	Sean Wasylyk	TCLP	02/03/16 12:16	Leachate from JC13575-3.1
JC13575-3.1.1	TCLP	George Verveniotis	02/04/16 09:21	Leachate from JC13575-3.1
JC13575-3.1.1	George Verveniotis	Secured Storage	02/04/16 14:02	Return to Storage
JC13575-3.1.1	Secured Storage	Jessica Adametz	02/04/16 14:04	Retrieve from Storage
JC13575-3.1.1	Jessica Adametz	Secured Storage	02/04/16 14:51	Return to Storage
JC13575-3.1.2	Gage Donahue	TCLP	02/03/16 16:38	Leachate from JC13575-3.1
JC13575-3.1.2	TCLP	George Verveniotis	02/04/16 09:21	Leachate from JC13575-3.1
JC13575-3.1.2	George Verveniotis	Secured Storage	02/04/16 14:02	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ
Received: 02/02/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC13575-3.1.3	Jessica Adametz	Metals Digestion	02/04/16 14:05	Digestate from JC13575-3.1.1
JC13575-3.1.3	Metals Digestion	Jessica Adametz	02/04/16 14:05	Digestate from JC13575-3.1.1
JC13575-3.1.3	Jessica Adametz	Metals Digestate Storage	02/04/16 14:05	Return to Storage
JC13575-3.2	Secured Storage	Alfredo Crespo	02/03/16 14:25	Retrieve from Storage
JC13575-3.2	Alfredo Crespo	Secured Staging Area	02/03/16 14:25	Return to Storage
JC13575-3.2	Secured Staging Area	Smit Patel	02/03/16 15:37	Retrieve from Storage
JC13575-3.2	Smit Patel	Secured Storage	02/03/16 16:28	Return to Storage
JC13575-3.2	Secured Storage	Edwin Gonzalez	02/03/16 17:37	Retrieve from Storage
JC13575-3.2	Edwin Gonzalez	Secured Staging Area	02/03/16 17:37	Return to Storage
JC13575-3.2	Secured Staging Area	Rebecca Gluckman	02/03/16 18:05	Retrieve from Storage
JC13575-3.2	Rebecca Gluckman	Secured Storage	02/03/16 23:07	Return to Storage
JC13575-3.2	Secured Storage	Luis Villanueva	02/04/16 13:22	Retrieve from Storage
JC13575-3.2	Luis Villanueva	Secured Staging Area	02/04/16 13:22	Return to Storage
JC13575-3.2	Secured Staging Area	Sean Wasylyk	02/04/16 13:27	Retrieve from Storage
JC13575-3.2	Sean Wasylyk	Secured Storage	02/04/16 13:27	Return to Storage
JC13575-3.2.1	Rebecca Gluckman	Organics Prep	02/03/16 18:13	Extract from JC13575-3.2
JC13575-3.2.1	Organics Prep	Fernanda Lois	02/03/16 21:59	Extract from JC13575-3.2
JC13575-3.2.1	Fernanda Lois	Extract Storage	02/03/16 21:59	Return to Storage
JC13575-3.2.1	Extract Storage	Curtis Casseus	02/04/16 10:43	Retrieve from Storage
JC13575-3.2.1	Curtis Casseus	GCEF	02/04/16 10:43	Load on Instrument
JC13575-3.2.2	Sean Wasylyk	TCLP	02/04/16 13:27	Leachate from JC13575-3.2
JC13575-3.2.2	TCLP	Yogesh Rane	02/05/16 08:53	Leachate from JC13575-3.2
JC13575-3.2.2	Yogesh Rane	Secured Storage	02/05/16 10:11	Return to Storage
JC13575-3.2.3	TCLP	Yogesh Rane	02/05/16 08:53	Leachate from JC13575-3.2
JC13575-3.2.3	Yogesh Rane	Secured Storage	02/05/16 10:11	Return to Storage
JC13575-3.2.3	Secured Storage	Joseph Baum	02/05/16 14:56	Retrieve from Storage
JC13575-3.2.3	Joseph Baum	Secured Storage	02/05/16 17:50	Return to Storage
JC13575-3.2.4	Joseph Baum	Organics Prep	02/05/16 14:58	Extract from JC13575-3.2.3
JC13575-3.2.4	Organics Prep	Ryan Fantasia	02/05/16 19:23	Extract from JC13575-3.2.3
JC13575-3.2.4	Ryan Fantasia	Extract Storage	02/05/16 19:23	Return to Storage
JC13575-3.2.4	Extract Storage	Sara Davis	02/05/16 22:44	Retrieve from Storage
JC13575-3.2.4	Sara Davis	GCMS3P	02/05/16 22:44	Load on Instrument
JC13575-3.2.4	GCMS3P	Robert LaPosta	02/08/16 09:19	Unload from Instrument
JC13575-3.2.4	Robert LaPosta	Extract Freezer	02/08/16 09:19	Return to Storage
JC13575-3.3	Secured Storage	Alfredo Crespo	02/03/16 08:48	Retrieve from Storage
JC13575-3.3	Alfredo Crespo	Secured Staging Area	02/03/16 08:48	Return to Storage
JC13575-3.3	Secured Staging Area	Gage Donahue	02/03/16 09:36	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ
Received: 02/02/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC13575-3.3	Gage Donahue	Secured Storage	02/03/16 11:44	Return to Storage
JC13575-4.1	Secured Storage	Alfredo Crespo	02/03/16 14:25	Retrieve from Storage
JC13575-4.1	Alfredo Crespo	Secured Staging Area	02/03/16 14:25	Return to Storage
JC13575-4.1	Secured Staging Area	Smit Patel	02/03/16 15:37	Retrieve from Storage
JC13575-4.1	Smit Patel	Secured Storage	02/03/16 16:28	Return to Storage
JC13575-4.1	Secured Storage	Arielle Cocozza	02/04/16 03:39	Retrieve from Storage
JC13575-4.1	Arielle Cocozza	Sauvelson Auguste	02/04/16 05:53	Custody Transfer
JC13575-4.1	Sauvelson Auguste	Secured Storage	02/04/16 09:02	Return to Storage
JC13575-4.1.1	Arielle Cocozza	Organics Prep	02/04/16 03:39	Extract from JC13575-4.1
JC13575-4.1.1	Organics Prep	Meilly Arbelo	02/04/16 10:04	Extract from JC13575-4.1
JC13575-4.1.1	Meilly Arbelo	Extract Storage	02/04/16 10:04	Return to Storage
JC13575-4.1.1	Extract Storage	Thomas Lally	02/04/16 11:06	Retrieve from Storage
JC13575-4.1.1	Thomas Lally	GC2Y	02/04/16 11:06	Load on Instrument
JC13575-4.1.1	GC2Y	Khaliah Douglas	02/04/16 23:03	Unload from Instrument
JC13575-4.1.1	Khaliah Douglas	Extract Freezer	02/04/16 23:03	Return to Storage
JC13575-4.2	Secured Storage	Jay Chao	02/03/16 10:49	Retrieve from Storage
JC13575-4.2	Jay Chao	Secured Storage	02/03/16 10:59	Return to Storage
JC13575-4.2	Secured Storage	Sahara Feliciano	02/03/16 12:08	Retrieve from Storage
JC13575-4.2	Sahara Feliciano	Secured Staging Area	02/03/16 12:08	Return to Storage
JC13575-4.2	Secured Staging Area	Sean Wasylyk	02/03/16 12:16	Retrieve from Storage
JC13575-4.2	Secured Staging Area	Gage Donahue	02/03/16 16:37	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC13575-4.2	Shirley Grzybowski	Secured Storage	02/04/16 07:02	Return to Storage
Analyst unavailable for custody transfer.				
JC13575-4.2.1	Sean Wasylyk	TCLP	02/03/16 12:16	Leachate from JC13575-4.2
JC13575-4.2.1	TCLP	George Verveniotis	02/04/16 09:21	Leachate from JC13575-4.2
JC13575-4.2.1	George Verveniotis	Secured Storage	02/04/16 14:02	Return to Storage
JC13575-4.2.1	Secured Storage	HeeEun Ahn	02/04/16 14:14	Retrieve from Storage
JC13575-4.2.1	HeeEun Ahn	Secured Storage	02/04/16 15:51	Return to Storage
JC13575-4.2.2	Gage Donahue	TCLP	02/03/16 16:38	Leachate from JC13575-4.2
JC13575-4.2.2	TCLP	George Verveniotis	02/04/16 09:21	Leachate from JC13575-4.2
JC13575-4.2.2	George Verveniotis	Secured Storage	02/04/16 14:02	Return to Storage
JC13575-4.2.2	Secured Storage	Toan Pham	02/06/16 11:37	Retrieve from Storage
JC13575-4.2.2	Toan Pham	Secured Storage	02/06/16 14:52	Return to Storage
JC13575-4.2.2	Secured Storage	HeeEun Ahn	02/09/16 10:52	Retrieve from Storage
JC13575-4.2.2	HeeEun Ahn	Secured Storage	02/09/16 15:54	Return to Storage
JC13575-5.1	Secured Storage	Alfredo Crespo	02/03/16 14:25	Retrieve from Storage
JC13575-5.1	Alfredo Crespo	Secured Staging Area	02/03/16 14:25	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ
Received: 02/02/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC13575-5.1	Secured Staging Area	Smit Patel	02/03/16 15:37	Retrieve from Storage
JC13575-5.1	Smit Patel	Secured Storage	02/03/16 16:28	Return to Storage
JC13575-5.1	Secured Storage	Dawan Currie	02/07/16 07:07	Retrieve from Storage
JC13575-5.1	Dawan Currie	Secured Staging Area	02/07/16 07:07	Return to Storage
JC13575-5.1	Secured Staging Area	Ifediora Obi	02/07/16 10:14	Retrieve from Storage
JC13575-5.1	Ifediora Obi	Secured Storage	02/07/16 15:16	Return to Storage
JC13575-5.1	Secured Storage	Alfredo Crespo	02/10/16 09:05	Retrieve from Storage
JC13575-5.1	Alfredo Crespo	Secured Staging Area	02/10/16 09:05	Return to Storage
JC13575-5.1	Secured Staging Area	Smit Patel	02/10/16 09:09	Retrieve from Storage
JC13575-5.1	Smit Patel	Secured Storage	02/10/16 13:03	Return to Storage
JC13575-5.2	Secured Storage	Sahara Feliciano	02/03/16 15:05	Retrieve from Storage
JC13575-5.2	Sahara Feliciano	Secured Staging Area	02/03/16 15:06	Return to Storage
JC13575-5.2	Secured Staging Area	Rebecca Gluckman	02/03/16 15:13	Retrieve from Storage
JC13575-5.2	Rebecca Gluckman	Secured Storage	02/03/16 17:13	Return to Storage
JC13575-5.2.1	Rebecca Gluckman	Rebecca Gluckman	02/03/16 16:55	Extract from JC13575-5.2
JC13575-5.2.1	Bruce Scholz		02/04/16 09:16	Depleted
Analyst chain of custody update error.				
JC13575-5.2.2	Rebecca Gluckman	Organics Prep	02/03/16 16:56	Extract from JC13575-5.2
JC13575-5.2.2	Organics Prep	Fernanda Lois	02/03/16 21:59	Extract from JC13575-5.2
JC13575-5.2.2	Fernanda Lois	Extract Storage	02/03/16 21:59	Return to Storage
JC13575-5.2.2	Extract Storage	Curtis Casseus	02/04/16 10:43	Retrieve from Storage
JC13575-5.2.2	Curtis Casseus	GCEF	02/04/16 10:43	Load on Instrument
JC13575-5.3	Secured Storage	Alfredo Crespo	02/03/16 08:48	Retrieve from Storage
JC13575-5.3	Alfredo Crespo	Secured Staging Area	02/03/16 08:48	Return to Storage
JC13575-5.3	Secured Staging Area	Gage Donahue	02/03/16 09:36	Retrieve from Storage
JC13575-5.3	Gage Donahue	Secured Storage	02/03/16 11:44	Return to Storage
JC13575-6.1	Secured Storage	Alfredo Crespo	02/03/16 14:25	Retrieve from Storage
JC13575-6.1	Alfredo Crespo	Secured Staging Area	02/03/16 14:25	Return to Storage
JC13575-6.1	Secured Staging Area	Smit Patel	02/03/16 15:37	Retrieve from Storage
JC13575-6.1	Smit Patel	Secured Storage	02/03/16 16:28	Return to Storage
JC13575-6.1	Secured Storage	Arielle Cocozza	02/04/16 03:39	Retrieve from Storage
JC13575-6.1	Arielle Cocozza	Sauvelson Auguste	02/04/16 05:53	Custody Transfer
JC13575-6.1	Sauvelson Auguste	Secured Storage	02/04/16 09:02	Return to Storage
JC13575-6.1.1	Arielle Cocozza	Organics Prep	02/04/16 03:39	Extract from JC13575-6.1
JC13575-6.1.1	Organics Prep	Meilly Arbelo	02/04/16 10:04	Extract from JC13575-6.1
JC13575-6.1.1	Meilly Arbelo	Extract Storage	02/04/16 10:04	Return to Storage
JC13575-6.1.1	Extract Storage	Thomas Lally	02/04/16 11:06	Retrieve from Storage
JC13575-6.1.1	Thomas Lally	GC2Y	02/04/16 11:06	Load on Instrument

SGS Accutest Internal Chain of Custody

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ
Received: 02/02/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC13575-6.1.1	GC2Y	Khaliah Douglas	02/04/16 23:03	Unload from Instrument
JC13575-6.1.1	Khaliah Douglas	Extract Freezer	02/04/16 23:03	Return to Storage
JC13575-6.2	Secured Storage	Jay Chao	02/03/16 10:49	Retrieve from Storage
JC13575-6.2	Jay Chao	Secured Storage	02/03/16 10:59	Return to Storage
JC13575-7.1	Secured Storage	Alfredo Crespo	02/03/16 14:25	Retrieve from Storage
JC13575-7.1	Alfredo Crespo	Secured Staging Area	02/03/16 14:25	Return to Storage
JC13575-7.1	Secured Staging Area	Smit Patel	02/03/16 15:37	Retrieve from Storage
JC13575-7.1	Smit Patel	Secured Storage	02/03/16 16:28	Return to Storage
JC13575-7.1	Secured Storage	Dawan Currie	02/07/16 07:07	Retrieve from Storage
JC13575-7.1	Dawan Currie	Secured Staging Area	02/07/16 07:07	Return to Storage
JC13575-7.1	Secured Staging Area	Ifediora Obi	02/07/16 10:14	Retrieve from Storage
JC13575-7.1	Ifediora Obi	Secured Storage	02/07/16 15:16	Return to Storage
JC13575-7.1	Secured Storage	Alfredo Crespo	02/10/16 09:05	Retrieve from Storage
JC13575-7.1	Alfredo Crespo	Secured Staging Area	02/10/16 09:05	Return to Storage
JC13575-7.1	Secured Staging Area	Smit Patel	02/10/16 09:09	Retrieve from Storage
JC13575-7.1	Smit Patel	Secured Storage	02/10/16 13:03	Return to Storage
JC13575-7.2	Secured Storage	Sahara Feliciano	02/03/16 15:05	Retrieve from Storage
JC13575-7.2	Sahara Feliciano	Secured Staging Area	02/03/16 15:06	Return to Storage
JC13575-7.2	Secured Staging Area	Rebecca Gluckman	02/03/16 15:13	Retrieve from Storage
JC13575-7.2	Rebecca Gluckman	Secured Storage	02/03/16 17:13	Return to Storage
JC13575-7.2.1	Rebecca Gluckman	Rebecca Gluckman	02/03/16 16:55	Extract from JC13575-7.2
JC13575-7.2.1	Bruce Scholz		02/04/16 09:16	Depleted
Analyst chain of custody update error.				
JC13575-7.2.2	Rebecca Gluckman	Organics Prep	02/03/16 16:56	Extract from JC13575-7.2
JC13575-7.2.2	Organics Prep	Fernanda Lois	02/03/16 21:59	Extract from JC13575-7.2
JC13575-7.2.2	Fernanda Lois	Extract Storage	02/03/16 21:59	Return to Storage
JC13575-7.2.2	Extract Storage	Curtis Casseus	02/04/16 10:43	Retrieve from Storage
JC13575-7.2.2	Curtis Casseus	GCEF	02/04/16 10:43	Load on Instrument
JC13575-7.3	Secured Storage	Alfredo Crespo	02/03/16 08:48	Retrieve from Storage
JC13575-7.3	Alfredo Crespo	Secured Staging Area	02/03/16 08:48	Return to Storage
JC13575-7.3	Secured Staging Area	Gage Donahue	02/03/16 09:36	Retrieve from Storage
JC13575-7.3	Gage Donahue	Secured Storage	02/03/16 11:44	Return to Storage
JC13575-8.1	Secured Storage	Alfredo Crespo	02/03/16 14:25	Retrieve from Storage
JC13575-8.1	Alfredo Crespo	Secured Staging Area	02/03/16 14:25	Return to Storage
JC13575-8.1	Secured Staging Area	Smit Patel	02/03/16 15:37	Retrieve from Storage
JC13575-8.1	Smit Patel	Secured Storage	02/03/16 16:28	Return to Storage
JC13575-8.1	Secured Storage	Arielle Cocozza	02/04/16 03:39	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ
Received: 02/02/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC13575-8.1	Arielle Cocozza	Sauvelson Auguste	02/04/16 05:53	Custody Transfer
JC13575-8.1	Sauvelson Auguste	Secured Storage	02/04/16 09:02	Return to Storage
JC13575-8.1.1	Arielle Cocozza	Organics Prep	02/04/16 03:39	Extract from JC13575-8.1
JC13575-8.1.1	Organics Prep	Meilly Arbelo	02/04/16 10:04	Extract from JC13575-8.1
JC13575-8.1.1	Meilly Arbelo	Extract Storage	02/04/16 10:04	Return to Storage
JC13575-8.1.1	Extract Storage	Thomas Lally	02/04/16 11:06	Retrieve from Storage
JC13575-8.1.1	Thomas Lally	GC2Y	02/04/16 11:06	Load on Instrument
JC13575-8.1.1	GC2Y	Khaliah Douglas	02/04/16 23:03	Unload from Instrument
JC13575-8.1.1	Khaliah Douglas	Extract Freezer	02/04/16 23:03	Return to Storage
JC13575-8.2	Secured Storage	Jay Chao	02/03/16 10:49	Retrieve from Storage
JC13575-8.2	Jay Chao	Secured Storage	02/03/16 10:59	Return to Storage

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V1176-MB	2V29712.D	1	02/04/16	HA	n/a	n/a	V2V1176

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC13575-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.24	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	97%	76-120%
17060-07-0	1,2-Dichloroethane-D4	109%	64-135%
2037-26-5	Toluene-D8	96%	76-117%
460-00-4	4-Bromofluorobenzene	94%	72-122%

Method Blank Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V1180-MB	2V29862.D	1	02/09/16	HA	n/a	n/a	V2V1180

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC13575-4

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.24	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	108%	76-120%
17060-07-0	1,2-Dichloroethane-D4	108%	64-135%
2037-26-5	Toluene-D8	106%	76-117%
460-00-4	4-Bromofluorobenzene	100%	72-122%

Leachate Blank Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP95352-LB7	2V29716.D	5	02/04/16	HA	02/03/16	GP95352	V2V1176

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC13575-2, JC13575-4

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	2.5	1.2	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	28	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	1.1	ug/l	
108-90-7	Chlorobenzene	ND	5.0	0.93	ug/l	
67-66-3	Chloroform	ND	5.0	0.94	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	0.90	ug/l	
75-35-4	1,1-Dichloroethene	ND	5.0	2.6	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	2.0	ug/l	
79-01-6	Trichloroethene	ND	5.0	1.1	ug/l	
75-01-4	Vinyl chloride	ND	5.0	0.74	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	97%	76-120%
17060-07-0	1,2-Dichloroethane-D4	106%	64-135%
2037-26-5	Toluene-D8	98%	76-117%
460-00-4	4-Bromofluorobenzene	95%	72-122%

Blank Spike Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V1176-BS	2V29713.D	1	02/04/16	HA	n/a	n/a	V2V1176

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC13575-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	47.6	95	75-122
78-93-3	2-Butanone (MEK)	50	53.4	107	64-130
56-23-5	Carbon tetrachloride	50	57.5	115	75-148
108-90-7	Chlorobenzene	50	48.2	96	76-124
67-66-3	Chloroform	50	52.6	105	77-124
106-46-7	1,4-Dichlorobenzene	50	45.0	90	71-123
107-06-2	1,2-Dichloroethane	50	57.7	115	66-150
75-35-4	1,1-Dichloroethene	50	56.3	113	61-132
127-18-4	Tetrachloroethene	50	46.5	93	70-136
79-01-6	Trichloroethene	50	49.1	98	79-126
75-01-4	Vinyl chloride	50	48.9	98	56-146

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	76-120%
17060-07-0	1,2-Dichloroethane-D4	108%	64-135%
2037-26-5	Toluene-D8	98%	76-117%
460-00-4	4-Bromofluorobenzene	92%	72-122%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V1180-BS	2V29863.D	1	02/09/16	HA	n/a	n/a	V2V1180

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC13575-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	51.3	103	75-122
78-93-3	2-Butanone (MEK)	50	56.9	114	64-130
56-23-5	Carbon tetrachloride	50	58.5	117	75-148
108-90-7	Chlorobenzene	50	53.7	107	76-124
67-66-3	Chloroform	50	54.3	109	77-124
106-46-7	1,4-Dichlorobenzene	50	50.9	102	71-123
107-06-2	1,2-Dichloroethane	50	56.8	114	66-150
75-35-4	1,1-Dichloroethene	50	53.0	106	61-132
127-18-4	Tetrachloroethene	50	52.8	106	70-136
79-01-6	Trichloroethene	50	53.7	107	79-126
75-01-4	Vinyl chloride	50	48.1	96	56-146

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	76-120%
17060-07-0	1,2-Dichloroethane-D4	108%	64-135%
2037-26-5	Toluene-D8	108%	76-117%
460-00-4	4-Bromofluorobenzene	97%	72-122%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC13575-2MS	2V29718.D	5	02/04/16	HA	n/a	n/a	V2V1176
JC13575-2MSD	2V29719.D	5	02/04/16	HA	n/a	n/a	V2V1176
JC13575-2	2V29717.D	5	02/04/16	HA	02/03/16	GP95352	V2V1176

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC13575-2

CAS No.	Compound	JC13575-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		250	246	98	250	244	98	1	38-139/13
78-93-3	2-Butanone (MEK)	ND		250	300	120	250	279	112	7	58-140/14
56-23-5	Carbon tetrachloride	ND		250	306	122	250	307	123	0	50-161/18
108-90-7	Chlorobenzene	ND		250	244	98	250	245	98	0	65-128/12
67-66-3	Chloroform	ND		250	272	109	250	267	107	2	66-132/14
106-46-7	1,4-Dichlorobenzene	ND		250	232	93	250	227	91	2	63-126/13
107-06-2	1,2-Dichloroethane	ND		250	295	118	250	289	116	2	59-153/15
75-35-4	1,1-Dichloroethene	ND		250	292	117	250	289	116	1	41-144/17
127-18-4	Tetrachloroethene	ND		250	241	96	250	239	96	1	48-145/15
79-01-6	Trichloroethene	ND		250	256	102	250	252	101	2	53-141/15
75-01-4	Vinyl chloride	ND		250	264	106	250	262	105	1	34-151/20

CAS No.	Surrogate Recoveries	MS	MSD	JC13575-2	Limits
1868-53-7	Dibromofluoromethane	98%	97%	95%	76-120%
17060-07-0	1,2-Dichloroethane-D4	108%	106%	106%	64-135%
2037-26-5	Toluene-D8	98%	99%	96%	76-117%
460-00-4	4-Bromofluorobenzene	92%	92%	95%	72-122%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC13575-4MS	2V29866.D	5	02/09/16	HA	n/a	n/a	V2V1180
JC13575-4MSD	2V29867.D	5	02/09/16	HA	n/a	n/a	V2V1180
JC13575-4	2V29865.D	5	02/09/16	HA	02/03/16	GP95352	V2V1180

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC13575-4

CAS No.	Compound	JC13575-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		250	252	101	250	246	98	2	38-139/13
78-93-3	2-Butanone (MEK)	ND		250	287	115	250	271	108	6	58-140/14
56-23-5	Carbon tetrachloride	ND		250	300	120	250	287	115	4	50-161/18
108-90-7	Chlorobenzene	ND		250	262	105	250	259	104	1	65-128/12
67-66-3	Chloroform	ND		250	270	108	250	258	103	5	66-132/14
106-46-7	1,4-Dichlorobenzene	ND		250	248	99	250	247	99	0	63-126/13
107-06-2	1,2-Dichloroethane	ND		250	273	109	250	269	108	1	59-153/15
75-35-4	1,1-Dichloroethene	ND		250	271	108	250	255	102	6	41-144/17
127-18-4	Tetrachloroethene	ND		250	253	101	250	252	101	0	48-145/15
79-01-6	Trichloroethene	ND		250	260	104	250	258	103	1	53-141/15
75-01-4	Vinyl chloride	ND		250	281	112	250	259	104	8	34-151/20

CAS No.	Surrogate Recoveries	MS	MSD	JC13575-4	Limits
1868-53-7	Dibromofluoromethane	109%	107%	108%	76-120%
17060-07-0	1,2-Dichloroethane-D4	108%	106%	107%	64-135%
2037-26-5	Toluene-D8	108%	108%	105%	76-117%
460-00-4	4-Bromofluorobenzene	98%	98%	100%	72-122%

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GP95352-LS8	2V29718A.D	5	02/04/16	HA	02/03/16	GP95352	V2V1176
JC13575-2	2V29717.D	5	02/04/16	HA	02/03/16	GP95352	V2V1176

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC13575-2, JC13575-4

CAS No.	Compound	JC13575-2 ug/l	Q	Spike ug/l	LS ug/l	LS %	Limits
71-43-2	Benzene	ND		250	246	98	38-139
78-93-3	2-Butanone (MEK)	ND		250	300	120	58-140
56-23-5	Carbon tetrachloride	ND		250	306	122	50-161
108-90-7	Chlorobenzene	ND		250	244	98	65-128
67-66-3	Chloroform	ND		250	272	109	66-132
106-46-7	1,4-Dichlorobenzene	ND		250	232	93	63-126
107-06-2	1,2-Dichloroethane	ND		250	295	118	59-153
75-35-4	1,1-Dichloroethene	ND		250	292	117	41-144
127-18-4	Tetrachloroethene	ND		250	241	96	48-145
79-01-6	Trichloroethene	ND		250	256	102	53-141
75-01-4	Vinyl chloride	ND		250	264	106	34-151

CAS No.	Surrogate Recoveries	LS	JC13575-2	Limits
1868-53-7	Dibromofluoromethane	98%	95%	76-120%
17060-07-0	1,2-Dichloroethane-D4	108%	106%	64-135%
2037-26-5	Toluene-D8	98%	96%	76-117%
460-00-4	4-Bromofluorobenzene	92%	95%	72-122%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample: V2V1156-BFB
Lab File ID: 2V29041.D
Instrument ID: GCMS2V
Injection Date: 01/12/16
Injection Time: 17:03

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	10218	16.9		Pass
75	30.0 - 60.0% of mass 95	27981	46.2		Pass
95	Base peak, 100% relative abundance	60605	100.0		Pass
96	5.0 - 9.0% of mass 95	4293	7.08		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	52328	86.3		Pass
175	5.0 - 9.0% of mass 174	4064	6.71	(7.77) [a]	Pass
176	95.0 - 101.0% of mass 174	51475	84.9	(98.4) [a]	Pass
177	5.0 - 9.0% of mass 176	3329	5.49	(6.47) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2V1156-IC1156	2V29042.D	01/12/16	17:38	00:35	Initial cal 0.2
V2V1156-IC1156	2V29043.D	01/12/16	18:05	01:02	Initial cal 0.5
V2V1156-IC1156	2V29044.D	01/12/16	18:32	01:29	Initial cal 1
V2V1156-IC1156	2V29045.D	01/12/16	18:59	01:56	Initial cal 2
V2V1156-IC1156	2V29046.D	01/12/16	19:25	02:22	Initial cal 5
V2V1156-IC1156	2V29047.D	01/12/16	19:52	02:49	Initial cal 10
V2V1156-IC1156	2V29048.D	01/12/16	20:19	03:16	Initial cal 20
V2V1156-ICC1156	2V29049.D	01/12/16	20:45	03:42	Initial cal 50
V2V1156-IC1156	2V29050.D	01/12/16	21:12	04:09	Initial cal 100
V2V1156-IC1156	2V29051.D	01/12/16	21:39	04:36	Initial cal 200
V2V1156-ICV1156	2V29054.D	01/12/16	22:59	05:56	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample: V2V1176-BFB
Lab File ID: 2V29709.D
Instrument ID: GCMS2V
Injection Date: 02/04/16
Injection Time: 08:02

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	11784	18.4		Pass
75	30.0 - 60.0% of mass 95	31453	49.0		Pass
95	Base peak, 100% relative abundance	64133	100.0		Pass
96	5.0 - 9.0% of mass 95	4170	6.50		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	51731	80.7		Pass
175	5.0 - 9.0% of mass 174	4239	6.61	(8.19) [a]	Pass
176	95.0 - 101.0% of mass 174	49893	77.8	(96.4) [a]	Pass
177	5.0 - 9.0% of mass 176	3591	5.60	(7.20) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2V1176-CC1156	2V29710.D	02/04/16	08:40	00:38	Continuing cal 50
V2V1176-MB	2V29712.D	02/04/16	09:45	01:43	Method Blank
V2V1176-BS	2V29713.D	02/04/16	10:24	02:22	Blank Spike
GP95358-LB9	2V29715.D	02/04/16	13:16	05:14	Leachate Blank
GP95352-LB7	2V29716.D	02/04/16	13:43	05:41	Leachate Blank
JC13575-2	2V29717.D	02/04/16	14:11	06:09	BORING AL020216-N1
JC13575-2MS	2V29718.D	02/04/16	14:48	06:46	Matrix Spike
GP95352-LS8	2V29718A.D	02/04/16	14:48	06:46	Leachate Spike
JC13575-2MSD	2V29719.D	02/04/16	15:15	07:13	Matrix Spike Duplicate
ZZZZZZ	2V29721.D	02/04/16	16:09	08:07	(unrelated sample)
ZZZZZZ	2V29722.D	02/04/16	16:36	08:34	(unrelated sample)
ZZZZZZ	2V29724.D	02/04/16	17:30	09:28	(unrelated sample)
ZZZZZZ	2V29725.D	02/04/16	17:57	09:55	(unrelated sample)
GP95358-LS11	2V29727.D	02/04/16	18:51	10:49	Leachate Spike

Instrument Performance Check (BFB)

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample: V2V1180-BFB
Lab File ID: 2V29859.D
Instrument ID: GCMS2V
Injection Date: 02/09/16
Injection Time: 08:05

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	9200	15.6		Pass
75	30.0 - 60.0% of mass 95	26651	45.3		Pass
95	Base peak, 100% relative abundance	58805	100.0		Pass
96	5.0 - 9.0% of mass 95	3989	6.78		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	49192	83.7		Pass
175	5.0 - 9.0% of mass 174	3928	6.68	(7.99) [a]	Pass
176	95.0 - 101.0% of mass 174	46981	79.9	(95.5) [a]	Pass
177	5.0 - 9.0% of mass 176	3393	5.77	(7.22) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2V1180-CC1156	2V29860.D	02/09/16	08:44	00:39	Continuing cal 20
V2V1180-MB	2V29862.D	02/09/16	09:49	01:44	Method Blank
V2V1180-BS	2V29863.D	02/09/16	10:17	02:12	Blank Spike
JC13575-4	2V29865.D	02/09/16	11:22	03:17	BORING AL020216-S1
JC13575-4MS	2V29866.D	02/09/16	12:00	03:55	Matrix Spike
JC13575-4MSD	2V29867.D	02/09/16	12:28	04:23	Matrix Spike Duplicate
GP95429-LB18	2V29869.D	02/09/16	13:35	05:30	Leachate Blank

Volatile Internal Standard Area Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Check Std:	V2V1176-CC1156	**Injection Date:**	02/04/16
Lab File ID:	2V29710.D	**Injection Time:**	08:40
Instrument ID:	GCMS2V	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	104104	8.05	216474	10.49	277276	11.44	219956	14.46	105531	16.56
Upper Limit [a]	208208	8.55	432948	10.99	554552	11.94	439912	14.96	211062	17.06
Lower Limit [b]	52052	7.55	108237	9.99	138638	10.94	109978	13.96	52766	16.06

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2V1176-MB	110597	8.06	227816	10.49	289926	11.44	231416	14.46	102933	16.56
V2V1176-BS	100881	8.04	217843	10.49	273940	11.44	221586	14.46	106248	16.56
GP95358-LB9	106968	8.05	215556	10.49	268824	11.44	217105	14.46	100767	16.56
GP95352-LB7	106227	8.05	220791	10.49	273601	11.44	221270	14.46	100829	16.56
JC13575-2	104039	8.04	228034	10.49	282985	11.44	227217	14.46	102171	16.56
JC13575-2MS	106124	8.05	209449	10.49	262620	11.44	213848	14.46	102241	16.56
GP95352-LS8	106124	8.05	209449	10.49	262620	11.44	213848	14.46	102241	16.56
JC13575-2MSD	108091	8.07	222458	10.49	275547	11.44	224701	14.46	108001	16.56
ZZZZZZ	102315	8.04	215468	10.49	268676	11.44	216819	14.46	100479	16.56
ZZZZZZ	128373	8.06	222903	10.49	273906	11.44	225814	14.46	107098	16.56
ZZZZZZ	122708	8.05	222720	10.49	277304	11.44	224288	14.46	101351	16.56
ZZZZZZ	109673	8.05	211767	10.49	263647	11.44	216955	14.46	98839	16.56
GP95358-LS11	130014	8.07	217467	10.50	272730	11.44	223538	14.46	109267	16.56

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Check Std:	V2V1180-CC1156	**Injection Date:**	02/09/16
Lab File ID:	2V29860.D	**Injection Time:**	08:44
Instrument ID:	GCMS2V	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	97116	8.04	200600	10.49	244086	11.44	195073	14.46	92373	16.56
Upper Limit [a]	194232	8.54	401200	10.99	488172	11.94	390146	14.96	184746	17.06
Lower Limit [b]	48558	7.54	100300	9.99	122043	10.94	97537	13.96	46187	16.06

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2V1180-MB	102441	8.05	208883	10.49	255243	11.44	201828	14.46	92093	16.56
V2V1180-BS	104604	8.05	212113	10.49	264767	11.44	213505	14.46	100526	16.56
JC13575-4	93957	8.06	209316	10.49	258611	11.44	204311	14.46	92716	16.56
JC13575-4MS	100257	8.05	197509	10.49	244391	11.44	197358	14.46	94172	16.56
JC13575-4MSD	100407	8.07	214949	10.49	264605	11.44	215939	14.46	102684	16.56
GP95429-LB18	98831	8.06	197517	10.50	242227	11.44	190816	14.46	88567	16.56

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Method: SW846 8260C **Matrix:** LEACHATE

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC13575-2	2V29717.D	95	106	96	95
JC13575-4	2V29865.D	108	107	105	100
GP95352-LB7	2V29716.D	97	106	98	95
GP95352-LS8	2V29718A.D	98	108	98	92
JC13575-2MS	2V29718.D	98	108	98	92
JC13575-2MSD	2V29719.D	97	106	99	92
JC13575-4MS	2V29866.D	109	108	108	98
JC13575-4MSD	2V29867.D	107	106	108	98
V2V1176-BS	2V29713.D	97	108	98	92
V2V1176-MB	2V29712.D	97	109	96	94
V2V1180-BS	2V29863.D	106	108	108	97
V2V1180-MB	2V29862.D	108	108	106	100

Surrogate Compounds		Recovery Limits
S1 =	Dibromofluoromethane	76-120%
S2 =	1,2-Dichloroethane-D4	64-135%
S3 =	Toluene-D8	76-117%
S4 =	4-Bromofluorobenzene	72-122%

Initial Calibration Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ
Sample: V2V1156-ICC1156
Lab FileID: 2V29049.D


```
                         Response Factor Report  MS2V

Method       : C:\MSDCHEM\1\METHODS\M2V1156.M (RTE Integrator)
Title        : Method 8260
Last Update  : Wed Jan 13 09:28:14 2016
Response via : Initial Calibration

Calibration Files
10  =2v29047.D   0.5 =2v29043.D   5   =2v29046.D   50  =2v29049.D
100 =2v29050.D   1   =2v29044.D   200 =2v29051.D   20  =2v29048.D
2   =2v29045.D   0.2 =2v29042.D       =                =

Compound
        10    0.5   5     50    100   1     200   20    2     0.2    Avg   %RSD
-------------------------------------------------------------------------------

1) I   Tert Butyl Alcohol-d9 ----------------ISTD---------------------
2)  ethanol
                                                                      0.000#  -1.00
3)  1,4-dioxane
     0.116       0.107 0.117 0.112 0.115 0.109 0.122 0.115        0.114    4.15
4)  tertiary butyl alcohol
     1.678       1.548 1.648 1.560 2.136 1.478 1.593 1.667        1.664   12.18

5) I   pentafluorobenzene    ----------------ISTD---------------------
6)  chlorodifluoromethane
     0.714 0.844 0.716 0.870 0.826 0.939 0.802 0.783 0.771        0.807    8.99
7)  dichlorodifluoromethane
     0.916       0.879 1.003 1.020       0.965 0.966 0.765        0.931    9.41
8)  chloromethane
     0.992       0.924 1.069 1.113 1.280 1.103 1.030 0.930        1.055   10.99
9)  vinyl chloride
     0.943 0.821 0.879 1.039 1.072 0.828 1.051 1.006 0.907 0.925  0.947    9.67
10)  bromomethane
     0.598       0.602 0.635 0.645 0.734 0.636 0.601 0.651        0.638    6.92
11)  chloroethane
     0.431 0.426 0.412 0.456 0.467 0.407 0.464 0.447 0.418        0.436    5.21
12)  trichlorofluoromethane
     1.128       1.077 1.220 1.224 0.893 1.179 1.191 1.024        1.117   10.27
13)  vinyl bromide
                                                                      0.000#  -1.00
14)  ethyl ether
     0.309       0.306 0.332 0.331 0.256 0.329 0.320 0.313        0.312    7.94
15)  pentane
                                                                      0.000#  -1.00
16)  2-chloropropane
     1.136       1.071 1.194 1.170 1.172 1.152 1.164 1.077        1.142    3.96
17)  acrolein
     0.112       0.108 0.129 0.123 0.133 0.142 0.120 0.137        0.126    9.51
18)  1,1-dichloroethene
     1.014 0.871 0.946 1.098 1.061 0.785 1.053 1.046 0.868        0.971   11.17
19)  acetone
     0.163       0.181 0.152 0.149       0.145 0.155              0.158    8.24
20)  allyl chloride
     0.375 0.268 0.364 0.387 0.379 0.287 0.373 0.374 0.359        0.352   12.24
21)  acetonitrile
     0.047       0.045 0.047 0.045       0.045 0.047 0.048        0.046    2.68
22)  iodomethane
     1.205 1.044 1.162 1.313 1.287 0.967 1.289 1.254 1.126 1.252  1.190    9.65
23)  iso-butyl alcohol
```

```
      0.020       0.022 0.020 0.018 0.026 0.018 0.021 0.024        0.021   12.22
24)  carbon disulfide
      2.366 2.152 2.240 2.557 2.485 1.828 2.481 2.449 2.181 2.456  2.320    9.56
25)  methylene chloride
      0.703 0.613 0.678 0.746 0.737 0.633 0.731 0.716 0.691 0.844  0.709    9.07
26)  1-chloropropane
      1.263       1.394 1.173 1.139       1.111 1.195              1.213    8.48
27)  methyl acetate
      0.080       0.076 0.092 0.091       0.091 0.084 0.076        0.084    8.35
28)  methyl tert butyl ether
      1.753 1.530 1.723 1.939 1.911 1.485 1.910 1.875 1.821        1.772    9.43
29)  trans-1,2-dichloroethene
      0.673 0.830 0.655 0.702 0.693 0.720 0.688 0.685 0.654        0.700    7.58
30)  di-isopropyl ether
      1.962 2.035 1.864 2.221 2.172 2.609 2.186 2.075 1.937 2.082  2.114    9.86
31)  ethyl tert-butyl ether
      1.906 1.844 1.756 2.153 2.117 2.443 2.160 1.993 1.886 1.837  2.009   10.37
32)  2-butanone
      0.064       0.058 0.068 0.067       0.069 0.063              0.065    6.03
33)  1,1-dichloroethane
      1.196 1.081 1.142 1.282 1.265 0.988 1.254 1.234 1.142 1.187  1.177    7.80
34)  chloroprene
      0.806 0.730 0.770 0.955 0.932 1.010 0.943 0.874 0.812 0.735  0.857   11.65
35)  acrylonitrile
      0.201 0.150 0.195 0.221 0.220 0.162 0.220 0.211 0.201 0.189  0.197   12.41
36)  vinyl acetate
      0.085       0.076 0.107 0.107       0.109 0.096              0.097   14.17
37)  ethyl acetate
      0.084       0.079 0.083 0.081       0.082 0.077 0.099        0.084    8.72
38)  2,2-dichloropropane
      1.060 1.159 1.044 1.121 1.074 0.937 1.062 1.070 1.025        1.061    5.80
39)  cis-1,2-dichloroethene
      0.736 0.896 0.697 0.777 0.773 0.635 0.769 0.752 0.759        0.755    9.27
40)  propionitrile
      0.077 0.058 0.073 0.082 0.079 0.066 0.081 0.078 0.073        0.074   10.54
41)  methyl acrylate
      0.571       0.548 0.635 0.630 0.529 0.643 0.602 0.584        0.593    7.10
42)  bromochloromethane
      0.343 0.312 0.336 0.377 0.375 0.264 0.375 0.360 0.331        0.342   10.82
43)  tetrahydrofuran
      0.198       0.203 0.202 0.199 0.221 0.203 0.193 0.206        0.203    4.12
44)  chloroform
      1.178 1.111 1.123 1.267 1.258 0.985 1.256 1.223 1.137 1.253  1.179    7.72
45)  dibromofluoromethane (s)
      0.483 0.478 0.484 0.481 0.484 0.484 0.486 0.488 0.483 0.477  0.483    0.70
46)  1,2-dichloroethane-d4 (s)
      0.480 0.475 0.486 0.490 0.490 0.482 0.500 0.489 0.487 0.455  0.483    2.48
47)  freon 113
      0.390       0.395 0.494 0.465 0.433 0.459 0.445 0.395        0.434    8.85
48)  methacrylonitrile
      0.319       0.310 0.354 0.352 0.341 0.364 0.324 0.345        0.338    5.56
49)  1,1,1-trichloroethane
      1.057 0.993 1.001 1.157 1.117 0.868 1.126 1.098 0.941 1.031  1.039    8.72
50)  tert-amyl methyl ether
      1.770 1.823 1.705 2.027 1.992 2.309 2.028 1.893 1.686        1.915   10.32

51) I   1,4-difluorobenzene   ----------------ISTD---------------------
52)  epichlorohydrin
      0.034       0.034 0.040 0.038 0.049 0.040 0.037 0.035        0.038   12.45
53)  n-butyl alcohol
```

Initial Calibration Summary

Job Number: JC13575 **Sample:** V2V1156-ICC1156
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2V29049.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

```
      0.012 0.009 0.012 0.012 0.012 0.015 0.012 0.013 0.013        0.012   13.32
54)  cyclohexane
      0.740 0.621 0.691 0.797 0.786 0.492 0.789 0.761 0.614        0.699   14.94
55)  carbon tetrachloride
      0.818 0.734 0.752 0.868 0.848 0.588 0.844 0.834 0.700 0.723  0.771   11.39
56)  1,1-dichloropropene
      0.700 0.693 0.650 0.731 0.728 0.592 0.729 0.710 0.645 0.785  0.696    7.89
57)  hexane
      0.442 0.369 0.435 0.525 0.511 0.491 0.498 0.481 0.451        0.467   10.33
58)  benzene
      1.946 2.006 1.844 2.063 2.054 1.842 2.044 1.996 1.869 2.328  1.999    7.20
59)  iso-octane
      1.268 1.084 1.208 1.551 1.534 1.371 1.541 1.386 1.274        1.357   12.10
60)  heptane
      0.245 0.235 0.233 0.294 0.295 0.286 0.289 0.273 0.250        0.267    9.64
61)  isopropyl acetate
      0.952 0.943 0.942 1.095 1.075 1.236 1.115 1.012 1.016        1.043    9.36
62)  1,2-dichloroethane
      0.664 0.554 0.613 0.701 0.697 0.519 0.689 0.681 0.634 0.608  0.636    9.86
63)  trichloroethene
      0.512 0.426 0.471 0.537 0.543 0.435 0.551 0.522 0.472 0.548  0.502    9.42
64)  ethyl acrylate
                                                                   0.000#  -1.00
65)  2-nitropropane
      0.142       0.139 0.154 0.154 0.156 0.156 0.146 0.155        0.150    4.57
66)  2-chloroethyl vinyl ether
      0.220       0.197 0.261 0.264 0.268 0.274 0.233 0.200        0.240   12.99
67)  methyl methacrylate
      0.094       0.089 0.108 0.108       0.110 0.099 0.084        0.099   10.34
68)  1,2-dichloropropane
      0.510 0.424 0.479 0.533 0.536 0.425 0.537 0.523 0.498        0.496    9.03
69)  methylcyclohexane
      0.651 0.494 0.612 0.789 0.774 0.717 0.791 0.711 0.660 0.599  0.680   14.09
70)  dibromomethane
      0.310 0.260 0.294 0.340 0.341 0.269 0.343 0.320 0.305        0.309    9.87
71)  bromodichloromethane
      0.683 0.636 0.654 0.733 0.738 0.597 0.747 0.699 0.648 0.770  0.690    8.17
72)  cis-1,3-dichloropropene
      0.752 0.730 0.719 0.824 0.825 0.719 0.835 0.783 0.728 0.997  0.791   10.86
73)  toluene-d8 (s)
      1.133 1.144 1.121 1.141 1.156 1.136 1.155 1.133 1.130 1.133  1.138    0.96
74)  4-methyl-2-pentanone
      0.164       0.158 0.175 0.175 0.172 0.177 0.166 0.170        0.170    3.86
75)  toluene
      1.041 0.923 0.980 1.126 1.141 0.888 1.148 1.069 0.971 1.070  1.036    8.88
76)  3-methyl-1-butanol
      0.011       0.010 0.011 0.011 0.012 0.011 0.012 0.011        0.011    5.77
77)  trans-1,3-dichloropropene
      0.670 0.609 0.638 0.731 0.744 0.611 0.743 0.685 0.621 0.718  0.677    8.12
78)  ethyl methacrylate
      0.484       0.455 0.542 0.554 0.457 0.558 0.498 0.443        0.499    9.41
79)  1,1,2-trichloroethane
      0.339 0.293 0.319 0.358 0.366 0.301 0.365 0.339 0.349        0.336    7.99
80)  2-hexanone
      0.132       0.147 0.145 0.147 0.125 0.148 0.135 0.126        0.138    7.11

81) I   chlorobenzene-d5      ----------------ISTD---------------------
82)  tetrachloroethene
      0.646 0.538 0.594 0.673 0.669 0.520 0.651 0.640 0.627 0.649  0.621    8.58
83)  1,3-dichloropropane
```

Initial Calibration Summary

Job Number: JC13575 **Sample:** V2V1156-ICC1156
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2V29049.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

```
      0.794 0.711 0.746 0.855 0.849 0.710 0.825 0.810 0.807 0.733  0.784    6.99
 84)  butyl acetate
      0.298       0.288 0.335 0.331 0.314 0.330 0.319 0.268        0.311    7.70
 85)  dibromochloromethane
      0.661 0.521 0.638 0.729 0.727 0.609 0.722 0.674 0.647 0.582  0.651   10.38
 86)  1,2-dibromoethane
      0.524 0.496 0.511 0.564 0.562 0.471 0.556 0.531 0.502 0.509  0.523    5.91
 87)  n-butyl ether
      2.128 1.908 2.032 2.379 2.399 1.913 2.376 2.224 1.916 2.359  2.163    9.70
 88)  chlorobenzene
      1.446 1.293 1.412 1.564 1.569 1.287 1.544 1.479 1.337 1.552  1.448    7.73
 89)  1,1,1,2-tetrachloroethane
      0.644 0.597 0.608 0.677 0.676 0.589 0.664 0.633 0.595 0.607  0.629    5.47
 90)  ethylbenzene
      2.466 2.273 2.366 2.669 2.659 2.075 2.616 2.527 2.250 2.936  2.484   10.13
 91)  m,p-xylene
      0.908 0.775 0.869 0.993 0.992 0.752 0.968 0.939 0.817 0.848  0.886    9.90
 92)  o-xylene
      0.888 0.781 0.862 0.990 0.995 0.797 0.982 0.931 0.796 0.792  0.881   10.01
 93)  styrene
      1.442 1.257 1.345 1.636 1.645 1.221 1.600 1.487 1.280 1.425  1.434   11.02
 94)  butyl acrylate
                                                                   0.000#  -1.00
 95)  bromoform
      0.428 0.356 0.438 0.479 0.479 0.445 0.477 0.444 0.431        0.442    8.61

 96) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
 97)  isopropylbenzene
      5.220 4.674 5.062 5.605 5.610 4.401 5.601 5.437 4.770 5.434  5.181    8.43
 98)  4-bromofluorobenzene (s)
      1.116 1.160 1.153 1.095 1.097 1.141 1.082 1.136 1.145 1.166  1.129    2.63
 99)  cis-1,4-dichloro-2-butene
                                                                   0.000#  -1.00
100)  bromobenzene
      1.389 1.354 1.424 1.445 1.450 1.432 1.427 1.408 1.314 1.365  1.401    3.17
101)  cyclohexanone *This compound does not meet initial calibration criteria.
      0.102       0.104 0.074 0.072             0.084              0.087   17.57
102)  1,1,2,2-tetrachloroethane
      1.532 1.447 1.583 1.538 1.527 1.793 1.532 1.503 1.569 1.508  1.553    5.93
103)  trans-1,4-dichloro-2-butene
      0.333       0.321 0.355 0.362 0.296 0.361 0.329 0.298        0.332    7.93
104)  1,2,3-trichloropropane
      0.346       0.360 0.365 0.360 0.385 0.359 0.355 0.348        0.360    3.29
105)  n-propylbenzene
      6.098 5.819 5.977 6.374 6.400 5.410 6.399 6.168 5.531 7.221  6.140    8.40
106)  2-chlorotoluene
      1.326 1.314 1.280 1.358 1.361 1.300 1.340 1.318 1.238        1.315    2.96
107)  4-chlorotoluene
      3.688 3.814 3.691 3.902 3.890 3.713 3.861 3.742 3.670 4.918  3.889    9.56
108)  1,3,5-trimethylbenzene
      4.319 3.983 4.036 4.513 4.610 3.835 4.616 4.365 3.823 4.698  4.280    7.84
109)  tert-butylbenzene
      3.431 3.560 3.295 3.706 3.799 3.251 3.835 3.511 3.191 4.327  3.591    9.53
110)  pentachloroethane
      0.914 0.771 0.936 0.989 1.009 0.955 1.009 0.940 0.813        0.926    9.00
111)  1,2,4-trimethylbenzene
      4.208 3.648 4.029 4.513 4.547 3.739 4.551 4.318 3.824 4.645  4.202    8.83
112)  sec-butylbenzene
      5.293 4.816 5.119 5.760 5.852 4.489 5.816 5.438 4.565 6.004  5.315   10.42
113)  1,3-dichlorobenzene
```

Initial Calibration Summary

Job Number: JC13575 **Sample:** V2V1156-ICC1156
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2V29049.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

```
       2.473 2.475 2.463 2.657 2.654 2.263 2.640 2.546 2.413 2.615  2.520    5.04
114)  p-isopropyltoluene
       4.247 4.313 4.134 4.667 4.722 3.759 4.734 4.355 3.788 5.372  4.409   11.01
115)  1,4-dichlorobenzene
       2.532 2.574 2.410 2.601 2.620 2.558 2.618 2.490 2.382 2.843  2.563    5.02
116)  1,2-dichlorobenzene
       2.433 2.262 2.445 2.564 2.578 2.443 2.569 2.447 2.336 2.600  2.468    4.51
117)  n-butylbenzene
       1.992 1.637 1.918 2.345 2.375 1.516 2.442 2.106 1.699 1.796  1.983   16.55
118)  1,2-dibromo-3-chloropropane
       0.281       0.278 0.288 0.289       0.290 0.274 0.363        0.295   10.38
119)  1,3,5-trichlorobenzene
       1.762 1.606 1.718 1.971 2.010 1.676 2.049 1.842 1.696 1.665  1.800    8.84
120)  1,2,4-trichlorobenzene
       1.341       1.243 1.664 1.726 1.266 1.800 1.441 1.201        1.460   16.23
121)  hexachlorobutadiene
       0.726 0.661 0.696 0.807 0.810 0.614 0.835 0.760 0.651        0.729   10.81
122)  naphthalene
       2.422       2.274 3.230 3.421       3.682 2.699              2.955   19.35
123)  1,2,3-trichlorobenzene
       1.234       1.216 1.570 1.610 1.208 1.677 1.362 1.119        1.375   15.65
124)  hexachloroethane
       0.922       0.900 1.087 1.126 0.817 1.158 1.033 1.050        1.012   11.87
125)  Benzyl chloride
       2.132 2.613 2.137 2.507 2.542 3.276 2.596 2.287 2.368        2.495   13.85
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M2V1156.M         Wed Jan 13 12:59:11 2016   RPT1
```

Initial Calibration Verification

Job Number: JC13575 **Sample:** V2V1156-ICV1156
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2V29054.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2v29054.D Vial: 15
Acq On : 12 Jan 2016 10:59 pm Operator: HeeEunA
Sample : icv1156-50 Inst : MS2V
Misc : MS97115,V2V1156,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V1156.M (RTE Integrator)
Title : Method 8260
Last Update : Wed Jan 13 09:28:14 2016
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	TrueValue	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	500.00	1.000	1.000	0.0	100	0.02	8.07
2		ethanol		----------NA----------					
3		1,4-dioxane	1250.00	0.114	0.095	16.7	80	0.00	12.17
4	M	tertiary butyl alcohol	250.00	1.664	1.585	4.7	96	0.00	8.19
5	I	pentafluorobenzene	50.00	1.000	1.000	0.0	101	0.00	10.50
6		chlorodifluoromethane	50.00	0.807	0.773	4.2	89	0.00	4.13
7		dichlorodifluoromethane	50.00	0.931	0.882	5.3	89	0.00	4.11
8		chloromethane	50.00	1.055	1.048	0.7	99	0.00	4.49
9		vinyl chloride	50.00	0.947	1.061	-12.0	103	0.00	4.78
10		bromomethane	50.00	0.638	0.671	-5.2	106	0.00	5.52
11		chloroethane	50.00	0.436	0.515	-18.1	114	0.00	5.72
12		trichlorofluoromethane	50.00	1.117	1.212	-8.5	100	0.00	6.25
13		vinyl bromide		----------NA----------					
14		ethyl ether	50.00	0.312	0.332	-6.4	101	0.00	6.73
15		pentane		----------NA----------					
16		2-chloropropane	50.00	1.142	1.247	-9.2	105	0.00	6.96
17		acrolein	500.00	0.126	0.112	11.1	87	0.00	7.06
18		1,1-dichloroethene	50.00	0.971	1.080	-11.2	99	0.00	7.21
19		acetone	50.00	0.158	0.166	-5.1	110	0.00	7.31
20		allyl chloride	50.00	0.352	0.362	-2.8	94	0.00	7.84
21		acetonitrile	500.00	0.046	0.047	-2.2	100	0.00	7.85
22		iodomethane	50.00	1.190	1.306	-9.7	100	0.00	7.54
23		iso-butyl alcohol	500.00	0.021	0.018	14.3	92	0.00	10.84
24		carbon disulfide	50.00	2.320	2.582	-11.3	102	0.00	7.67
25		methylene chloride	50.00	0.709	0.755	-6.5	102	0.00	8.07
26		1-chloropropane	50.00	1.213	1.145	5.6	98	0.00	8.09
27		methyl acetate	50.00	0.084	0.090	-7.1	99	0.00	7.83
28		methyl tert butyl ether	50.00	1.772	1.995	-12.6	104	0.00	8.42
29		trans-1,2-dichloroethene	50.00	0.700	0.699	0.1	100	0.00	8.48
30		di-isopropyl ether	50.00	2.114	2.342	-10.8	106	0.00	9.09
31		ethyl tert-butyl ether	50.00	2.009	2.228	-10.9	104	0.00	9.61
32		2-butanone	50.00	0.065	0.069	-6.2	101	0.00	9.92
33	M	1,1-dichloroethane	50.00	1.177	1.290	-9.6	101	0.00	9.13
34		chloroprene	50.00	0.857	0.855	0.2	90	0.00	9.23
35		acrylonitrile	250.00	0.197	0.225	-14.2	103	0.00	8.47
36		vinyl acetate	50.00	0.097	0.105	-8.2	99	0.00	9.12
37		ethyl acetate	50.00	0.084	0.080	4.8	97	0.00	9.93
38		2,2-dichloropropane	50.00	1.061	1.077	-1.5	97	0.00	9.94
39		cis-1,2-dichloroethene	50.00	0.755	0.754	0.1	98	0.00	9.94
40		propionitrile	500.00	0.074	0.079	-6.8	97	0.00	10.06
41		methyl acrylate	50.00	0.593	0.628	-5.9	99	0.00	10.02

Initial Calibration Verification

Job Number: JC13575 **Sample:** V2V1156-ICV1156
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2V29054.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

42	bromochloromethane	50.00	0.342	0.370	-8.2	99	0.00	10.28
43	tetrahydrofuran	50.00	0.203	0.195	3.9	97	0.00	10.32
44	chloroform	50.00	1.179	1.269	-7.6	101	0.00	10.35
45 S	dibromofluoromethane (s)	50.00	0.483	0.479	0.8	100	0.00	10.56
46 S	1,2-dichloroethane-d4 (s)	50.00	0.483	0.481	0.4	99	0.00	11.00
47	freon 113	50.00	0.434	0.483	-11.3	98	0.00	7.17
48	methacrylonitrile	50.00	0.338	0.343	-1.5	98	0.00	10.24
49	1,1,1-trichloroethane	50.00	1.039	1.200	-15.5	104	0.00	10.60
50	tert-amyl methyl ether	50.00	1.915	2.074	-8.3	103	0.00	11.08
51 I	1,4-difluorobenzene	50.00	1.000	1.000	0.0	100	0.00	11.45
52	epichlorohydrin	250.00	0.038	0.039	-2.6	98	0.00	12.69
53	n-butyl alcohol	2500.00	0.012	0.011	8.3	86	0.00	11.60
54 M	cyclohexane	50.00	0.699	0.793	-13.4	99	0.00	10.65
55	carbon tetrachloride	50.00	0.771	0.878	-13.9	101	0.00	10.80
56	1,1-dichloropropene	50.00	0.696	0.759	-9.1	104	0.00	10.78
57	hexane	50.00	0.467	0.347	25.7	66	0.00	8.79
58 M	benzene	50.00	1.999	2.065	-3.3	100	0.00	11.06
59	iso-octane	50.00	1.357	1.450	-6.9	93	0.00	11.03
60	heptane	50.00	0.267	0.268	-0.4	91	0.00	11.21
61	isopropyl acetate	50.00	1.043	1.150	-10.3	105	0.00	11.00
62	1,2-dichloroethane	50.00	0.636	0.698	-9.7	99	0.00	11.09
63	trichloroethene	50.00	0.502	0.539	-7.4	100	0.00	11.77
64	ethyl acrylate		----------NA----------					
65	2-nitropropane	50.00	0.150	0.152	-1.3	98	0.00	12.56
66	2-chloroethyl vinyl ether	250.00	0.240	0.268	-11.7	102	0.00	12.56
67	methyl methacrylate	50.00	0.099	0.112	-13.1	103	0.00	12.04
68	1,2-dichloropropane	50.00	0.496	0.543	-9.5	102	0.00	12.04
69	methylcyclohexane	50.00	0.680	0.761	-11.9	96	0.00	11.97
70	dibromomethane	50.00	0.309	0.334	-8.1	98	0.00	12.21
71	bromodichloromethane	50.00	0.690	0.739	-7.1	100	0.00	12.33
72	cis-1,3-dichloropropene	50.00	0.791	0.815	-3.0	99	0.00	12.77
73 S	toluene-d8 (s)	50.00	1.138	1.149	-1.0	100	0.00	13.03
74	4-methyl-2-pentanone	50.00	0.170	0.178	-4.7	102	0.00	12.86
75	toluene	50.00	1.036	1.125	-8.6	100	0.00	13.10
76	3-methyl-1-butanol	1000.00	0.011	0.011	0.0	94	0.00	12.89
77	trans-1,3-dichloropropene	50.00	0.677	0.694	-2.5	95	0.00	13.31
78	ethyl methacrylate	50.00	0.499	0.548	-9.8	101	0.00	13.29
79	1,1,2-trichloroethane	50.00	0.336	0.362	-7.7	101	0.00	13.51
80	2-hexanone	50.00	0.138	0.148	-7.2	102	0.00	13.67
81 I	chlorobenzene-d5	50.00	1.000	1.000	0.0	102	0.00	14.47
82	tetrachloroethene	50.00	0.621	0.668	-7.6	101	0.00	13.65
83	1,3-dichloropropane	50.00	0.784	0.822	-4.8	98	0.00	13.69
84	butyl acetate	50.00	0.311	0.344	-10.6	104	0.00	13.73
85	dibromochloromethane	50.00	0.651	0.710	-9.1	99	0.00	13.94
86	1,2-dibromoethane	50.00	0.523	0.549	-5.0	99	0.00	14.08
87	n-butyl ether	50.00	2.163	2.628	-21.5	112	0.00	14.39
88	chlorobenzene	50.00	1.448	1.554	-7.3	101	0.00	14.50
89	1,1,1,2-tetrachloroethane	50.00	0.629	0.659	-4.8	99	0.00	14.56
90	ethylbenzene	50.00	2.484	2.624	-5.6	100	0.00	14.54
91	m,p-xylene	100.00	0.886	0.976	-10.2	100	0.00	14.64
92	o-xylene	50.00	0.881	0.999	-13.4	103	0.00	15.03
93	styrene	50.00	1.434	1.568	-9.3	98	0.00	15.04
94	butyl acrylate		----------NA----------					
95	bromoform	50.00	0.442	0.469	-6.1	100	0.00	15.30
96 I	1,4-dichlorobenzene-d4	50.00	1.000	1.000	0.0	101	0.00	16.56
97	isopropylbenzene	50.00	5.181	5.538	-6.9	100	0.00	15.34
98 S	4-bromofluorobenzene (s)	50.00	1.129	1.087	3.7	100	0.00	15.54

Initial Calibration Verification

Job Number: JC13575 **Sample:** V2V1156-ICV1156
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2V29054.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

99	cis-1,4-dichloro-2-butene	----------NA----------						
100	bromobenzene	50.00	1.401	1.420	-1.4	99	0.00	15.71
101	cyclohexanone	500.00	0.087	0.042	51.7#	57	0.00	15.52
102	1,1,2,2-tetrachloroethane	50.00	1.553	1.524	1.9	100	0.00	15.64
103	trans-1,4-dichloro-2-bute	50.00	0.332	0.362	-9.0	103	0.00	15.67
104	1,2,3-trichloropropane	50.00	0.360	0.352	2.2	98	0.00	15.70
105	n-propylbenzene	50.00	6.140	6.480	-5.5	103	0.00	15.70
106	2-chlorotoluene	50.00	1.315	1.313	0.2	98	0.00	15.85
107	4-chlorotoluene	50.00	3.889	3.801	2.3	98	0.00	15.94
108	1,3,5-trimethylbenzene	50.00	4.280	4.493	-5.0	101	0.00	15.84
109	tert-butylbenzene	50.00	3.591	3.745	-4.3	102	0.00	16.15
110	pentachloroethane	50.00	0.926	0.992	-7.1	101	0.00	16.23
111	1,2,4-trimethylbenzene	50.00	4.202	4.548	-8.2	102	0.00	16.19
112	sec-butylbenzene	50.00	5.315	5.706	-7.4	100	0.00	16.33
113	1,3-dichlorobenzene	50.00	2.520	2.622	-4.0	100	0.00	16.51
114	p-isopropyltoluene	50.00	4.409	4.719	-7.0	102	0.00	16.44
115	1,4-dichlorobenzene	50.00	2.563	2.600	-1.4	101	0.00	16.59
116	1,2-dichlorobenzene	50.00	2.468	2.604	-5.5	103	0.00	16.93
117	n-butylbenzene	50.00	1.983	2.307	-16.3	99	0.00	16.80
118	1,2-dibromo-3-chloropropa	50.00	0.295	0.289	2.0	101	0.00	17.59
119	1,3,5-trichlorobenzene	50.00	1.800	1.959	-8.8	100	0.00	17.72
120	1,2,4-trichlorobenzene	50.00	1.460	1.677	-14.9	102	0.00	18.25
121	hexachlorobutadiene	50.00	0.729	0.799	-9.6	100	0.00	18.33
122	naphthalene	50.00	2.955	3.268	-10.6	102	0.00	18.48
123	1,2,3-trichlorobenzene	50.00	1.375	1.590	-15.6	102	0.00	18.69
124	hexachloroethane	50.00	1.012	1.070	-5.7	99	0.00	17.14
125	Benzyl chloride	50.00	2.495	2.350	5.8	95	0.00	16.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2v29049.D M2V1156.M Wed Jan 13 12:58:41 2016 RPT1

Continuing Calibration Summary

Job Number: JC13575 **Sample:** V2V1176-CC1156
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2V29710.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2v29710.D Vial: 2
Acq On : 4 Feb 2016 8:40 am Operator: HeeEunA
Sample : cc1156-50 Inst : MS2V
Misc : MS98039,V2V1176,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V1156.M (RTE Integrator)
Title : Method 8260
Last Update : Wed Jan 13 09:28:14 2016
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	TrueValue	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	500.00	1.000	1.000	0.0	113	0.00	8.05
2		ethanol		----------NA----------					
3		1,4-dioxane	1250.00	0.114	0.107	6.1	103	0.00	12.15
4	M	tertiary butyl alcohol	250.00	1.664	1.617	2.8	111	-0.01	8.18
5	I	pentafluorobenzene	50.00	1.000	1.000	0.0	105	-0.01	10.49
6		chlorodifluoromethane	50.00	0.807	1.008	-24.9#	121	0.00	4.13
7		dichlorodifluoromethane	50.00	0.931	1.183	-27.1#	124	0.01	4.11
8		chloromethane	50.00	1.055	1.074	-1.8	105	0.00	4.49
9		vinyl chloride	50.00	0.947	1.074	-13.4	108	0.00	4.78
10		bromomethane	50.00	0.638	0.670	-5.0	110	0.00	5.52
11		chloroethane	50.00	0.436	0.468	-7.3	108	0.00	5.72
12		trichlorofluoromethane	50.00	1.117	1.355	-21.3#	116	0.00	6.25
13		vinyl bromide		----------NA----------					
14		ethyl ether	50.00	0.312	0.327	-4.8	103	0.00	6.72
15		pentane		----------NA----------					
16		2-chloropropane	50.00	1.142	1.176	-3.0	103	0.00	6.95
17		acrolein	500.00	0.126	0.135	-7.1	109	-0.01	7.04
18		1,1-dichloroethene	50.00	0.971	1.102	-13.5	105	0.00	7.21
19		acetone	50.00	0.158	0.202	-27.8#	139	-0.01	7.29
20		allyl chloride	50.00	0.352	0.381	-8.2	103	0.00	7.83
21		acetonitrile	500.00	0.046	0.053	-15.2	118	-0.01	7.83
22		iodomethane	50.00	1.190	1.270	-6.7	101	-0.01	7.53
23		iso-butyl alcohol	500.00	0.021	0.021	0.0	108	-0.01	10.83
24		carbon disulfide	50.00	2.320	2.460	-6.0	101	0.00	7.66
25		methylene chloride	50.00	0.709	0.756	-6.6	106	0.00	8.07
26		1-chloropropane	50.00	1.213	1.194	1.6	107	-0.01	8.08
27		methyl acetate	50.00	0.084	0.094	-11.9	107	-0.01	7.82
28		methyl tert butyl ether	50.00	1.772	2.052	-15.8	111	0.00	8.41
29		trans-1,2-dichloroethene	50.00	0.700	0.694	0.9	104	-0.01	8.47
30		di-isopropyl ether	50.00	2.114	2.136	-1.0	101	0.00	9.08
31		ethyl tert-butyl ether	50.00	2.009	2.171	-8.1	106	-0.01	9.59
32		2-butanone	50.00	0.065	0.077	-18.5	118	-0.02	9.91
33	M	1,1-dichloroethane	50.00	1.177	1.270	-7.9	104	-0.01	9.12
34		chloroprene	50.00	0.857	0.947	-10.5	104	-0.01	9.22
35		acrylonitrile	250.00	0.197	0.233	-18.3	110	-0.01	8.46
36		vinyl acetate	50.00	0.097	0.105	-8.2	103	-0.01	9.11
37		ethyl acetate	50.00	0.084	0.080	4.8	101	-0.02	9.92
38		2,2-dichloropropane	50.00	1.061	1.270	-19.7	119	-0.01	9.92
39		cis-1,2-dichloroethene	50.00	0.755	0.756	-0.1	102	-0.01	9.93
40		propionitrile	500.00	0.074	0.088	-18.9	112	-0.02	10.04
41		methyl acrylate	50.00	0.593	0.646	-8.9	107	-0.01	10.01

Continuing Calibration Summary

Job Number: JC13575 **Sample:** V2V1176-CC1156
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2V29710.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

42		bromochloromethane	50.00	0.342	0.364	-6.4	101	-0.01	10.27
43		tetrahydrofuran	50.00	0.203	0.213	-4.9	111	0.00	10.31
44		chloroform	50.00	1.179	1.280	-8.6	106	-0.01	10.34
45	S	dibromofluoromethane (s)	50.00	0.483	0.484	-0.2	105	-0.02	10.55
46	S	1,2-dichloroethane-d4 (s)	50.00	0.483	0.540	-11.8	115	-0.01	10.99
47		freon 113	50.00	0.434	0.490	-12.9	104	0.00	7.17
48		methacrylonitrile	50.00	0.338	0.364	-7.7	108	-0.01	10.23
49		1,1,1-trichloroethane	50.00	1.039	1.208	-16.3	109	0.00	10.59
50		tert-amyl methyl ether	50.00	1.915	1.985	-3.7	103	0.00	11.07
51	I	1,4-difluorobenzene	50.00	1.000	1.000	0.0	106	-0.01	11.44
52		epichlorohydrin	250.00	0.038	0.042	-10.5	111	-0.01	12.68
53		n-butyl alcohol	2500.00	0.012	0.012	0.0	105	-0.01	11.59
54	M	cyclohexane	50.00	0.699	0.763	-9.2	102	0.00	10.64
55		carbon tetrachloride	50.00	0.771	0.890	-15.4	109	-0.01	10.79
56		1,1-dichloropropene	50.00	0.696	0.701	-0.7	102	0.00	10.77
57		hexane	50.00	0.467	0.482	-3.2	97	0.00	8.78
58	M	benzene	50.00	1.999	1.940	3.0	100	-0.01	11.05
59		iso-octane	50.00	1.357	1.486	-9.5	102	0.00	11.02
60		heptane	50.00	0.267	0.285	-6.7	103	0.00	11.20
61		isopropyl acetate	50.00	1.043	1.099	-5.4	107	-0.01	10.99
62		1,2-dichloroethane	50.00	0.636	0.745	-17.1	113	-0.01	11.09
63		trichloroethene	50.00	0.502	0.504	-0.4	100	0.00	11.77
64		ethyl acrylate		----------NA----------					
65		2-nitropropane	50.00	0.150	0.177	-18.0	122	-0.01	12.55
66		2-chloroethyl vinyl ether	250.00	0.240	0.258	-7.5	105	0.00	12.55
67		methyl methacrylate	50.00	0.099	0.105	-6.1	103	0.00	12.04
68		1,2-dichloropropane	50.00	0.496	0.490	1.2	98	0.00	12.04
69		methylcyclohexane	50.00	0.680	0.734	-7.9	99	0.00	11.96
70		dibromomethane	50.00	0.309	0.334	-8.1	104	-0.01	12.20
71		bromodichloromethane	50.00	0.690	0.732	-6.1	106	-0.01	12.32
72		cis-1,3-dichloropropene	50.00	0.791	0.792	-0.1	102	-0.01	12.76
73	S	toluene-d8 (s)	50.00	1.138	1.102	3.2	103	-0.01	13.03
74		4-methyl-2-pentanone	50.00	0.170	0.174	-2.4	106	-0.01	12.85
75		toluene	50.00	1.036	1.039	-0.3	98	-0.01	13.09
76		3-methyl-1-butanol	1000.00	0.011	0.012	-9.1	108	-0.01	12.88
77		trans-1,3-dichloropropene	50.00	0.677	0.729	-7.7	106	0.00	13.30
78		ethyl methacrylate	50.00	0.499	0.530	-6.2	104	-0.01	13.28
79		1,1,2-trichloroethane	50.00	0.336	0.340	-1.2	101	0.00	13.51
80		2-hexanone	50.00	0.138	0.147	-6.5	108	-0.01	13.66
81	I	chlorobenzene-d5	50.00	1.000	1.000	0.0	109	0.00	14.46
82		tetrachloroethene	50.00	0.621	0.591	4.8	96	0.00	13.64
83		1,3-dichloropropane	50.00	0.784	0.784	0.0	100	-0.01	13.68
84		butyl acetate	50.00	0.311	0.315	-1.3	103	0.00	13.72
85		dibromochloromethane	50.00	0.651	0.691	-6.1	103	-0.01	13.93
86		1,2-dibromoethane	50.00	0.523	0.520	0.6	101	-0.01	14.07
87		n-butyl ether	50.00	2.163	2.103	2.8	97	0.00	14.39
88		chlorobenzene	50.00	1.448	1.415	2.3	99	0.00	14.49
89		1,1,1,2-tetrachloroethane	50.00	0.629	0.635	-1.0	102	0.00	14.55
90		ethylbenzene	50.00	2.484	2.457	1.1	101	0.00	14.54
91		m,p-xylene	100.00	0.886	0.900	-1.6	99	0.00	14.63
92		o-xylene	50.00	0.881	0.888	-0.8	98	0.00	15.02
93		styrene	50.00	1.434	1.478	-3.1	99	-0.01	15.03
94		butyl acrylate		----------NA----------					
95		bromoform	50.00	0.442	0.462	-4.5	105	0.00	15.30
96	I	1,4-dichlorobenzene-d4	50.00	1.000	1.000	0.0	111	0.00	16.56
97		isopropylbenzene	50.00	5.181	5.044	2.6	100	0.00	15.33
98	S	4-bromofluorobenzene (s)	50.00	1.129	1.035	8.3	105	-0.01	15.53

Continuing Calibration Summary

Job Number: JC13575 **Sample:** V2V1176-CC1156
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2V29710.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

99	cis-1,4-dichloro-2-butene	----------NA----------						
100	bromobenzene	50.00	1.401	1.318	5.9	101	0.00	15.70
101	cyclohexanone	500.00	0.087	0.143	-64.4#	215#	-0.01	15.51
102	1,1,2,2-tetrachloroethane	50.00	1.553	1.420	8.6	102	0.00	15.63
103	trans-1,4-dichloro-2-bute	50.00	0.332	0.380	-14.5	119	-0.01	15.66
104	1,2,3-trichloropropane	50.00	0.360	0.350	2.8	107	-0.01	15.69
105	n-propylbenzene	50.00	6.140	5.812	5.3	101	0.00	15.70
106	2-chlorotoluene	50.00	1.315	1.205	8.4	99	0.00	15.84
107	4-chlorotoluene	50.00	3.889	3.501	10.0	100	-0.01	15.92
108	1,3,5-trimethylbenzene	50.00	4.280	4.178	2.4	103	0.00	15.83
109	tert-butylbenzene	50.00	3.591	3.298	8.2	99	0.00	16.14
110	pentachloroethane	50.00	0.926	0.933	-0.8	105	0.00	16.23
111	1,2,4-trimethylbenzene	50.00	4.202	4.173	0.7	103	0.00	16.18
112	sec-butylbenzene	50.00	5.315	5.144	3.2	99	0.00	16.33
113	1,3-dichlorobenzene	50.00	2.520	2.370	6.0	99	0.00	16.51
114	p-isopropyltoluene	50.00	4.409	4.308	2.3	102	0.00	16.43
115	1,4-dichlorobenzene	50.00	2.563	2.358	8.0	101	0.00	16.58
116	1,2-dichlorobenzene	50.00	2.468	2.335	5.4	101	-0.01	16.92
117	n-butylbenzene	50.00	1.983	2.148	-8.3	102	0.00	16.80
118	1,2-dibromo-3-chloropropa	50.00	0.295	0.297	-0.7	114	-0.01	17.58
119	1,3,5-trichlorobenzene	50.00	1.800	1.830	-1.7	103	0.00	17.72
120	1,2,4-trichlorobenzene	50.00	1.460	1.582	-8.4	106	0.00	18.24
121	hexachlorobutadiene	50.00	0.729	0.805	-10.4	111	0.00	18.32
122	naphthalene	50.00	2.955	3.184	-7.7	109	0.00	18.48
123	1,2,3-trichlorobenzene	50.00	1.375	1.522	-10.7	108	-0.01	18.68
124	hexachloroethane	50.00	1.012	1.006	0.6	103	0.00	17.14
125	Benzyl chloride	50.00	2.495	2.829	-13.4	125	0.00	16.68

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2v29049.D M2V1156.M Fri Feb 05 11:28:57 2016 RPT1

Continuing Calibration Summary

Job Number: JC13575 **Sample:** V2V1180-CC1156
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2V29860.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2v29860.D Vial: 2
Acq On : 9 Feb 2016 8:44 am Operator: HeeEunA
Sample : cc1156-20 Inst : MS2V
Misc : MS98203,V2V1180,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2V1156.M (RTE Integrator)
Title : Method 8260
Last Update : Wed Jan 13 09:28:14 2016
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	TrueValue	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Tert Butyl Alcohol-d9	500.00	1.000	1.000	0.0	101	0.00	8.04
2	ethanol		----------NA----------					
3	1,4-dioxane	500.00	0.114	0.124	-8.8	102	0.00	12.16
4 M	tertiary butyl alcohol	100.00	1.664	1.651	0.8	105	-0.01	8.18
5 I	pentafluorobenzene	50.00	1.000	1.000	0.0	97	0.00	10.49
6	chlorodifluoromethane	20.00	0.807	0.928	-15.0	115	0.00	4.13
7	dichlorodifluoromethane	20.00	0.931	1.031	-10.7	103	0.00	4.10
8	chloromethane	20.00	1.055	1.071	-1.5	101	-0.02	4.47
9	vinyl chloride	20.00	0.947	1.082	-14.3	104	0.00	4.77
10	bromomethane	20.00	0.638	0.665	-4.2	107	-0.02	5.51
11	chloroethane	20.00	0.436	0.487	-11.7	106	0.00	5.71
12	trichlorofluoromethane	20.00	1.117	1.258	-12.6	102	0.00	6.25
13	vinyl bromide		----------NA----------					
14	ethyl ether	20.00	0.312	0.318	-1.9	96	0.00	6.72
15	pentane		----------NA----------					
16	2-chloropropane	20.00	1.142	1.018	10.9	85	0.00	6.95
17	acrolein	200.00	0.126	0.125	0.8	101	0.00	7.05
18	1,1-dichloroethene	20.00	0.971	0.988	-1.8	92	-0.01	7.20
19	acetone	20.00	0.158	0.200	-26.6#	125	0.01	7.32
20	allyl chloride	20.00	0.352	0.367	-4.3	95	0.00	7.83
21	acetonitrile	200.00	0.046	0.050	-8.7	103	-0.01	7.83
22	iodomethane	20.00	1.190	1.343	-12.9	104	-0.01	7.53
23	iso-butyl alcohol	200.00	0.021	0.020	4.8	91	0.00	10.83
24	carbon disulfide	20.00	2.320	2.446	-5.4	97	0.00	7.66
25	methylene chloride	20.00	0.709	0.778	-9.7	105	0.00	8.07
26	1-chloropropane	20.00	1.213	1.100	9.3	89	-0.01	8.08
27	methyl acetate	20.00	0.084	0.092	-9.5	106	0.00	7.83
28	methyl tert butyl ether	20.00	1.772	1.931	-9.0	100	-0.01	8.41
29	trans-1,2-dichloroethene	20.00	0.700	0.704	-0.6	100	-0.01	8.47
30	di-isopropyl ether	20.00	2.114	1.892	10.5	88	0.00	9.08
31	ethyl tert-butyl ether	20.00	2.009	1.943	3.3	95	0.00	9.60
32	2-butanone	20.00	0.065	0.072	-10.8	111	0.00	9.92
33 M	1,1-dichloroethane	20.00	1.177	1.202	-2.1	94	-0.01	9.12
34	chloroprene	20.00	0.857	0.791	7.7	88	-0.02	9.22
35	acrylonitrile	100.00	0.197	0.226	-14.7	104	0.00	8.46
36	vinyl acetate	20.00	0.097	0.100	-3.1	100	-0.02	9.10
37	ethyl acetate	20.00	0.084	0.073	13.1	92	-0.02	9.92
38	2,2-dichloropropane	20.00	1.061	1.192	-12.3	108	-0.01	9.92
39	cis-1,2-dichloroethene	20.00	0.755	0.757	-0.3	98	0.00	9.93
40	propionitrile	200.00	0.074	0.085	-14.9	106	-0.02	10.04
41	methyl acrylate	20.00	0.593	0.591	0.3	95	-0.01	10.01

Continuing Calibration Summary

Job Number: JC13575 **Sample:** V2V1180-CC1156
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2V29860.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

42		bromochloromethane	20.00	0.342	0.378	-10.5	102	-0.01	10.27
43		tetrahydrofuran	20.00	0.203	0.187	7.9	94	0.00	10.31
44		chloroform	20.00	1.179	1.223	-3.7	97	-0.01	10.34
45	S	dibromofluoromethane (s)	50.00	0.483	0.516	-6.8	102	-0.02	10.55
46	S	1,2-dichloroethane-d4 (s)	50.00	0.483	0.502	-3.9	100	-0.01	10.99
47		freon 113	20.00	0.434	0.498	-14.7	108	0.00	7.16
48		methacrylonitrile	20.00	0.338	0.297	12.1	89	-0.02	10.22
49		1,1,1-trichloroethane	20.00	1.039	1.133	-9.0	100	0.00	10.59
50		tert-amyl methyl ether	20.00	1.915	1.904	0.6	98	0.00	11.08
51	I	1,4-difluorobenzene	50.00	1.000	1.000	0.0	94	-0.01	11.44
52		epichlorohydrin	100.00	0.038	0.041	-7.9	105	-0.01	12.68
53		n-butyl alcohol	1000.00	0.012	0.013	-8.3	95	-0.01	11.59
54	M	cyclohexane	20.00	0.699	0.750	-7.3	93	-0.01	10.64
55		carbon tetrachloride	20.00	0.771	0.883	-14.5	100	-0.01	10.79
56		1,1-dichloropropene	20.00	0.696	0.662	4.9	88	0.00	10.77
57		hexane	20.00	0.467	0.418	10.5	82	0.00	8.79
58	M	benzene	20.00	1.999	2.001	-0.1	94	-0.01	11.05
59		iso-octane	20.00	1.357	1.330	2.0	90	0.00	11.02
60		heptane	20.00	0.267	0.251	6.0	86	0.00	11.20
61		isopropyl acetate	20.00	1.043	0.969	7.1	90	-0.01	10.99
62		1,2-dichloroethane	20.00	0.636	0.699	-9.9	97	-0.02	11.08
63		trichloroethene	20.00	0.502	0.509	-1.4	92	0.00	11.77
64		ethyl acrylate		----------NA----------					
65		2-nitropropane	20.00	0.150	0.157	-4.7	101	-0.01	12.55
66		2-chloroethyl vinyl ether	100.00	0.240	0.250	-4.2	101	0.00	12.55
67		methyl methacrylate	20.00	0.099	0.104	-5.1	99	0.00	12.04
68		1,2-dichloropropane	20.00	0.496	0.498	-0.4	90	0.00	12.04
69		methylcyclohexane	20.00	0.680	0.703	-3.4	93	0.00	11.96
70		dibromomethane	20.00	0.309	0.345	-11.7	102	-0.01	12.20
71		bromodichloromethane	20.00	0.690	0.721	-4.5	97	-0.01	12.32
72		cis-1,3-dichloropropene	20.00	0.791	0.758	4.2	91	-0.01	12.76
73	S	toluene-d8 (s)	50.00	1.138	1.217	-6.9	101	-0.01	13.03
74		4-methyl-2-pentanone	20.00	0.170	0.177	-4.1	100	-0.01	12.85
75		toluene	20.00	1.036	1.057	-2.0	93	-0.01	13.09
76		3-methyl-1-butanol	400.00	0.011	0.014	-27.3#	108	0.00	12.88
77		trans-1,3-dichloropropene	20.00	0.677	0.697	-3.0	96	-0.01	13.30
78		ethyl methacrylate	20.00	0.499	0.504	-1.0	95	0.00	13.28
79		1,1,2-trichloroethane	20.00	0.336	0.356	-6.0	99	0.00	13.51
80		2-hexanone	20.00	0.138	0.145	-5.1	101	0.00	13.67
81	I	chlorobenzene-d5	50.00	1.000	1.000	0.0	98	0.00	14.46
82		tetrachloroethene	20.00	0.621	0.611	1.6	94	0.00	13.64
83		1,3-dichloropropane	20.00	0.784	0.788	-0.5	96	0.00	13.68
84		butyl acetate	20.00	0.311	0.293	5.8	90	0.00	13.72
85		dibromochloromethane	20.00	0.651	0.729	-12.0	106	-0.01	13.93
86		1,2-dibromoethane	20.00	0.523	0.536	-2.5	99	-0.01	14.07
87		n-butyl ether	20.00	2.163	1.907	11.8	84	0.00	14.39
88		chlorobenzene	20.00	1.448	1.473	-1.7	98	0.00	14.49
89		1,1,1,2-tetrachloroethane	20.00	0.629	0.684	-8.7	106	0.00	14.55
90		ethylbenzene	20.00	2.484	2.437	1.9	95	0.00	14.54
91		m,p-xylene	40.00	0.886	0.914	-3.2	96	0.00	14.64
92		o-xylene	20.00	0.881	0.901	-2.3	95	0.00	15.02
93		styrene	20.00	1.434	1.487	-3.7	98	0.00	15.04
94		butyl acrylate		----------NA----------					
95		bromoform	20.00	0.442	0.491	-11.1	109	0.00	15.30
96	I	1,4-dichlorobenzene-d4	50.00	1.000	1.000	0.0	102	0.00	16.56
97		isopropylbenzene	20.00	5.181	4.983	3.8	93	0.00	15.33
98	S	4-bromofluorobenzene (s)	50.00	1.129	1.113	1.4	100	-0.01	15.53

Continuing Calibration Summary

Job Number: JC13575 **Sample:** V2V1180-CC1156
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2V29860.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

99	cis-1,4-dichloro-2-butene	----------NA----------						
100	bromobenzene	20.00	1.401	1.420	-1.4	103	0.00	15.70
101	cyclohexanone	200.00	0.087	0.143	-64.4#	173	-0.01	15.51
102	1,1,2,2-tetrachloroethane	20.00	1.553	1.525	1.8	103	0.00	15.63
103	trans-1,4-dichloro-2-bute	20.00	0.332	0.350	-5.4	108	-0.01	15.66
104	1,2,3-trichloropropane	20.00	0.360	0.370	-2.8	106	0.00	15.70
105	n-propylbenzene	20.00	6.140	5.764	6.1	95	0.00	15.70
106	2-chlorotoluene	20.00	1.315	1.299	1.2	100	0.00	15.84
107	4-chlorotoluene	20.00	3.889	3.558	8.5	97	0.00	15.93
108	1,3,5-trimethylbenzene	20.00	4.280	4.206	1.7	98	0.00	15.84
109	tert-butylbenzene	20.00	3.591	3.167	11.8	92	0.00	16.15
110	pentachloroethane	20.00	0.926	0.997	-7.7	108	0.00	16.23
111	1,2,4-trimethylbenzene	20.00	4.202	4.185	0.4	99	0.00	16.19
112	sec-butylbenzene	20.00	5.315	5.095	4.1	95	0.00	16.33
113	1,3-dichlorobenzene	20.00	2.520	2.529	-0.4	101	0.00	16.51
114	p-isopropyltoluene	20.00	4.409	4.214	4.4	98	0.00	16.43
115	1,4-dichlorobenzene	20.00	2.563	2.522	1.6	103	0.00	16.58
116	1,2-dichlorobenzene	20.00	2.468	2.485	-0.7	103	-0.01	16.92
117	n-butylbenzene	20.00	1.983	2.017	-1.7	98	0.00	16.80
118	1,2-dibromo-3-chloropropa	20.00	0.295	0.296	-0.3	110	0.00	17.59
119	1,3,5-trichlorobenzene	20.00	1.800	1.972	-9.6	109	0.00	17.72
120	1,2,4-trichlorobenzene	20.00	1.460	1.670	-14.4	118	0.00	18.24
121	hexachlorobutadiene	20.00	0.729	0.834	-14.4	112	0.00	18.32
122	naphthalene	20.00	2.955	3.184	-7.7	120	0.00	18.48
123	1,2,3-trichlorobenzene	20.00	1.375	1.633	-18.8	122	0.00	18.68
124	hexachloroethane	20.00	1.012	0.999	1.3	99	-0.01	17.13
125	Benzyl chloride	20.00	2.495	2.814	-12.8	125	0.00	16.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2v29048.D M2V1156.M Tue Feb 09 13:55:06 2016 RPT1

6.9.4
6

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2v29717.D
Acq On : 4 Feb 2016 2:11 pm
Operator : HeeEunA
Sample : jc13575-2
Misc : MS98089,V2V1176,5,,,,5
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 04 16:00:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2V1156.M
Quant Title : Method 8260
QLast Update : Wed Jan 13 09:14:44 2016
Response via : Initial Calibration

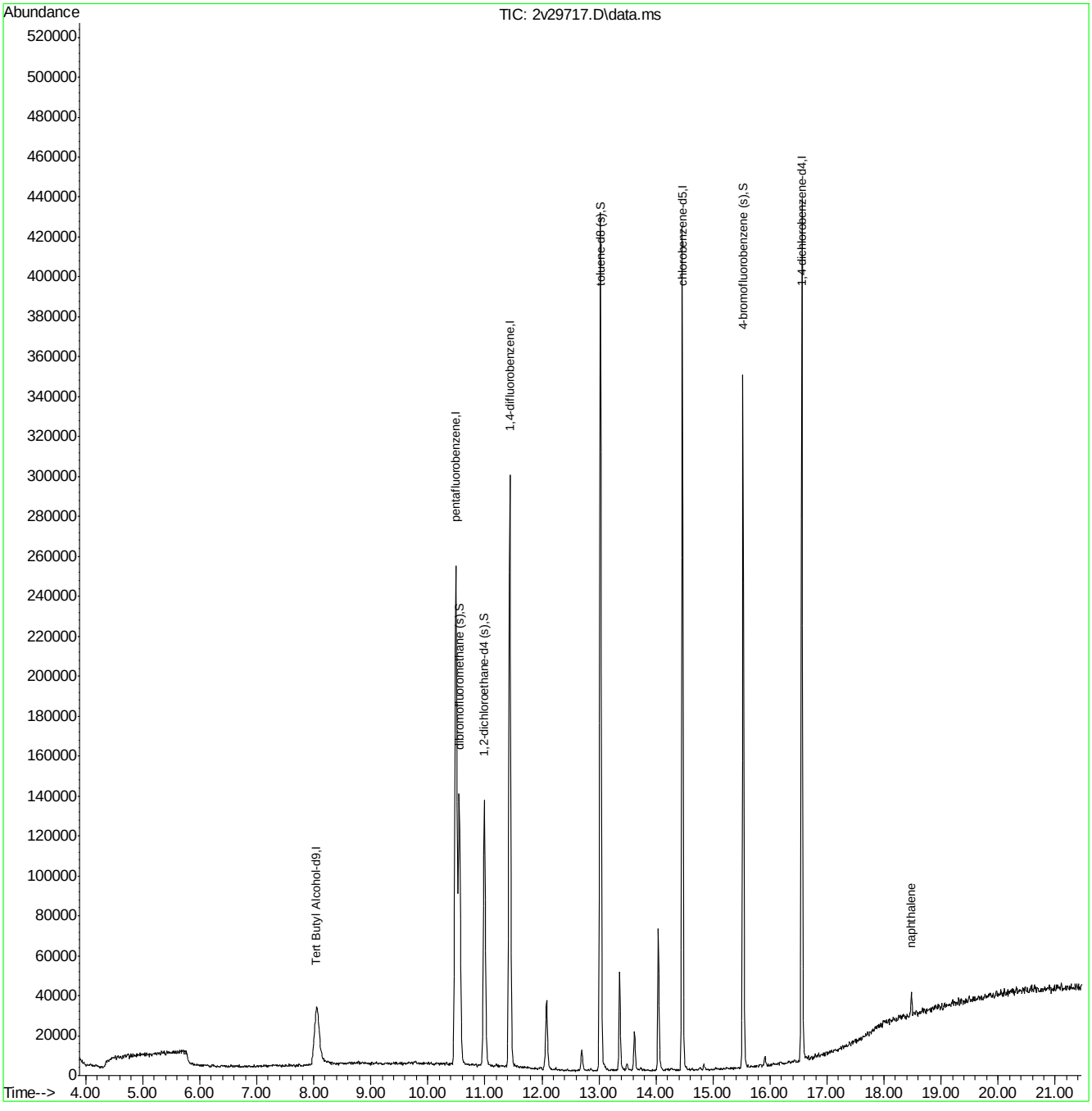
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.045	65	104039	500.00	ug/L	0.00
5) pentafluorobenzene	10.493	168	228034	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.437	114	282985	50.00	ug/L	-0.01
81) chlorobenzene-d5	14.462	117	227217	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.559	152	102171	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	10.551	113	104979	47.68	ug/L	-0.02
Spiked Amount 50.000	Range 79 - 120		Recovery = 95.36%			
46) 1,2-dichloroethane-d4 (s)	10.991	65	116768	52.96	ug/L	-0.01
Spiked Amount 50.000	Range 72 - 123		Recovery = 105.92%			
73) toluene-d8 (s)	13.025	98	309104	47.99	ug/L	-0.01
Spiked Amount 50.000	Range 78 - 119		Recovery = 95.98%			
98) 4-bromofluorobenzene (s)	15.526	95	109894	47.64	ug/L	-0.01
Spiked Amount 50.000	Range 74 - 119		Recovery = 95.28%			
Target Compounds						Qvalue
122) naphthalene	18.478	128	7595	1.26	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

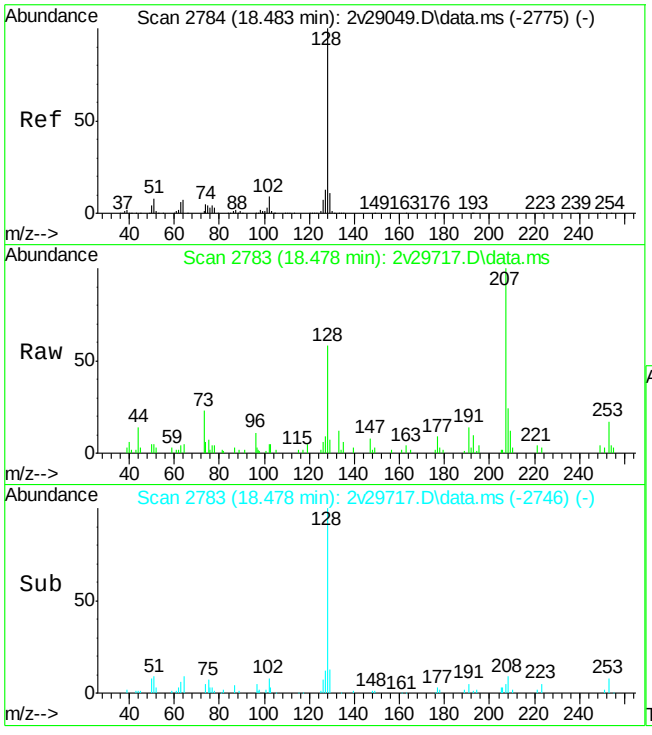
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2v29717.D
Acq On : 4 Feb 2016 2:11 pm
Operator : HeeEunA
Sample : jc13575-2
Misc : MS98089,V2V1176,5,,,,5
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 04 16:00:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2V1156.M
Quant Title : Method 8260
QLast Update : Wed Jan 13 09:14:44 2016
Response via : Initial Calibration



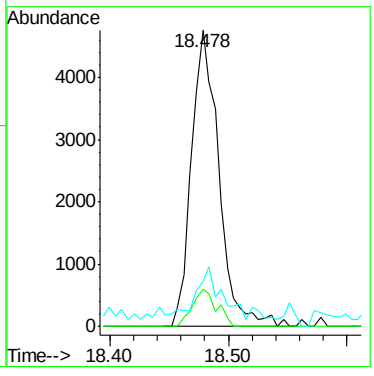
M2V1156.M Fri Feb 05 12:03:03 2016 RPT1 Page: 2



#122
naphthalene
Concen: 1.26 ug/L
RT: 18.478 min Scan# 2783
Delta R.T. -0.005 min
Lab File: 2v29717.D
Acq: 4 Feb 2016 2:11 pm

Tgt Ion:128 Resp: 7595

Ion	Ratio	Lower	Upper
128	100		
129	12.7	0.0	40.9
127	11.6	0.0	43.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2v29865.D
Acq On : 9 Feb 2016 11:22 am
Operator : HeeEunA
Sample : jc13575-4
Misc : MS98089,V2V1180,5,,,,5
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 09 13:59:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2V1156.M
Quant Title : Method 8260
QLast Update : Wed Jan 13 09:14:44 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.060	65	93957	500.00	ug/L	0.01
5) pentafluorobenzene	10.493	168	209316	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.437	114	258611	50.00	ug/L	-0.01
81) chlorobenzene-d5	14.462	117	204311	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.559	152	92716	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	10.556	113	108683	53.77	ug/L	-0.01
Spiked Amount 50.000	Range 79 - 120		Recovery = 107.54%			
46) 1,2-dichloroethane-d4 (s)	10.991	65	108026	53.37	ug/L	-0.01
Spiked Amount 50.000	Range 72 - 123		Recovery = 106.74%			
73) toluene-d8 (s)	13.025	98	310116	52.68	ug/L	-0.01
Spiked Amount 50.000	Range 78 - 119		Recovery = 105.36%			
98) 4-bromofluorobenzene (s)	15.526	95	104417	49.88	ug/L	-0.01
Spiked Amount 50.000	Range 74 - 119		Recovery = 99.76%			
Target Compounds						Qvalue
122) naphthalene	18.478	128	1892	0.35	ug/L	76

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.2

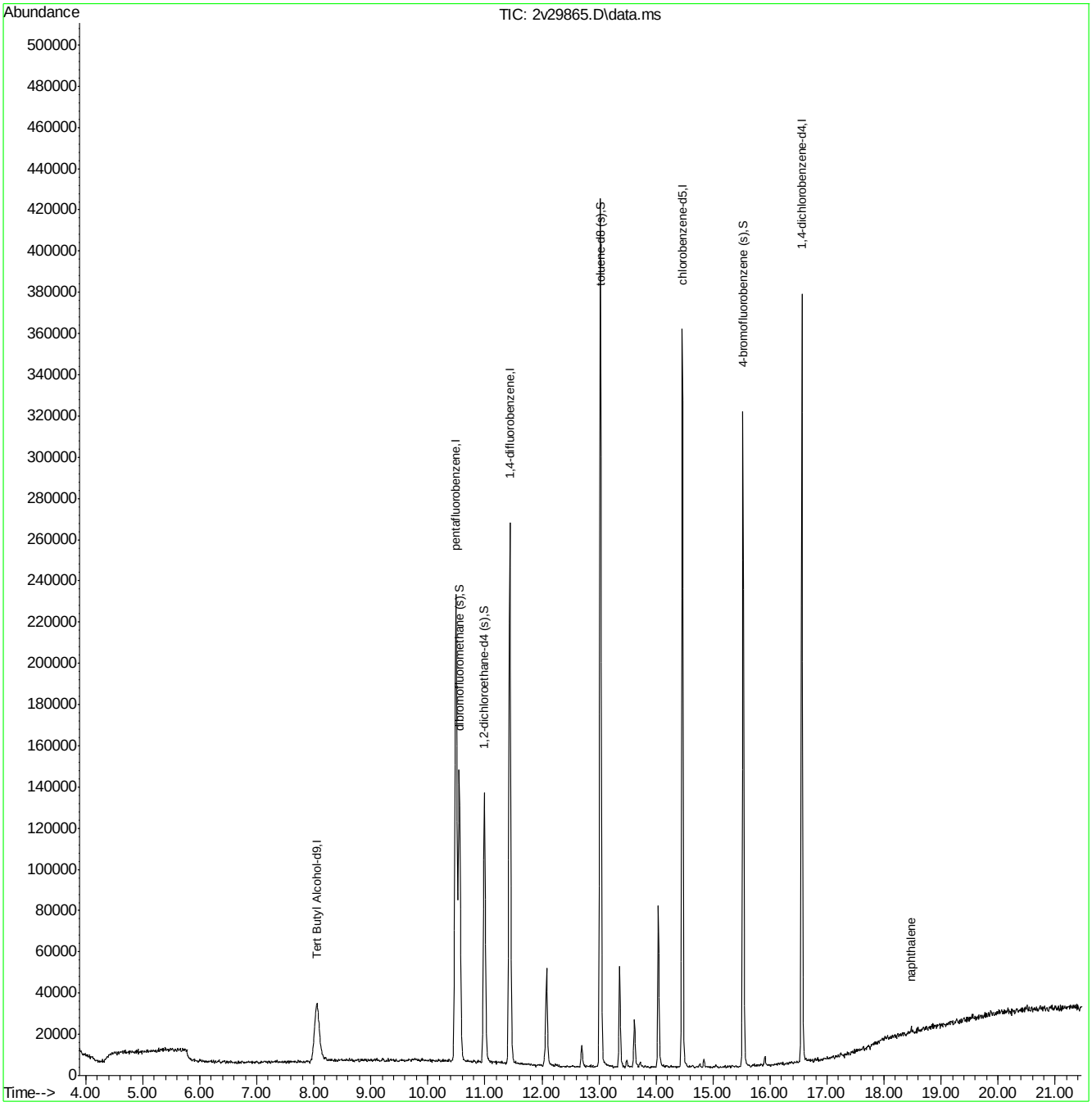
7

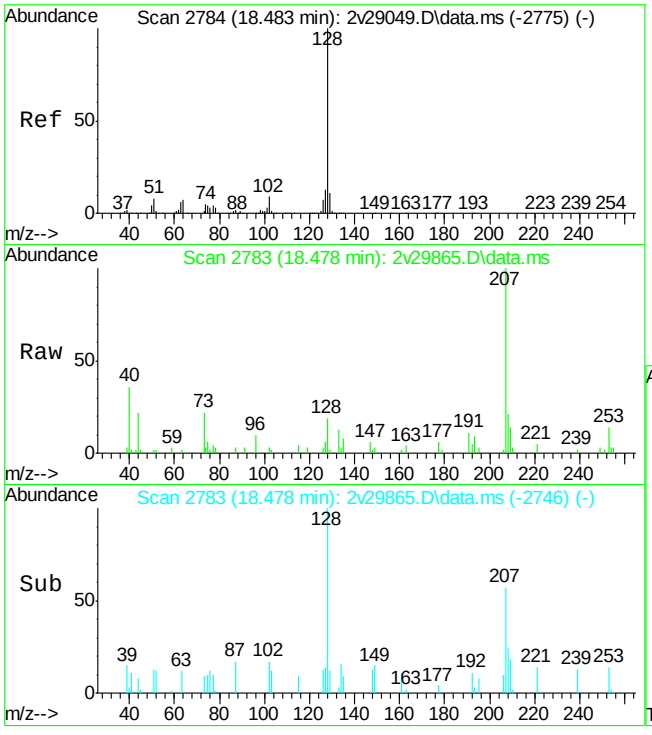
SGS ACCUTEST JC13575

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2v29865.D
Acq On : 9 Feb 2016 11:22 am
Operator : HeeEunA
Sample : jc13575-4
Misc : MS98089,V2V1180,5,,,,5
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 09 13:59:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2V1156.M
Quant Title : Method 8260
QLast Update : Wed Jan 13 09:14:44 2016
Response via : Initial Calibration

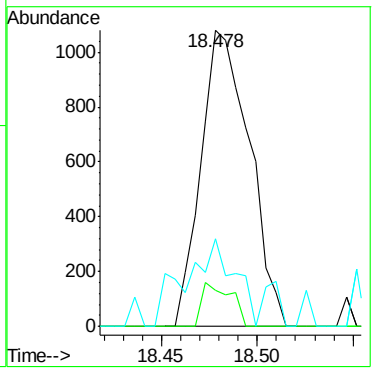




#122
naphthalene
Concen: 0.35 ug/L
RT: 18.478 min Scan# 2783
Delta R.T. -0.005 min
Lab File: 2v29865.D
Acq: 9 Feb 2016 11:22 am

Tgt Ion:128 Resp: 1892

Ion	Ratio	Lower	Upper
128	100		
129	12.2	0.0	40.9
127	29.4	0.0	43.0



7.1.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2v29712.D
Acq On : 4 Feb 2016 9:45 am
Operator : HeeEunA
Sample : mb
Misc : MS98039,V2V1176,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 04 15:56:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2V1156.M
Quant Title : Method 8260
QLast Update : Wed Jan 13 09:14:44 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.060	65	110597	500.00	ug/L	0.01
5) pentafluorobenzene	10.493	168	227816	50.00	ug/L	-0.01
51) 1,4-difluorobenzene	11.437	114	289926	50.00	ug/L	-0.01
81) chlorobenzene-d5	14.462	117	231416	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.559	152	102933	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	10.556	113	106717	48.51	ug/L	-0.01
Spiked Amount 50.000	Range 79 - 120		Recovery = 97.02%			
46) 1,2-dichloroethane-d4 (s)	10.991	65	120098	54.52	ug/L	-0.01
Spiked Amount 50.000	Range 72 - 123		Recovery = 109.04%			
73) toluene-d8 (s)	13.025	98	317428	48.10	ug/L	-0.01
Spiked Amount 50.000	Range 78 - 119		Recovery = 96.20%			
98) 4-bromofluorobenzene (s)	15.526	95	109422	47.08	ug/L	-0.01
Spiked Amount 50.000	Range 74 - 119		Recovery = 94.16%			

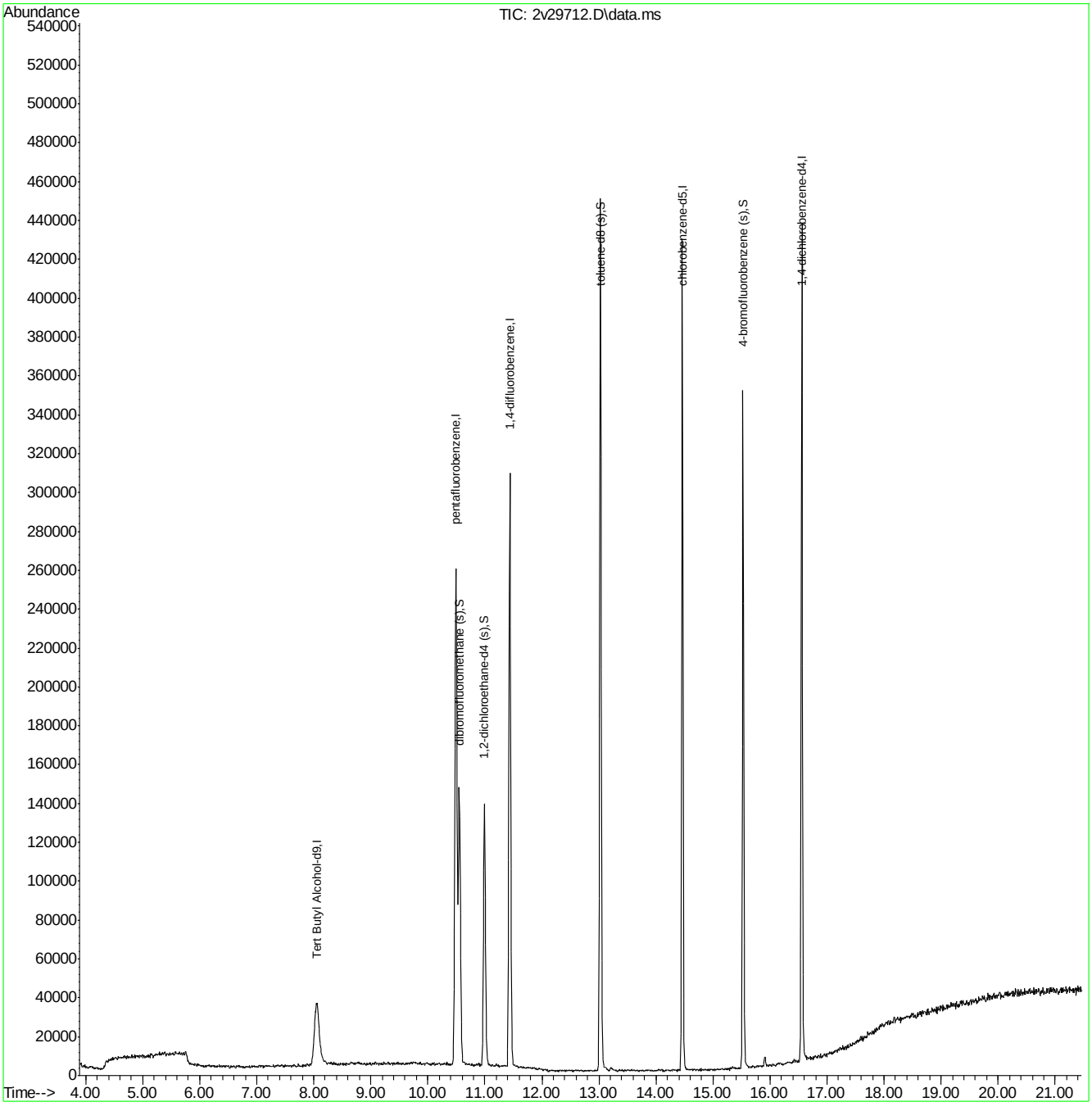
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2v29712.D
Acq On : 4 Feb 2016 9:45 am
Operator : HeeEunA
Sample : mb
Misc : MS98039,V2V1176,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 04 15:56:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2V1156.M
Quant Title : Method 8260
QLast Update : Wed Jan 13 09:14:44 2016
Response via : Initial Calibration



M2V1156.M Fri Feb 05 12:02:54 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2v29862.D
Acq On : 9 Feb 2016 9:49 am
Operator : HeeEunA
Sample : mb
Misc : MS98203,V2V1180,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 09 13:56:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2V1156.M
Quant Title : Method 8260
QLast Update : Wed Jan 13 09:14:44 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.055	65	102441	500.00	ug/L	0.00
5) pentafluorobenzene	10.493	168	208883	50.00	ug/L	-0.01
51) 1,4-difluorobenzene	11.437	114	255243	50.00	ug/L	-0.01
81) chlorobenzene-d5	14.462	117	201828	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.559	152	92093	50.00	ug/L	0.00
System Monitoring Compounds						
45) dibromofluoromethane (s)	10.556	113	108506	53.80	ug/L	-0.01
Spiked Amount 50.000	Range 79 - 120		Recovery = 107.60%			
46) 1,2-dichloroethane-d4 (s)	10.991	65	109248	54.09	ug/L	-0.01
Spiked Amount 50.000	Range 72 - 123		Recovery = 108.18%			
73) toluene-d8 (s)	13.025	98	308442	53.09	ug/L	-0.01
Spiked Amount 50.000	Range 78 - 119		Recovery = 106.18%			
98) 4-bromofluorobenzene (s)	15.526	95	103635	49.84	ug/L	-0.01
Spiked Amount 50.000	Range 74 - 119		Recovery = 99.68%			

Target Compounds Qvalue

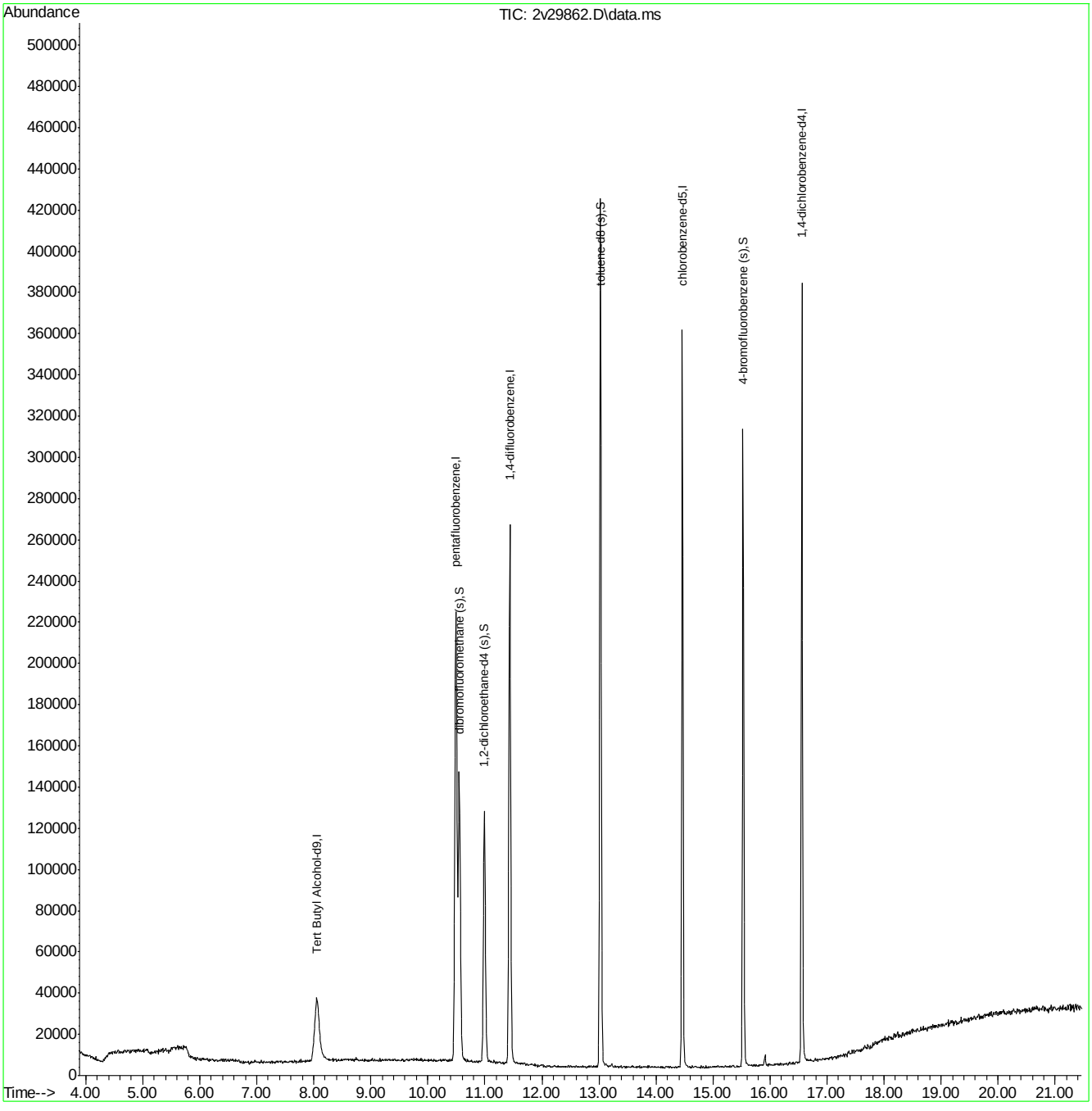
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC13575

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : 2v29862.D
Acq On : 9 Feb 2016 9:49 am
Operator : HeeEunA
Sample : mb
Misc : MS98203,V2V1180,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 09 13:56:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2V1156.M
Quant Title : Method 8260
QLast Update : Wed Jan 13 09:14:44 2016
Response via : Initial Calibration



M2V1156.M Tue Feb 09 14:35:03 2016 RPT1 Page: 2

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91010-MB1	P102434.D	1	02/05/16	AD	02/05/16	OP91010	EP4494

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC13575-1, JC13575-3

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	2.0	0.82	ug/l	
	3&4-Methylphenol	ND	2.0	0.67	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.23	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.26	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	0.42	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.36	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.22	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.46	ug/l	
110-86-1	Pyridine	ND	2.0	0.27	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	45%	14-88%
4165-62-2	Phenol-d5	28%	10-110%
118-79-6	2,4,6-Tribromophenol	97%	39-149%
4165-60-0	Nitrobenzene-d5	83%	32-128%
321-60-8	2-Fluorobiphenyl	79%	35-119%
1718-51-0	Terphenyl-d14	80%	10-126%

Method Blank Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91010-MB1	3P50577.D	1	02/05/16	JJ	02/05/16	OP91010	E3P2295

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC13575-1, JC13575-3

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	2.0	0.82	ug/l	
	3&4-Methylphenol	ND	2.0	0.67	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.23	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.26	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	0.42	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.36	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.22	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.46	ug/l	
110-86-1	Pyridine	ND	2.0	0.27	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	37%	14-88%
4165-62-2	Phenol-d5	26%	10-110%
118-79-6	2,4,6-Tribromophenol	89%	39-149%
4165-60-0	Nitrobenzene-d5	83%	32-128%
321-60-8	2-Fluorobiphenyl	78%	35-119%
1718-51-0	Terphenyl-d14	81%	10-126%

Leachate Blank Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91010-LB12	3P50579.D	1	02/05/16	JJ	02/05/16	OP91010	E3P2295

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC13575-1, JC13575-3

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	20	8.2	ug/l	
	3&4-Methylphenol	ND	20	6.7	ug/l	
87-86-5	Pentachlorophenol	ND	100	14	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	15	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	14	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	2.3	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	20	2.6	ug/l	
118-74-1	Hexachlorobenzene	ND	20	4.2	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	3.6	ug/l	
67-72-1	Hexachloroethane	ND	50	2.2	ug/l	
98-95-3	Nitrobenzene	ND	20	4.6	ug/l	
110-86-1	Pyridine	ND	20	2.7	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	43%	14-88%
4165-62-2	Phenol-d5	30%	10-110%
118-79-6	2,4,6-Tribromophenol	97%	39-149%
4165-60-0	Nitrobenzene-d5	92%	32-128%
321-60-8	2-Fluorobiphenyl	87%	35-119%
1718-51-0	Terphenyl-d14	87%	10-126%

Blank Spike Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91010-BS1	P102435.D	1	02/05/16	AD	02/05/16	OP91010	EP4494

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC13575-1, JC13575-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-48-7	2-Methylphenol	500	367	73	42-103
	3&4-Methylphenol	500	332	66	39-110
87-86-5	Pentachlorophenol	500	305	61	30-136
95-95-4	2,4,5-Trichlorophenol	500	401	80	55-116
88-06-2	2,4,6-Trichlorophenol	500	442	88	56-115
106-46-7	1,4-Dichlorobenzene	500	401	80	39-110
121-14-2	2,4-Dinitrotoluene	500	468	94	57-122
118-74-1	Hexachlorobenzene	500	487	97	49-122
87-68-3	Hexachlorobutadiene	500	496	99	24-112
67-72-1	Hexachloroethane	500	461	92	31-107
98-95-3	Nitrobenzene	500	457	91	44-116
110-86-1	Pyridine	500	239	48	10-110

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	52%	14-88%
4165-62-2	Phenol-d5	35%	10-110%
118-79-6	2,4,6-Tribromophenol	110%	39-149%
4165-60-0	Nitrobenzene-d5	100%	32-128%
321-60-8	2-Fluorobiphenyl	86%	35-119%
1718-51-0	Terphenyl-d14	83%	10-126%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91010-BS1	3P50580.D	1	02/05/16	JJ	02/05/16	OP91010	E3P2295

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC13575-1, JC13575-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-48-7	2-Methylphenol	500	349	70	42-103
	3&4-Methylphenol	500	296	59	39-110
87-86-5	Pentachlorophenol	500	350	70	30-136
95-95-4	2,4,5-Trichlorophenol	500	405	81	55-116
88-06-2	2,4,6-Trichlorophenol	500	414	83	56-115
106-46-7	1,4-Dichlorobenzene	500	373	75	39-110
121-14-2	2,4-Dinitrotoluene	500	497	99	57-122
118-74-1	Hexachlorobenzene	500	434	87	49-122
87-68-3	Hexachlorobutadiene	500	404	81	24-112
67-72-1	Hexachloroethane	500	386	77	31-107
98-95-3	Nitrobenzene	500	412	82	44-116
110-86-1	Pyridine	500	217	43	10-110

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	48%	14-88%
4165-62-2	Phenol-d5	34%	10-110%
118-79-6	2,4,6-Tribromophenol	102%	39-149%
4165-60-0	Nitrobenzene-d5	86%	32-128%
321-60-8	2-Fluorobiphenyl	83%	35-119%
1718-51-0	Terphenyl-d14	85%	10-126%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91010-MS	3P50588.D	1	02/06/16	JJ	02/05/16	OP91010	E3P2295
OP91010-MSD	3P50589.D	1	02/06/16	JJ	02/05/16	OP91010	E3P2295
JC13575-1	3P50584.D	1	02/06/16	JJ	02/05/16	OP91010	E3P2295

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC13575-1, JC13575-3

CAS No.	Compound	JC13575-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-48-7	2-Methylphenol	ND		500	271	54	500	318	64	16	47-112/18
	3&4-Methylphenol	18.9	J	500	253	47	500	288	54	13	44-113/19
87-86-5	Pentachlorophenol	ND		500	182	36	500	318	64	54* [a]	25-151/25
95-95-4	2,4,5-Trichlorophenol	ND		500	307	61	500	378	76	21* [a]	51-124/20
88-06-2	2,4,6-Trichlorophenol	ND		500	302	60	500	375	75	22* [a]	53-120/21
106-46-7	1,4-Dichlorobenzene	ND		500	270	54	500	318	64	16	40-105/22
121-14-2	2,4-Dinitrotoluene	ND		500	378	76	500	463	93	20	54-123/27
118-74-1	Hexachlorobenzene	ND		500	320	64	500	394	79	21	46-125/24
87-68-3	Hexachlorobutadiene	ND		500	294	59	500	336	67	13	26-121/24
67-72-1	Hexachloroethane	ND		500	281	56	500	326	65	15	35-111/26
98-95-3	Nitrobenzene	ND		500	306	61	500	369	74	19	35-130/25
110-86-1	Pyridine	ND		500	138	28	500	159	32	14	12-102/41

CAS No.	Surrogate Recoveries	MS	MSD	JC13575-1	Limits
367-12-4	2-Fluorophenol	36%	44%	43%	14-88%
4165-62-2	Phenol-d5	27%	33%	31%	10-110%
118-79-6	2,4,6-Tribromophenol	75%	93%	94%	39-149%
4165-60-0	Nitrobenzene-d5	63%	78%	86%	32-128%
321-60-8	2-Fluorobiphenyl	62%	76%	77%	35-119%
1718-51-0	Terphenyl-d14	66%	79%	84%	10-126%

(a) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Leachate Spike Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP91010-LS6	3P50588.D	1	02/06/16	JJ	02/05/16	OP91010	E3P2295
JC13575-1	3P50584.D	1	02/06/16	JJ	02/05/16	OP91010	E3P2295

The QC reported here applies to the following samples: **Method:** SW846 8270D

JC13575-1, JC13575-3

CAS No.	Compound	JC13575-1 ug/l	Q	Spike ug/l	LS ug/l	LS %	Limits
95-48-7	2-Methylphenol	ND		500	271	54	47-112
	3&4-Methylphenol	18.9	J	500	253	47	44-113
87-86-5	Pentachlorophenol	ND		500	182	36	25-151
95-95-4	2,4,5-Trichlorophenol	ND		500	307	61	51-124
88-06-2	2,4,6-Trichlorophenol	ND		500	302	60	53-120
106-46-7	1,4-Dichlorobenzene	ND		500	270	54	40-105
121-14-2	2,4-Dinitrotoluene	ND		500	378	76	54-123
118-74-1	Hexachlorobenzene	ND		500	320	64	46-125
87-68-3	Hexachlorobutadiene	ND		500	294	59	26-121
67-72-1	Hexachloroethane	ND		500	281	56	35-111
98-95-3	Nitrobenzene	ND		500	306	61	35-130
110-86-1	Pyridine	ND		500	138	28	12-102

CAS No.	Surrogate Recoveries	LS	JC13575-1	Limits
367-12-4	2-Fluorophenol	36%	43%	14-88%
4165-62-2	Phenol-d5	27%	31%	10-110%
118-79-6	2,4,6-Tribromophenol	75%	94%	39-149%
4165-60-0	Nitrobenzene-d5	63%	86%	32-128%
321-60-8	2-Fluorobiphenyl	62%	77%	35-119%
1718-51-0	Terphenyl-d14	66%	84%	10-126%

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample: E3P2260-DFTPP
Lab File ID: 3P49876.D
Instrument ID: GCMS3P
Injection Date: 01/12/16
Injection Time: 10:07

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	39274	33.1		Pass
68	Less than 2.0% of mass 69	341	0.29	(0.64) [a]	Pass
69	Mass 69 relative abundance	53118	44.7		Pass
70	Less than 2.0% of mass 69	73	0.06	(0.14) [a]	Pass
127	40.0 - 60.0% of mass 198	57503	48.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	118829	100.0		Pass
199	5.0 - 9.0% of mass 198	8005	6.74		Pass
275	10.0 - 30.0% of mass 198	25086	21.1		Pass
365	1.0 - 100.0% of mass 198	3203	2.70		Pass
441	Present, but less than mass 443	16114	13.6	(86.6) [b]	Pass
442	40.0 - 100.0% of mass 198	102115	85.9		Pass
443	17.0 - 23.0% of mass 442	18599	15.7	(18.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3P2260-ICC2260	3P49878.D	01/12/16	10:59	00:52	Initial cal 50
E3P2260-IC2260	3P49879.D	01/12/16	11:27	01:20	Initial cal 25
E3P2260-IC2260	3P49880.D	01/12/16	11:54	01:47	Initial cal 80
E3P2260-IC2260	3P49881.D	01/12/16	12:21	02:14	Initial cal 10
E3P2260-IC2260	3P49882.D	01/12/16	12:48	02:41	Initial cal 100
E3P2260-IC2260	3P49883.D	01/12/16	13:15	03:08	Initial cal 5
E3P2260-IC2260	3P49884.D	01/12/16	13:42	03:35	Initial cal 2
E3P2260-IC2260	3P49885.D	01/12/16	14:09	04:02	Initial cal 1

Instrument Performance Check (DFTPP)

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample: E3P2261-DFTPP
Lab File ID: 3P49886.D
Instrument ID: GCMS3P
Injection Date: 01/12/16
Injection Time: 15:15

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	38907	30.2		Pass
68	Less than 2.0% of mass 69	661	0.51	(1.24) [a]	Pass
69	Mass 69 relative abundance	53516	41.6		Pass
70	Less than 2.0% of mass 69	208	0.16	(0.39) [a]	Pass
127	40.0 - 60.0% of mass 198	60923	47.3		Pass
197	Less than 1.0% of mass 198	205	0.16		Pass
198	Base peak, 100% relative abundance	128763	100.0		Pass
199	5.0 - 9.0% of mass 198	8613	6.69		Pass
275	10.0 - 30.0% of mass 198	27945	21.7		Pass
365	1.0 - 100.0% of mass 198	3669	2.85		Pass
441	Present, but less than mass 443	18273	14.2	(79.7) [b]	Pass
442	40.0 - 100.0% of mass 198	123557	96.0		Pass
443	17.0 - 23.0% of mass 442	22921	17.8	(18.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3P2261-ICC2261	3P49888.D	01/12/16	15:53	00:38	Initial cal 50
E3P2261-IC2261	3P49889.D	01/12/16	16:21	01:06	Initial cal 25
E3P2261-IC2261	3P49890.D	01/12/16	16:49	01:34	Initial cal 80
E3P2261-IC2261	3P49891.D	01/12/16	17:17	02:02	Initial cal 10
E3P2261-IC2261	3P49892.D	01/12/16	17:46	02:31	Initial cal 100
E3P2261-IC2261	3P49893.D	01/12/16	18:14	02:59	Initial cal 5
E3P2261-IC2261	3P49894.D	01/12/16	18:41	03:26	Initial cal 2
E3P2261-IC2261	3P49895.D	01/12/16	19:08	03:53	Initial cal 1
E3P2261-ICV2260	3P49896.D	01/12/16	19:35	04:20	Initial cal verification 50
E3P2261-ICV2260	3P49898.D	01/12/16	20:28	05:13	Initial cal verification 50
E3P2261-ICV2261	3P49899A.D	01/12/16	20:55	05:40	Initial cal verification 50
E3P2261-ICV2260	3P49899.D	01/12/16	20:55	05:40	Initial cal verification 50
E3P2261-ICV2260	3P49900.D	01/12/16	21:22	06:07	Initial cal verification 50
E3P2261-ICV2261	3P49900A.D	01/12/16	21:22	06:07	Initial cal verification 50
E3P2261-ICV2261	3P49901.D	01/12/16	21:49	06:34	Initial cal verification 50
E3P2261-ICV2260	3P49902.D	01/12/16	22:15	07:00	Initial cal verification 50
E3P2261-ICV2261	3P49902A.D	01/12/16	22:15	07:00	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample: E3P2262-DFTPP
Lab File ID: 3P49905.D
Instrument ID: GCMS3P
Injection Date: 01/13/16
Injection Time: 10:43

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	37429	31.0		Pass
68	Less than 2.0% of mass 69	564	0.47	(1.11) [a]	Pass
69	Mass 69 relative abundance	50944	42.2		Pass
70	Less than 2.0% of mass 69	275	0.23	(0.54) [a]	Pass
127	40.0 - 60.0% of mass 198	57139	47.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	120757	100.0		Pass
199	5.0 - 9.0% of mass 198	8346	6.91		Pass
275	10.0 - 30.0% of mass 198	26692	22.1		Pass
365	1.0 - 100.0% of mass 198	3560	2.95		Pass
441	Present, but less than mass 443	17862	14.8	(81.5) [b]	Pass
442	40.0 - 100.0% of mass 198	118053	97.8		Pass
443	17.0 - 23.0% of mass 442	21916	18.1	(18.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3P2262-ICV2260	3P49906.D	01/13/16	10:56	00:13	Initial cal verification 50
E3P2262-ICV2260	3P49909.D	01/13/16	12:22	01:39	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample: E3P2295-DFTPP
Lab File ID: 3P50573.D
Instrument ID: GCMS3P
Injection Date: 02/05/16
Injection Time: 20:11

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	38802	36.0		Pass
68	Less than 2.0% of mass 69	572	0.53	(1.11) [a]	Pass
69	Mass 69 relative abundance	51597	47.9		Pass
70	Less than 2.0% of mass 69	329	0.31	(0.64) [a]	Pass
127	40.0 - 60.0% of mass 198	54973	51.0		Pass
197	Less than 1.0% of mass 198	494	0.46		Pass
198	Base peak, 100% relative abundance	107744	100.0		Pass
199	5.0 - 9.0% of mass 198	7394	6.86		Pass
275	10.0 - 30.0% of mass 198	26163	24.3		Pass
365	1.0 - 100.0% of mass 198	4771	4.43		Pass
441	Present, but less than mass 443	16109	15.0	(84.9) [b]	Pass
442	40.0 - 100.0% of mass 198	103405	96.0		Pass
443	17.0 - 23.0% of mass 442	18985	17.6	(18.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3P2295-CC2260	3P50574.D	02/05/16	20:24	00:13	Continuing cal 25
OP90922-MB2	3P50577.D	02/05/16	21:49	01:38	Method Blank
OP91010-MB1	3P50577.D	02/05/16	21:49	01:38	Method Blank
OP90922-LB11	3P50578.D	02/05/16	22:16	02:05	Leachate Blank
OP91010-LB12	3P50579.D	02/05/16	22:43	02:32	Leachate Blank
OP91010-BS1	3P50580.D	02/05/16	23:10	02:59	Blank Spike
OP90922-BS2	3P50580.D	02/05/16	23:10	02:59	Blank Spike
ZZZZZZ	3P50581.D	02/05/16	23:37	03:26	(unrelated sample)
ZZZZZZ	3P50582.D	02/06/16	00:04	03:53	(unrelated sample)
ZZZZZZ	3P50583.D	02/06/16	00:31	04:20	(unrelated sample)
JC13575-1	3P50584.D	02/06/16	00:58	04:47	COMPOSITE SOILPILE AI020216 BORINGS: AL02
JC13575-3	3P50585.D	02/06/16	01:25	05:14	COMPOSITE SOILPILE AI020216 BORINGS: AL02
ZZZZZZ	3P50586.D	02/06/16	01:51	05:40	(unrelated sample)
ZZZZZZ	3P50587.D	02/06/16	02:18	06:07	(unrelated sample)
OP91010-LS6	3P50588.D	02/06/16	02:45	06:34	Leachate Spike
OP91010-MS	3P50588.D	02/06/16	02:45	06:34	Matrix Spike
OP91010-MSD	3P50589.D	02/06/16	03:11	07:00	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample: EP4411-DFTPP
Lab File ID: P100854.D
Instrument ID: GCMSP
Injection Date: 12/04/15
Injection Time: 20:16

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	16166	30.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	20498	38.3		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	25336	47.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	53544	100.0		Pass
199	5.0 - 9.0% of mass 198	3567	6.66		Pass
275	10.0 - 30.0% of mass 198	9294	17.4		Pass
365	1.0 - 100.0% of mass 198	868	1.62		Pass
441	Present, but less than mass 443	5368	10.0	(76.2) [b]	Pass
442	40.0 - 100.0% of mass 198	34370	64.2		Pass
443	17.0 - 23.0% of mass 442	7045	13.2	(20.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP4411-IC4411	P100855.D	12/04/15	20:37	00:21	Initial cal 100
EP4411-IC4411	P100856.D	12/04/15	21:06	00:50	Initial cal 80
EP4411-ICC4411	P100857.D	12/04/15	21:35	01:19	Initial cal 50
EP4411-IC4411	P100858.D	12/04/15	22:05	01:49	Initial cal 25
EP4411-IC4411	P100859.D	12/04/15	22:34	02:18	Initial cal 10
EP4411-IC4411	P100860.D	12/04/15	23:03	02:47	Initial cal 5
EP4411-IC4411	P100861.D	12/04/15	23:33	03:17	Initial cal 2
EP4411-IC4411	P100862.D	12/05/15	00:02	03:46	Initial cal 1

Instrument Performance Check (DFTPP)

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample: EP4412-DFTPP
Lab File ID: P100865.D
Instrument ID: GCMSP
Injection Date: 12/07/15
Injection Time: 08:47

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	26011	30.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	32120	37.5		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	39957	46.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	85698	100.0		Pass
199	5.0 - 9.0% of mass 198	5720	6.67		Pass
275	10.0 - 30.0% of mass 198	14827	17.3		Pass
365	1.0 - 100.0% of mass 198	1242	1.45		Pass
441	Present, but less than mass 443	7793	9.09	(78.9) [b]	Pass
442	40.0 - 100.0% of mass 198	49386	57.6		Pass
443	17.0 - 23.0% of mass 442	9882	11.5	(20.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP4412-IC4412	P100866.D	12/07/15	09:10	00:23	Initial cal 100
EP4412-IC4412	P100867.D	12/07/15	09:43	00:56	Initial cal 80
EP4412-ICC4412	P100868.D	12/07/15	10:13	01:26	Initial cal 50
EP4412-IC4412	P100869.D	12/07/15	10:42	01:55	Initial cal 25
EP4412-IC4412	P100870.D	12/07/15	11:12	02:25	Initial cal 10
EP4412-IC4412	P100871.D	12/07/15	11:42	02:55	Initial cal 5
EP4412-IC4412	P100872.D	12/07/15	12:12	03:25	Initial cal 2
EP4412-IC4412	P100873.D	12/07/15	12:42	03:55	Initial cal 1
EP4412-ICV4411	P100874.D	12/07/15	13:12	04:25	Initial cal verification 50
EP4412-ICV4412	P100874A.D	12/07/15	13:12	04:25	Initial cal verification 50
EP4412-ICV4412	P100875A.D	12/07/15	13:42	04:55	Initial cal verification 50
EP4412-ICV4411	P100875.D	12/07/15	13:42	04:55	Initial cal verification 50
EP4412-ICV4411	P100876.D	12/07/15	14:11	05:24	Initial cal verification 50
EP4412-ICV4411	P100877.D	12/07/15	14:41	05:54	Initial cal verification 50
EP4412-ICV4411	P100878.D	12/07/15	15:11	06:24	Initial cal verification 50
EP4412-ICV4412	P100879.D	12/07/15	15:40	06:53	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample: EP4494-DFTPP
Lab File ID: P102430.D
Instrument ID: GCMSP
Injection Date: 02/05/16
Injection Time: 11:30

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	28739	48.3		Pass
68	Less than 2.0% of mass 69	505	0.85	(1.43) [a]	Pass
69	Mass 69 relative abundance	35434	59.5		Pass
70	Less than 2.0% of mass 69	125	0.21	(0.35) [a]	Pass
127	40.0 - 60.0% of mass 198	33407	56.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	59525	100.0		Pass
199	5.0 - 9.0% of mass 198	3559	5.98		Pass
275	10.0 - 30.0% of mass 198	10864	18.3		Pass
365	1.0 - 100.0% of mass 198	1254	2.11		Pass
441	Present, but less than mass 443	4930	8.28	(88.2) [b]	Pass
442	40.0 - 100.0% of mass 198	28353	47.6		Pass
443	17.0 - 23.0% of mass 442	5591	9.39	(19.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP4494-CC4411	P102431.D	02/05/16	11:42	00:12	Continuing cal 50
EP4494-CC4412	P102432.D	02/05/16	12:11	00:41	Continuing cal 50
OP90922-MB2	P102434.D	02/05/16	13:10	01:40	Method Blank
OP91010-MB1	P102434.D	02/05/16	13:10	01:40	Method Blank
OP90951-MB2	P102434.D	02/05/16	13:10	01:40	Method Blank
OP91010-BS1	P102435.D	02/05/16	13:39	02:09	Blank Spike
OP90951-BS2	P102435.D	02/05/16	13:39	02:09	Blank Spike
OP90922-BS2	P102435.D	02/05/16	13:39	02:09	Blank Spike
ZZZZZZ	P102436.D	02/05/16	14:08	02:38	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Check Std:	E3P2295-CC2260	**Injection Date:**	02/05/16
Lab File ID:	3P50574.D	**Injection Time:**	20:24
Instrument ID:	GCMS3P	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	170661	4.68	552406	5.61	281088	7.02	453738	8.90	461293	14.17	392441	17.23
Upper Limit [a]	341322	5.18	1104812	6.11	562176	7.52	907476	9.40	922586	14.67	784882	17.73
Lower Limit [b]	85331	4.18	276203	5.11	140544	6.52	226869	8.40	230647	13.67	196221	16.73

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP90922-MB2	210330	4.68	768357	5.61	414320	7.02	691558	8.90	695791	14.17	639269	17.23
OP91010-MB1	210330	4.68	768357	5.61	414320	7.02	691558	8.90	695791	14.17	639269	17.23
OP90922-LB11	185682	4.68	685650	5.61	352926	7.02	576876	8.90	562598	14.17	505223	17.23
OP91010-LB12	177052	4.68	661862	5.61	339598	7.02	575973	8.90	567477	14.17	517149	17.23
OP90922-BS2	147628	4.68	551552	5.61	267805	7.02	460444	8.90	552261	14.17	462545	17.23
OP91010-BS1	147628	4.68	551552	5.61	267805	7.02	460444	8.90	552261	14.17	462545	17.23
ZZZZZZ	176261	4.68	642533	5.61	341484	7.02	559346	8.90	548106	14.17	500586	17.23
ZZZZZZ	159132	4.68	600032	5.61	311322	7.02	527348	8.90	531519	14.17	495529	17.23
ZZZZZZ	144464	4.68	537050	5.61	282732	7.02	463803	8.90	472196	14.17	433530	17.23
JC13575-1	209384	4.68	795098	5.61	435422	7.02	712713	8.90	731576	14.17	684070	17.23
JC13575-3	173039	4.68	644607	5.61	341064	7.02	564588	8.90	555936	14.17	521216	17.23
ZZZZZZ	159351	4.68	583665	5.61	311488	7.02	510536	8.90	507803	14.17	462587	17.23
ZZZZZZ	95571	4.68	306392	5.61	145434	7.02	237958	8.90	258336	14.17	257045	17.23
OP91010-LS6	110238	4.68	413601	5.61	197014	7.02	336251	8.90	366313	14.17	308081	17.23
OP91010-MS	110238	4.68	413601	5.61	197014	7.02	336251	8.90	366313	14.17	308081	17.23
OP91010-MSD	149225	4.68	550742	5.61	263086	7.02	447137	8.90	517171	14.17	428205	17.23

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Check Std:	EP4494-CC4411	**Injection Date:**	02/05/16
Lab File ID:	P102431.D	**Injection Time:**	11:42
Instrument ID:	GCMSP	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	50205	4.28	202304	6.03	111992	8.74	168450	11.11	186074	15.82	156648	18.39
Upper Limit [a]	100410	4.78	404608	6.53	223984	9.24	336900	11.61	372148	16.32	313296	18.89
Lower Limit [b]	25103	3.78	101152	5.53	55996	8.24	84225	10.61	93037	15.32	78324	17.89

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP90951-MB2	41631	4.28	168311	6.02	94184	8.74	147488	11.10	140495	15.81	129730	18.38
OP91010-MB1	41631	4.28	168311	6.02	94184	8.74	147488	11.10	140495	15.81	129730	18.38
OP90922-MB2	41631	4.28	168311	6.02	94184	8.74	147488	11.10	140495	15.81	129730	18.38
OP90951-BS2	50420	4.28	202704	6.03	119390	8.74	177020	11.11	201316	15.82	174792	18.39
OP90922-BS2	50420	4.28	202704	6.03	119390	8.74	177020	11.11	201316	15.82	174792	18.39
OP91010-BS1	50420	4.28	202704	6.03	119390	8.74	177020	11.11	201316	15.82	174792	18.39
ZZZZZZ	41267	4.28	157121	6.02	87623	8.74	136868	11.11	123731	15.81	118226	18.38

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Method: SW846 8270D **Matrix:** LEACHATE

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JC13575-1	3P50584.D	43	31	94	86	77	84
JC13575-3	3P50585.D	41	30	98	88	83	89
OP91010-BS1	P102435.D	52	35	110	100	86	83
OP91010-BS1	3P50580.D	48	34	102	86	83	85
OP91010-LB12	3P50579.D	43	30	97	92	87	87
OP91010-LS6	3P50588.D	36	27	75	63	62	66
OP91010-MB1	P102434.D	45	28	97	83	79	80
OP91010-MB1	3P50577.D	37	26	89	83	78	81
OP91010-MS	3P50588.D	36	27	75	63	62	66
OP91010-MSD	3P50589.D	44	33	93	78	76	79

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	14-88%
S2 = Phenol-d5	10-110%
S3 = 2,4,6-Tribromophenol	39-149%
S4 = Nitrobenzene-d5	32-128%
S5 = 2-Fluorobiphenyl	35-119%
S6 = Terphenyl-d14	10-126%

Initial Calibration Summary

Job Number: JC13575 **Sample:** E3P2260-ICC2260
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 3P49878.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Response Factor Report MSGC3P

Method : C:\MSDCHEM\1\METHODS\M3P2260.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Jan 13 09:21:20 2016
Response via : Initial Calibration

Calibration Files
2 =3p49884.D 5 =3p49883.D 25 =3p49879.D 80 =3p49880.D
100 =3p49882.D 50 =3p49878.D 1 =3p49885.D 10 =3p49881.D

Compound	2	5	25	80	100	50	1	10	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	----------	----------	----------	----------	ISTD	----------	----------	----------		
2) 1,4-Dioxane	0.799	0.886	0.883	1.042	1.025	1.001	0.939	0.820	0.924	10.03
3) Pyridine	2.161	2.249	2.185	2.481	2.407	2.493	2.507	2.106	2.324	7.14
4) N-Nitrosodim	0.899	0.960	1.000	1.105	1.069	1.105	1.083	0.871	1.012	9.23
5) 2-Fluorophen	1.654	1.769	1.766	1.998	1.918	1.960	1.733	1.660	1.807	7.42
6) Indene	2.695	2.833	2.483	2.496	2.370	2.510	3.081	2.556	2.628	8.81
7) Cumene	3.983	4.216	4.093	4.533	4.336	4.409	4.489	3.968	4.253	5.23
8) Phenol-d5	2.115	2.218	2.155	2.348	2.275	2.378	2.231	2.060	2.223	4.98
9) Phenol	2.257	2.390	2.285	2.584	2.466	2.503	2.514	2.235	2.404	5.50
10) Aniline	2.658	2.750	2.335	2.514	2.372	2.397	2.962	2.545	2.567	8.35
11) bis(2-Chloro	1.671	1.793	1.656	1.627	1.553	1.685	1.886	1.621	1.687	6.26
12) 2-Chlorophen	1.717	1.790	1.617	1.645	1.562	1.629	1.963	1.643	1.696	7.54
13) Decane	2.189	2.250	2.111	1.904	1.771	2.012	2.364	2.094	2.087	9.11
14) 1,3-Dichloro	1.813	1.839	1.620	1.632	1.561	1.609	1.992	1.655	1.715	8.71
15) 1,4-Dichloro	1.698	1.792	1.573	1.610	1.549	1.598	1.904	1.611	1.667	7.41
16) Benzyl alcoh	0.978	1.069	0.944	0.965	0.918	0.984	1.081	0.945	0.986	5.99
17) 1,2-Dichloro	1.587	1.677	1.459	1.451	1.374	1.429	1.852	1.474	1.538	10.33
18) Acetophenone	2.180	2.271	1.902	1.895	1.767	1.919	2.473	1.972	2.048	11.59
19) 2-Methylphen	1.355	1.481	1.241	1.277	1.200	1.284	1.526	1.278	1.330	8.73
20) 2,2'-oxybis(	2.656	2.778	2.410	2.127	1.955	2.356	3.006	2.475	2.470	13.83
21) 3&4-Methylph	1.451	1.537	1.322	1.426	1.325	1.395	1.630	1.351	1.429	7.58
22) n-Nitroso-di	1.168	1.217	1.070	1.021	0.951	1.073	1.333	1.079	1.114	10.80
23) Hexachloroet	0.514	0.528	0.459	0.483	0.463	0.455	0.565	0.479	0.493	7.95
24) I Naphthalene-d8	----------	----------	----------	----------	ISTD	----------	----------	----------		
25) Nitrobenzene	0.462	0.476	0.448	0.436	0.428	0.456	0.488	0.444	0.455	4.42
26) Nitrobenzene	0.471	0.487	0.449	0.424	0.416	0.447	0.504	0.452	0.456	6.58
27) Quinoline	0.774	0.788	0.709	0.715	0.724	0.739	0.853	0.703	0.751	6.87
28) Isophorone	0.798	0.834	0.770	0.771	0.762	0.811	0.850	0.766	0.795	4.22
29) 2-Nitropheno	0.192	0.216	0.209	0.223	0.222	0.220	0.194	0.198	0.209	6.16
30) 2,4-Dimethyl	0.382	0.387	0.330	0.355	0.353	0.354	0.415	0.352	0.366	7.37
31) Benzoic acid	0.209	0.256	0.264	0.287	0.288	0.284	0.242	0.250	0.260	10.41
32) bis(2-Chloro	0.536	0.544	0.487	0.468	0.466	0.490	0.594	0.494	0.510	8.72
33) 2,4-Dichloro	0.308	0.320	0.301	0.300	0.301	0.300	0.333	0.288	0.306	4.67
34) 2,6-Dichloro	0.298	0.311	0.272	0.277	0.278	0.278	0.347	0.278	0.292	8.86
35) 1,3,5-Trichl	0.381	0.375	0.346	0.350	0.350	0.347	0.428	0.343	0.365	7.91
36) 1,2,4-Trichl	0.353	0.345	0.311	0.318	0.314	0.315	0.385	0.320	0.332	7.94
37) 1,2,3-Trichl	0.329	0.329	0.297	0.297	0.292	0.295	0.368	0.299	0.313	8.52
38) Naphthalene	1.169	1.169	1.063	1.047	1.037	1.042	1.314	1.082	1.115	8.66
39) 4-Chloroanil	0.502	0.511	0.455	0.457	0.449	0.459	0.554	0.470	0.482	7.64
40) 2,3-Dichloro	0.372	0.390	0.348	0.367	0.362	0.367	0.404	0.352	0.370	5.07
41) Caprolactam	0.101	0.117	0.109	0.116	0.112	0.117	0.111	0.107	0.111	5.06
42) Hexachlorobu	0.170	0.171	0.156	0.157	0.159	0.155	0.183	0.155	0.163	6.35
43) 4-Chloro-3-m	0.314	0.328	0.316	0.326	0.314	0.325	0.321	0.312	0.320	1.97
44) 2-Methylnaph	0.599	0.619	0.576	0.602	0.600	0.608	0.675	0.566	0.606	5.42
45) 1-Methylnaph	0.644	0.646	0.605	0.618	0.617	0.619	0.718	0.595	0.633	6.12

Initial Calibration Summary

Job Number: JC13575 **Sample:** E3P2260-ICC2260
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 3P49878.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

```
46) Dimethylnaph 0.596 0.613 0.556 0.564 0.576 0.581 0.658 0.566 0.589   5.69

47) I   Acenaphthene-d10      ----------------ISTD---------------------
48) Hexachlorocy 0.308 0.353 0.358 0.412 0.412 0.401       0.350 0.370  10.55
49) 2,4,6-Trichl 0.374 0.408 0.382 0.407 0.400 0.406 0.445 0.378 0.400   5.70
50) 2,4,5-Trichl 0.395 0.422 0.381 0.387 0.376 0.396 0.405 0.383 0.393   3.79
51) 2-Fluorobiph 1.454 1.406 1.289 1.269 1.245 1.283 1.605 1.320 1.359   9.02
52) 2-Chloronaph 1.302 1.322 1.178 1.130 1.097 1.182 1.520 1.233 1.246  10.87
53) Biphenyl     1.695 1.749 1.558 1.530 1.517 1.573 1.879 1.553 1.632   7.93
54) 2-Nitroanili 0.390 0.442 0.433 0.427 0.407 0.453 0.427 0.417 0.425   4.70
55) Dimethylphth 1.409 1.429 1.261 1.244 1.209 1.301 1.610 1.299 1.345   9.79
56) Acenaphthyle 1.990 2.100 1.901 1.962 1.887 1.971 2.148 1.904 1.983   4.81
57) 2,6-Dinitrot 0.238 0.266 0.266 0.288 0.281 0.288 0.234 0.255 0.264   7.96
58) 3-Nitroanili 0.343 0.390 0.368 0.391 0.380 0.395 0.327 0.358 0.369   6.68
59) Acenaphthene 1.255 1.297 1.161 1.224 1.207 1.234 1.400 1.174 1.244   6.15
60) 2,4-Dinitrop 0.061 0.099 0.134 0.174 0.174 0.170 0.113 0.100 0.128  32.89
            ---- Quadratic regression ----  Coefficient =  0.9982
              Response Ratio = -0.01621 + 0.16132 *A + 0.00354 *A^2

61) 4-Nitropheno 0.153 0.179 0.181 0.186 0.181 0.192 0.149 0.179 0.175   8.79
62) Dibenzofuran 1.729 1.731 1.551 1.555 1.499 1.576 1.941 1.600 1.648   8.79
63) 2,4-Dinitrot 0.304 0.350 0.355 0.389 0.371 0.388 0.279 0.342 0.347  11.23
64) 2,3,4,6-Tetr 0.279 0.302 0.287 0.319 0.319 0.310 0.274 0.285 0.297   5.95
65) Diethylphtha 1.370 1.460 1.331 1.379 1.313 1.402 1.507 1.320 1.385   5.00
66) Fluorene     1.346 1.399 1.286 1.358 1.302 1.389 1.415 1.292 1.348   3.77
67) 4-Chlorophen 0.605 0.627 0.561 0.605 0.587 0.607 0.638 0.576 0.601   4.24
68) 4-Nitroanili 0.350 0.390 0.372 0.380 0.372 0.393 0.320 0.364 0.367   6.44

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro- 0.063 0.091 0.111 0.132 0.131 0.127 0.057 0.091 0.100  29.57
            ---- Quadratic regression ----  Coefficient =  0.9993
              Response Ratio = -0.00475 + 0.12368 *A + 0.00417 *A^2

71) n-Nitrosodip 0.575 0.606 0.547 0.556 0.547 0.552 0.616 0.561 0.570   4.73
72) 1,2-Diphenyl 1.085 1.119 1.028 1.002 0.962 1.060 1.152 1.061 1.059   5.81
73) 2,4,6-Tribro 0.102 0.116 0.106 0.118 0.120 0.112 0.111 0.107 0.112   5.79
74) 4-Bromopheny 0.214 0.221 0.201 0.221 0.221 0.209 0.241 0.197 0.216   6.39
75) Hexachlorobe 0.257 0.265 0.238 0.259 0.258 0.247 0.294 0.244 0.258   6.67
76) Pentachlorop 0.132 0.155 0.152 0.188 0.187 0.180       0.147 0.163  13.46
77) Phenanthrene 1.188 1.214 1.098 1.135 1.116 1.132 1.369 1.105 1.170   7.69
78) Anthracene   1.125 1.173 1.098 1.148 1.114 1.085 1.183 1.093 1.127   3.29
79) Carbazole    1.150 1.196 1.098 1.164 1.162 1.155 1.219 1.115 1.157   3.39
80) Di-n-butylph 1.357 1.510 1.522 1.693 1.680 1.721 1.390 1.418 1.536   9.45
81) Fluoranthene 1.178 1.255 1.213 1.411 1.402 1.370 1.246 1.141 1.277   8.16
82) Octadecane   0.699 0.768 0.764 0.763 0.734 0.797 0.724 0.731 0.748   4.11

83) I   Chrysene-d12          ----------------ISTD---------------------
84) Pyrene       1.404 1.481 1.307 1.281 1.258 1.308 1.575 1.359 1.372   7.98
85) Terphenyl-d1 0.817 0.906 0.786 0.822 0.798 0.800 0.926 0.775 0.829   6.78
86) Butylbenzylp 0.584 0.692 0.713 0.746 0.717 0.756 0.583 0.646 0.680  10.02
87) Benzo[a]anth 1.234 1.229 1.134 1.190 1.151 1.161 1.329 1.107 1.192   5.95
88) 3,3'-Dichlor 0.391 0.437 0.434 0.447 0.439 0.442 0.372 0.418 0.423   6.40
89) Chrysene     1.162 1.182 1.052 1.033 0.999 1.016 1.368 1.097 1.114  10.99
90) bis(2-Ethylh 0.672 0.849 0.909 0.912 0.874 0.950       0.803 0.852  10.90

91) I   Perylene-d12          ----------------ISTD---------------------
92) Di-n-octylph 0.995 1.456 1.849 2.152 2.113 2.147 0.858 1.463 1.629  31.80
            ---- Quadratic regression ----  Coefficient =  0.9989
              Response Ratio = -0.09753 + 2.17700 *A + -0.00273 *A^2
```

8.9.1

8

Initial Calibration Summary

Job Number: JC13575 **Sample:** E3P2260-ICC2260
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 3P49878.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

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 93) Benzo[b]fluo 1.110 1.291 1.297 1.459 1.488 1.422 1.182 1.218 1.309  10.48
 94) Benzo[k]fluo 1.219 1.329 1.210 1.227 1.196 1.220 1.395 1.199 1.249   5.81
 95) Benzo[a]pyre 0.960 1.088 1.088 1.245 1.220 1.162 0.958 1.044 1.096   9.89
 96) Indeno[1,2,3 0.708 0.856 0.970 1.162 1.177 1.100 0.584 0.866 0.928  23.17
            ---- Quadratic regression ----  Coefficient =  0.9997
              Response Ratio = -0.02689 + 1.02763 *A + 0.06709 *A^2

 97) Dibenz(a,h)a 0.719 0.859 0.987 1.154       1.075 0.678 0.826 0.900  19.90
 98) Dibenz[a,h]a 0.793 0.961 1.015 1.143 1.151 1.090 0.888 0.966 1.001  12.53
 99) 7,12-Dimethy 0.481 0.572 0.539 0.641 0.638 0.608 0.475 0.523 0.560  11.78
100) Benzo[g,h,i] 0.979 1.093 1.105 1.235 1.233 1.164 1.062 1.065 1.117   7.94
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M3P2260.M         Wed Jan 13 12:54:22 2016
```

8.9.1

8

Initial Calibration Verification

Job Number: JC13575 **Sample:** E3P2261-ICV2260
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 3P49896.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\E3P2261\3p49896.D          Vial: 10
Acq On    : 12 Jan 2016   7:35 pm                    Operator: robertl1
Sample    : ICV2260-50                               Inst    : MSGC3P
Misc      : op90350,e3p2261                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3P2260.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Jan 13 09:21:20 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	125	0.00	4.89
5	S	2-Fluorophenol	1.807	1.627	10.0	104	0.00	3.91
8	S	Phenol-d5	2.223	1.959	11.9	103	0.00	4.62
24	I	Naphthalene-d8	1.000	1.000	0.0	135	0.00	5.83
25	S	Nitrobenzene-d5	0.455	0.424	6.8	125	0.00	5.30
47	I	Acenaphthene-d10	1.000	1.000	0.0	126	-0.01	7.31
51	S	2-Fluorobiphenyl	1.359	1.394	-2.6	137	0.00	6.66
		----------	AvgRF	CCRF	% Dev	----------		
69	I	Phenanthrene-d10	1.000	1.000	0.0	120	0.00	9.28
		----------	AvgRF	CCRF	% Dev	----------		
73	S	2,4,6-Tribromophenol	0.112	0.108	3.6	116	-0.01	8.24
83	I	Chrysene-d12	1.000	1.000	0.0	97	-0.02	14.64
85	S	Terphenyl-d14	0.829	0.913	-10.1	110	-0.01	12.39
91	I	Perylene-d12	1.000	1.000	0.0	99	0.00	17.72

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3p49888aa.D M3P2260.M Wed Jan 13 14:48:03 2016

8.9.2
8

Initial Calibration Verification

Job Number: JC13575 **Sample:** E3P2261-ICV2260
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 3P49898.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\E3P2261\3p49898.D          Vial: 12
Acq On    : 12 Jan 2016   8:28 pm                    Operator: robertl1
Sample    : ICV2260-50                               Inst    : MSGC3P
Misc      : op90350,e3p2261                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3P2260.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Jan 13 09:21:20 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	129	0.00	4.90
3	t	Pyridine	2.324	1.885	18.9	97	0.06	2.85
10		Aniline	2.567	2.471	3.7	133	0.00	4.65
16	t	Benzyl alcohol	0.986	0.920	6.7	120	0.00	5.00
24	I	Naphthalene-d8	1.000	1.000	0.0	148	0.00	5.83
39	t	4-Chloroaniline	0.482	0.397	17.6	128	0.00	5.87
44	t	2-Methylnaphthalene	0.606	0.500	17.5	122	0.00	6.36
47	I	Acenaphthene-d10	1.000	1.000	0.0	120	-0.01	7.31
54	t	2-Nitroaniline	0.425	0.427	-0.5	113	0.00	6.85
58	t	3-Nitroaniline	0.369	0.371	-0.5	113	0.00	7.25
62	t	Dibenzofuran	1.648	1.702	-3.3	129	-0.01	7.53
68	t	4-Nitroaniline	0.367	0.341	7.1	104	-0.02	7.94
69	I	Phenanthrene-d10	1.000	1.000	0.0	133	0.00	9.28
79	t	Carbazole	1.157	1.020	11.8	118	-0.01	9.67

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3p49888aa.D M3P2260.M Thu Jan 14 09:01:18 2016

8.9.3

8

Initial Calibration Verification

Job Number: JC13575 **Sample:** E3P2261-ICV2260
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 3P49899.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E3P2261\3p49899.D Vial: 13
Acq On : 12 Jan 2016 8:55 pm Operator: robertl1
Sample : ICV2260-50 Inst : MSGC3P
Misc : op90350,e3p2261 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M3P2260.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Jan 13 09:21:20 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	119	0.00	4.89
11	t	bis(2-Chloroethyl)ether	1.687	1.503	10.9	106	0.00	4.69
14	t	1,3-Dichlorobenzene	1.715	1.498	12.7	111	0.00	4.86
15	t	1,4-Dichlorobenzene	1.667	1.466	12.1	109	0.00	4.91
17	t	1,2-Dichlorobenzene	1.538	1.284	16.5	107	0.00	5.02
20	t	2,2'-oxybis(1-Chloropropa	2.470	1.739	29.6	88	0.00	5.09
22	t	n-Nitroso-di-n-propylamin	1.114	0.900	19.2	100	0.00	5.18
23	t	Hexachloroethane	0.493	0.447	9.3	117	0.00	5.27
24	I	Naphthalene-d8	1.000	1.000	0.0	115	0.00	5.83
26	t	Nitrobenzene	0.456	0.384	15.8	99	0.00	5.31
28	t	Isophorone	0.795	0.740	6.9	105	0.00	5.48
32	t	bis(2-Chloroethoxy)methan	0.510	0.440	13.7	104	0.00	5.63
36	t	1,2,4-Trichlorobenzene	0.332	0.304	8.4	111	0.00	5.78
38	t	Naphthalene	1.115	1.013	9.1	112	0.00	5.84
42	t	Hexachlorobutadiene	0.163	0.152	6.7	113	0.00	5.93
47	I	Acenaphthene-d10	1.000	1.000	0.0	116	-0.01	7.31
48	t	Hexachlorocyclopentadiene	0.370	0.304	17.8	88	0.00	6.49
52	t	2-Chloronaphthalene	1.246	1.181	5.2	116	0.00	6.77
55	t	Dimethylphthalate	1.345	1.206	10.3	107	-0.01	7.01
56	t	Acenaphthylene	1.983	1.798	9.3	106	-0.01	7.16
57	t	2,6-Dinitrotoluene	0.264	0.246	6.8	99	0.00	7.08
59	t	Acenaphthene	1.244	1.129	9.2	106	0.00	7.34
		----------	AvgRF	CCRF	% Dev	----------		
63	t	2,4-Dinitrotoluene	0.347	0.293	15.6	87	-0.01	7.49
65	t	Diethylphthalate	1.385	1.224	11.6	101	-0.01	7.78
66	t	Fluorene	1.348	1.216	9.8	101	0.00	7.93
67	t	4-Chlorophenyl-phenylethe	0.601	0.549	8.7	105	0.00	7.93
69	I	Phenanthrene-d10	1.000	1.000	0.0	120	0.00	9.28
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.570	0.445	21.9	97	-0.01	8.07
72	t	1,2-Diphenylhydrazine	1.059	0.848	19.9	96	-0.01	8.13
74	t	4-Bromophenyl-phenylether	0.216	0.187	13.4	107	0.00	8.59
75	t	Hexachlorobenzene	0.258	0.212	17.8	103	-0.01	8.69
77	t	Phenanthrene	1.170	1.020	12.8	108	-0.01	9.31
78	t	Anthracene	1.127	0.995	11.7	110	-0.01	9.39
80	t	Di-n-butylphthalate	1.536	1.353	11.9	94	0.00	10.39
81	t	Fluoranthene	1.277	1.159	9.2	101	-0.01	11.51

Initial Calibration Verification

Job Number: JC13575 **Sample:** E3P2261-ICV2260
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 3P49899.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

83	I	Chrysene-d12	1.000	1.000	0.0	105	-0.01	14.65
84	t	Pyrene	1.372	1.252	8.7	101	-0.01	11.97
86	t	Butylbenzylphthalate	0.680	0.626	7.9	87	0.00	13.57
87	t	Benzo[a]anthracene	1.192	1.082	9.2	98	-0.01	14.62
89	t	Chrysene	1.114	0.952	14.5	99	-0.01	14.70
90	t	bis(2-Ethylhexyl)phthalat	0.852	0.784	8.0	87	0.00	14.99
91	I	Perylene-d12	1.000	1.000	0.0	107	0.00	17.72
		----------	True	Calc.	% Drift	----------		
92	t	Di-n-octylphthalate	50.000	39.360	21.3	81	0.00	16.44
		----------	AvgRF	CCRF	% Dev	----------		
93	t	Benzo[b]fluoranthene	1.309	1.159	11.5	87	-0.01	16.96
94	t	Benzo[k]fluoranthene	1.249	1.182	5.4	104	-0.02	17.01
95	t	Benzo[a]pyrene	1.096	1.124	-2.6	104	-0.01	17.60
		----------	True	Calc.	% Drift	----------		
96	t	Indeno[1,2,3-cd]pyrene	50.000	45.962	8.1	97	0.00	19.67
		----------	AvgRF	CCRF	% Dev	----------		
98	t	Dibenz[a,h]anthracene	1.001	1.016	-1.5	100	0.00	19.73
100	t	Benzo[g,h,i]perylene	1.117	1.077	3.6	99	0.00	20.11

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3p49888aa.D M3P2260.M Wed Jan 13 14:48:08 2016

8.9.4

8

Initial Calibration Verification

Job Number: JC13575 **Sample:** E3P2261-ICV2260
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 3P49900.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\E3P2261\3p49900.D          Vial: 14
Acq On    : 12 Jan 2016   9:22 pm                    Operator: robertl1
Sample    : ICV2260-50                               Inst    : MSGC3P
Misc      : op90350,e3p2261                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3P2260.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Jan 13 09:21:20 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	131	0.00	4.89
2	t	1,4-Dioxane	0.924	0.721	22.0	94	-0.01	2.47
6	t	Indene	2.628	2.433	7.4	127	0.00	5.09
7	t	Cumene	4.253	3.611	15.1	107	0.00	4.31
13	t	Decane	2.087	1.602	23.2	104	0.00	4.78
18	t	Acetophenone	2.048	1.793	12.5	122	0.00	5.18
24	I	Naphthalene-d8	1.000	1.000	0.0	163	0.00	5.83
27	t	Quinoline	0.751	0.571	24.0	126	-0.01	6.08
40	t	2,3-Dichloroaniline	0.370	0.244	34.1#	109	0.00	6.59
41	t	Caprolactam	0.111	0.085	23.4	118	-0.03	6.11
45	t	1-Methylnaphthalene	0.633	0.464	26.7	122	0.00	6.44
46	t	Dimethylnaphthalene	0.589	0.429	27.2	121	-0.01	6.89
47	I	Acenaphthene-d10	1.000	1.000	0.0	119	-0.01	7.31
53	t	Biphenyl	1.632	1.624	0.5	123	0.00	6.75
		----------	AvgRF	CCRF	% Dev	----------		
69	I	Phenanthrene-d10	1.000	1.000	0.0	125	0.00	9.28
		----------	AvgRF	CCRF	% Dev	----------		
82	t	Octadecane	0.748	0.697	6.8	110	-0.01	9.16
83	I	Chrysene-d12	1.000	1.000	0.0	125	-0.02	14.64
91	I	Perylene-d12	1.000	1.000	0.0	131	-0.01	17.71
		----------	AvgRF	CCRF	% Dev	----------		
99	t	7,12-Dimethylbenz(a)anthr	0.560	0.416	25.7	90	-0.02	16.97

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3p49888aa.D M3P2260.M Wed Jan 13 14:48:12 2016

8.9.5

8

Initial Calibration Verification

Job Number: JC13575 **Sample:** E3P2261-ICV2260
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 3P49902.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\E3P2261\3p49902.D          Vial: 16
Acq On    : 12 Jan 2016  10:15 pm                    Operator: robertl1
Sample    : ICV2260-50                               Inst    : MSGC3P
Misc      : op90350,e3p2261                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3P2260.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Jan 13 09:21:20 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83 I	Chrysene-d12	1.000	1.000	0.0	126	-0.02	14.64
88 t	3,3'-Dichlorobenzidine	0.423	0.491	-16.1	140	0.00	14.66

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3p49888aa.D M3P2260.M Wed Jan 13 14:48:18 2016

8.9.6

Initial Calibration Verification

Job Number: JC13575 **Sample:** E3P2262-ICV2260
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 3P49906.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\E3P2262\3p49906.D          Vial: 2
Acq On    : 13 Jan 2016  10:56 am                    Operator: robertl1
Sample    : icv2260-50                               Inst    : MSGC3P
Misc      : op90350,e3p2262                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3P2260.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Jan 13 09:21:20 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	-0.02	4.88
9	t	Phenol	2.404	2.013	16.3	83	-0.01	4.62
12	t	2-Chlorophenol	1.696	1.510	11.0	95	-0.02	4.73
19	t	2-Methylphenol	1.330	1.316	1.1	105	-0.02	5.06
21	t	3&4-Methylphenol	1.429	1.321	7.6	97	-0.02	5.17
24	I	Naphthalene-d8	1.000	1.000	0.0	101	-0.02	5.81
29	t	2-Nitrophenol	0.209	0.206	1.4	94	-0.02	5.53
30	t	2,4-Dimethylphenol	0.366	0.382	-4.4	109	-0.01	5.56
31	t	Benzoic acid	0.260	0.278	-6.9	99	-0.02	5.62
33	t	2,4-Dichlorophenol	0.306	0.287	6.2	96	-0.01	5.71
34	t	2,6-Dichlorophenol	0.292	0.279	4.5	101	-0.02	5.87
43	t	4-Chloro-3-methylphenol	0.320	0.292	8.8	90	-0.02	6.21
47	I	Acenaphthene-d10	1.000	1.000	0.0	107	-0.02	7.30
49	t	2,4,6-Trichlorophenol	0.400	0.351	12.3	92	-0.02	6.57
50	t	2,4,5-Trichlorophenol	0.393	0.365	7.1	98	-0.03	6.60
		----------	True	Calc.	% Drift		----------	
60	t	2,4-Dinitrophenol	50.000	40.022	19.9	74	-0.02	7.34
		----------	AvgRF	CCRF	% Dev		----------	
61	t	4-Nitrophenol	0.175	0.178	-1.7	98	-0.02	7.39
64		2,3,4,6-Tetrachlorophenol	0.297	0.274	7.7	94	-0.02	7.65
69	I	Phenanthrene-d10	1.000	1.000	0.0	100	-0.03	9.25
		----------	True	Calc.	% Drift		----------	
70	t	4,6-Dinitro-2-methylpheno	50.000	42.507	15.0	83	-0.03	7.97
		----------	AvgRF	CCRF	% Dev		----------	
76	t	Pentachlorophenol	0.163	0.164	-0.6	90	-0.03	8.96

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3p49888aa.D M3P2260.M Wed Jan 13 15:01:47 2016

8.9.7

8

Initial Calibration Verification

Job Number: JC13575 **Sample:** E3P2262-ICV2260
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 3P49909.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\E3P2262\3p49909.D          Vial: 5
Acq On    : 13 Jan 2016  12:22 pm                    Operator: robertl1
Sample    : icv2260-50                               Inst    : MSGC3P
Misc      : op90350,e3p2262                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3P2260.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Jan 13 09:21:20 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	140	-0.02	4.88
4 t	N-Nitrosodimethylamine	1.012	0.861	14.9	109	-0.01	2.74

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3p49888aa.D M3P2260.M Wed Jan 13 15:01:49 2016

8.9.8

Continuing Calibration Summary

Job Number: JC13575 **Sample:** E3P2295-CC2260
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 3P50574.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\E3P2295\3p50574.D          Vial: 2
Acq On    :  5 Feb 2016   8:24 pm                    Operator: juliusj
Sample    : cc2260-25                                Inst    : MSGC3P
Misc      : op90754,e3p2295                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3P2260.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Thu Feb 04 11:39:01 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  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)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	71	0.07	4.68
2	t	1,4-Dioxane	0.924	0.660	28.6#	53	-0.01	2.21
3	t	Pyridine	2.324	1.698	26.9#	55	0.00	2.54
4	t	N-Nitrosodimethylamine	1.012	1.205	-19.1	86	0.00	2.51
5	S	2-Fluorophenol	1.807	1.477	18.3	60	0.05	3.70
6	t	Indene	2.628	2.355	10.4	68	0.08	4.87
7	t	Cumene	4.253	3.933	7.5	69	0.05	4.08
8	S	Phenol-d5	2.223	1.899	14.6	63	0.07	4.42
9	t	Phenol	2.404	2.103	12.5	66	0.07	4.43
10		Aniline	2.567	1.769	31.1#	54	0.06	4.43
11	t	bis(2-Chloroethyl)ether	1.687	1.407	16.6	61	0.06	4.48
12	t	2-Chlorophenol	1.696	1.513	10.8	67	0.07	4.53
13	t	Decane	2.087	2.201	-5.5	74	0.07	4.56
14	t	1,3-Dichlorobenzene	1.715	1.581	7.8	70	0.07	4.64
15	t	1,4-Dichlorobenzene	1.667	1.553	6.8	71	0.07	4.69
16	t	Benzyl alcohol	0.986	0.845	14.3	64	0.07	4.78
17	t	1,2-Dichlorobenzene	1.538	1.388	9.8	68	0.07	4.80
18	t	Acetophenone	2.048	1.865	8.9	70	0.08	4.98
19	t	2-Methylphenol	1.330	1.162	12.6	67	0.08	4.87
20	t	2,2'-oxybis(1-Chloropropa	2.470	2.429	1.7	72	0.08	4.88
21	t	3&4-Methylphenol	1.429	1.203	15.8	65	0.08	4.98
22	t	n-Nitroso-di-n-propylamin	1.114	1.085	2.6	72	0.08	4.97
23	t	Hexachloroethane	0.493	0.500	-1.4	78	0.09	5.06
24	I	Naphthalene-d8	1.000	1.000	0.0	70	0.06	5.61
25	S	Nitrobenzene-d5	0.455	0.489	-7.5	76	0.05	5.08
26	t	Nitrobenzene	0.456	0.484	-6.1	75	0.05	5.10
27	t	Quinoline	0.751	0.699	6.9	69	0.07	5.86
28	t	Isophorone	0.795	0.764	3.9	69	0.06	5.27
29	t	2-Nitrophenol	0.209	0.209	0.0	70	0.06	5.33
30	t	2,4-Dimethylphenol	0.366	0.339	7.4	72	0.06	5.37
31	t	Benzoic acid	0.260	0.258	0.8	68	0.04	5.44
32	t	bis(2-Chloroethoxy)methan	0.510	0.440	13.7	63	0.07	5.42
33	t	2,4-Dichlorophenol	0.306	0.300	2.0	70	0.06	5.51
34	t	2,6-Dichlorophenol	0.292	0.278	4.8	72	0.07	5.67
35		1,3,5-Trichlorobenzene	0.365	0.347	4.9	70	0.06	5.34
36	t	1,2,4-Trichlorobenzene	0.332	0.320	3.6	72	0.06	5.56
37		1,2,3-Trichlorobenzene	0.313	0.309	1.3	73	0.07	5.73
38	t	Naphthalene	1.115	1.049	5.9	69	0.06	5.62
39	t	4-Chloroaniline	0.482	0.410	14.9	63	0.07	5.66
40	t	2,3-Dichloroaniline	0.370	0.346	6.5	70	0.08	6.35
41	t	Caprolactam	0.111	0.103	7.2	66	0.05	5.90

Continuing Calibration Summary

Job Number: JC13575 **Sample:** E3P2295-CC2260
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 3P50574.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

42	t	Hexachlorobutadiene	0.163	0.190	-16.6	85	0.07	5.71
43	t	4-Chloro-3-methylphenol	0.320	0.319	0.3	71	0.07	6.01
44	t	2-Methylnaphthalene	0.606	0.574	5.3	70	0.07	6.13
45	t	1-Methylnaphthalene	0.633	0.596	5.8	69	0.07	6.20
46	t	Dimethylnaphthalene	0.589	0.569	3.4	71	0.08	6.63
47	I	Acenaphthene-d10	1.000	1.000	0.0	72	0.09	7.02
48	t	Hexachlorocyclopentadiene	0.370	0.355	4.1	71	0.08	6.25
49	t	2,4,6-Trichlorophenol	0.400	0.383	4.3	72	0.08	6.35
50	t	2,4,5-Trichlorophenol	0.393	0.393	0.0	74	0.09	6.39
51	S	2-Fluorobiphenyl	1.359	1.330	2.1	74	0.08	6.41
52	t	2-Chloronaphthalene	1.246	1.166	6.4	71	0.08	6.52
53	t	Biphenyl	1.632	1.558	4.5	72	0.08	6.49
54	t	2-Nitroaniline	0.425	0.480	-12.9	79	0.09	6.60
55	t	Dimethylphthalate	1.345	1.261	6.2	72	0.08	6.75
56	t	Acenaphthylene	1.983	1.844	7.0	69	0.09	6.89
57	t	2,6-Dinitrotoluene	0.264	0.275	-4.2	74	0.09	6.82
58	t	3-Nitroaniline	0.369	0.343	7.0	67	0.08	6.98
59	t	Acenaphthene	1.244	1.171	5.9	72	0.08	7.06
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	50.228	-0.5	82	0.09	7.09
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.175	0.262	-49.7#	103	0.09	7.16
62	t	Dibenzofuran	1.648	1.577	4.3	73	0.09	7.23
63	t	2,4-Dinitrotoluene	0.347	0.400	-15.3	80	0.09	7.22
64		2,3,4,6-Tetrachlorophenol	0.297	0.309	-4.0	77	0.09	7.37
65	t	Diethylphthalate	1.385	1.403	-1.3	75	0.09	7.48
66	t	Fluorene	1.348	1.317	2.3	73	0.09	7.62
67	t	4-Chlorophenyl-phenylethe	0.601	0.601	0.0	77	0.09	7.61
68	t	4-Nitroaniline	0.367	0.334	9.0	64	0.09	7.64
69	I	Phenanthrene-d10	1.000	1.000	0.0	73	0.12	8.90
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	25.000	26.081	-4.3	82	0.10	7.68
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.570	0.526	7.7	70	0.10	7.76
72	t	1,2-Diphenylhydrazine	1.059	1.023	3.4	73	0.10	7.80
73	S	2,4,6-Tribromophenol	0.112	0.119	-6.2	82	0.10	7.91
74	t	4-Bromophenyl-phenylether	0.216	0.224	-3.7	82	0.11	8.24
75	t	Hexachlorobenzene	0.258	0.257	0.4	79	0.11	8.34
76	t	Pentachlorophenol	0.163	0.136	16.6	65	0.12	8.63
77	t	Phenanthrene	1.170	1.107	5.4	74	0.11	8.93
78	t	Anthracene	1.127	1.070	5.1	71	0.12	9.02
79	t	Carbazole	1.157	1.082	6.5	72	0.12	9.30
80	t	Di-n-butylphthalate	1.536	1.473	4.1	71	0.14	9.99
81	t	Fluoranthene	1.277	1.270	0.5	76	0.15	11.08
82	t	Octadecane	0.748	0.723	3.3	69	0.11	8.79
83	I	Chrysene-d12	1.000	1.000	0.0	76	0.14	14.17
84	t	Pyrene	1.372	1.334	2.8	77	0.10	11.52
85	S	Terphenyl-d14	0.829	0.828	0.1	80	0.11	11.95
86	t	Butylbenzylphthalate	0.680	0.667	1.9	71	0.13	13.12
87	t	Benzo[a]anthracene	1.192	1.116	6.4	74	0.15	14.16
88	t	3,3'-Dichlorobenzidine	0.423	0.410	3.1	71	0.16	14.20
89	t	Chrysene	1.114	1.002	10.1	72	0.15	14.23
90	t	bis(2-Ethylhexyl)phthalat	0.852	0.835	2.0	69	0.16	14.53

Continuing Calibration Summary

Job Number: JC13575 **Sample:** E3P2295-CC2260
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 3P50574.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

91	I	Perylene-d12	1.000	1.000	0.0	75	0.15	17.23
		----------	True	Calc.	% Drift	----------		
92	t	Di-n-octylphthalate	25.000	22.556	9.8	74	0.14	15.98
		----------	AvgRF	CCRF	% Dev	----------		
93	t	Benzo[b]fluoranthene	1.309	1.347	-2.9	78	0.14	16.48
94	t	Benzo[k]fluoranthene	1.249	1.212	3.0	75	0.14	16.54
95	t	Benzo[a]pyrene	1.096	1.117	-1.9	77	0.15	17.12
		----------	True	Calc.	% Drift	----------		
96	t	Indeno[1,2,3-cd]pyrene	25.000	24.870	0.5	79	0.19	19.19
		----------	AvgRF	CCRF	% Dev	----------		
97	t	Dibenz(a,h)acridine	0.900	0.988	-9.8	75	0.18	18.82
98	t	Dibenz[a,h]anthracene	1.001	0.992	0.9	74	0.16	19.25
99	t	7,12-Dimethylbenz(a)anthr	0.560	0.530	5.4	74	0.13	16.49
100	t	Benzo[g,h,i]perylene	1.117	1.066	4.6	73	0.19	19.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3p50149.D M3P2260.M Fri Feb 05 21:08:28 2016

8.9.9

8

Initial Calibration Summary

Job Number: JC13575 **Sample:** EP4411-ICC4411
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** P100857.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Response Factor Report MSP

Method : C:\MSDCHEM\1\METHODS\MP4411.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 07 14:16:59 2015
Response via : Initial Calibration

Calibration Files
2 =P100872A.D 5 =P100871A.D 25 =P100869A.D 80 =P100867A.D
100 =P100866A.D 50 =P100868A.D 10 =P100870A.D 1 =P100873A.D

Compound	2	5	25	80	100	50	10	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d					ISTD					
2) 1,4-Dioxane	0.960	1.095	0.960	0.899	0.929	0.947	0.902	0.986	0.960	6.48
3) Pyridine	2.398	2.907	2.468	2.142	2.135	2.319	2.373	2.591	2.417	10.38
4) N-Nitrosodim	0.848	0.916	0.778	0.653	0.644	0.715	0.737	0.896	0.773	13.55
5) 2-Fluorophen	1.684	1.985	1.811	1.778	1.779	1.826	1.669	1.660	1.774	6.05
6) Indene	2.902	3.439	3.177	2.688	2.547	3.087	2.888	2.836	2.945	9.60
7) Cumene	4.005	4.769	4.266	3.592	3.438	4.064	3.974	4.172	4.035	10.12
8) Phenol-d5	2.432	3.009	2.645	2.432	2.415	2.610	2.439	2.451	2.554	7.99
9) Phenol	2.561	3.008	2.629	2.479	2.400	2.712	2.483	2.537	2.601	7.31
10) Aniline	3.147	3.614	2.700	2.097		2.349	2.852	3.274	2.862	18.55
11) bis(2-Chloro	1.909	2.274	1.937	1.723	1.709	1.857	1.831	2.024	1.908	9.52
12) 2-Chlorophen	1.593	1.866	1.592	1.514	1.500	1.573	1.497	1.537	1.584	7.60
13) Decane	2.307	2.515	2.007	1.510	1.424	1.790	2.020	2.230	1.975	19.37
14) 1,3-Dichloro	1.612	1.820	1.674	1.637	1.627	1.667	1.519	1.540	1.637	5.64
15) 1,4-Dichloro	1.511	1.760	1.635	1.609	1.586	1.672	1.471	1.536	1.597	5.84
16) Benzyl alcoh	1.024	1.289	1.200	1.187	1.158	1.224	1.093	0.915	1.136	10.60
17) 1,2-Dichloro	1.448	1.726	1.562	1.475	1.447	1.546	1.428	1.444	1.509	6.66
18) Acetophenone	2.278	2.731	2.462	2.181	2.114	2.357	2.279	2.340	2.343	8.09
19) 2-Methylphen	1.575	1.878	1.688	1.404	1.348	1.599	1.595	1.564	1.581	10.30
20) 2,2'-oxybis(	0.484	0.574	0.489	0.468	0.467	0.475	0.474	0.521	0.494	7.43
21) 3&4-Methylph	1.699	2.036	1.813	1.602	1.544	1.761	1.683	1.618	1.720	9.00
22) n-Nitroso-di	1.452	1.689	1.377	1.073	1.020	1.248	1.371	1.478	1.338	16.40
23) Hexachloroet	0.433	0.505	0.450	0.479	0.488	0.473	0.417	0.413	0.457	7.44
24) I Naphthalene-d8					ISTD					
25) Nitrobenzene	0.505	0.565	0.470	0.428	0.419	0.446	0.458	0.486	0.472	9.95
26) Nitrobenzene	0.509	0.584	0.476	0.421	0.406	0.450	0.468	0.522	0.480	12.11
27) Quinoline	0.740	0.903	0.779	0.771	0.769	0.780	0.737	0.778	0.782	6.63
28) Isophorone	0.918	1.081	0.912	0.807	0.778	0.860	0.885	0.918	0.895	10.23
29) 2-Nitropheno	0.194	0.240	0.214	0.226	0.225	0.218	0.194	0.184	0.212	9.05
30) 2,4-Dimethyl	0.330	0.386	0.340	0.355	0.349	0.353	0.305	0.346	0.346	6.67
31) Benzoic acid	0.188	0.311	0.314	0.319	0.316	0.314	0.269		0.290	16.60
32) bis(2-Chloro	0.593	0.678	0.580	0.534	0.519	0.561	0.559	0.614	0.580	8.66
33) 2,4-Dichloro	0.253	0.319	0.287	0.299	0.297	0.292	0.263	0.237	0.281	9.76
34) 2,6-Dichloro	0.251	0.295	0.270	0.290	0.288	0.283	0.246	0.255	0.272	7.15
35) 1,3,5-Trichl	0.293	0.357	0.318	0.322	0.314	0.322	0.291	0.304	0.315	6.60
36) 1,2,4-Trichl	0.288	0.344	0.316	0.318	0.314	0.318	0.285	0.301	0.310	6.15
37) 1,2,3-Trichl	0.280	0.338	0.314	0.289	0.274	0.315	0.283	0.260	0.294	8.76
38) Naphthalene	1.214	1.432	1.270	1.140	1.081	1.220	1.176	1.226	1.220	8.48
39) 4-Chloroanil	0.479	0.570	0.491	0.457	0.445	0.476	0.464	0.474	0.482	7.92
40) 2,3-Dichloro	0.338	0.397	0.362	0.374	0.372	0.369	0.333	0.331	0.360	6.49
41) Caprolactam	0.225	0.276	0.227	0.210	0.205	0.219	0.219	0.239	0.227	9.78
42) Hexachlorobu	0.116	0.145	0.136	0.138	0.134	0.141	0.117	0.117	0.130	9.08
43) 4-Chloro-3-m	0.340	0.415	0.371	0.357	0.351	0.368	0.350	0.354	0.363	6.38
44) 2-Methylnaph	0.564	0.683	0.615	0.586	0.562	0.607	0.568	0.554	0.592	7.22
45) 1-Methylnaph	0.675	0.826	0.740	0.714	0.685	0.727	0.685	0.670	0.715	7.22

Initial Calibration Summary

Job Number: JC13575 **Sample:** EP4411-ICC4411
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** P100857.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

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46) Dimethylnaph 0.549 0.659 0.605 0.591 0.569 0.611 0.560 0.569 0.589   6.03

47) I   Acenaphthene-d10      ----------------ISTD---------------------
48) Hexachlorocy 0.222 0.288 0.305 0.314 0.305 0.319 0.250 0.211 0.277  15.55
49) 2,4,6-Trichl 0.326 0.386 0.353 0.375 0.378 0.356 0.314 0.295 0.348   9.46
50) 2,4,5-Trichl 0.320 0.410 0.368 0.388 0.395 0.371 0.336 0.321 0.364   9.48
51) 2-Fluorobiph 1.141 1.350 1.221 1.221 1.217 1.218 1.122 1.124 1.202   6.22
52) 2-Chloronaph 1.097 1.339 1.194 1.057 1.011 1.149 1.088 1.122 1.132   8.88
53) Biphenyl     1.511 1.757 1.631 1.382 1.298 1.562 1.455 1.463 1.507   9.55
54) 2-Nitroanili 0.441 0.541 0.453 0.418 0.416 0.431 0.432 0.447 0.447   8.94
55) Dimethylphth 1.193 1.397 1.258 1.276 1.275 1.240 1.138 1.220 1.249   6.03
56) Acenaphthyle 2.106 2.506 2.237 2.062 1.987 2.147 2.067 2.138 2.156   7.39
57) 2,6-Dinitrot 0.231 0.303 0.274 0.298 0.300 0.281 0.252 0.230 0.271  11.15
58) 3-Nitroanili 0.327 0.448 0.389 0.410 0.416 0.393 0.359 0.325 0.383  11.37
59) Acenaphthene 1.185 1.434 1.320 1.260 1.222 1.310 1.178 1.198 1.263   6.93
60) 2,4-Dinitrop 0.062 0.130 0.171 0.216 0.224 0.191 0.128       0.161  35.81
         ----- Quadratic regression -----                Coefficient =  0.9997
              Response Ratio = -0.01532 + 0.17012 *A + 0.01169 *A^2

61) 4-Nitropheno 0.120 0.153 0.143 0.139 0.141 0.138 0.134 0.091 0.132  14.40
62) Dibenzofuran 1.418 1.763 1.600 1.558 1.506 1.584 1.439 1.431 1.537   7.52
63) 2,4-Dinitrot 0.305 0.399 0.386 0.381 0.381 0.374 0.340 0.288 0.357  11.56
64) 2,3,4,6-Tetr 0.209 0.268 0.264 0.308 0.316 0.280 0.229 0.206 0.260  16.21
65) Diethylphtha 1.197 1.468 1.312 1.284 1.267 1.287 1.184 1.191 1.274   7.28
66) Fluorene     1.319 1.644 1.517 1.451 1.406 1.492 1.343 1.332 1.438   7.76
67) 4-Chlorophen 0.501 0.615 0.537 0.562 0.561 0.541 0.494 0.484 0.537   8.11
68) 4-Nitroanili 0.319 0.426 0.371 0.371 0.373 0.360 0.352 0.326 0.362   9.02

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro-       0.114 0.122 0.147 0.152 0.135 0.108       0.130  13.90
71) n-Nitrosodip 0.527 0.643 0.576 0.611 0.604 0.580 0.541 0.555 0.580   6.66
72) 1,2-Diphenyl 1.179 1.381 1.094 0.925 0.890 0.994 1.119 1.218 1.100  14.79
73) 2,4,6-Tribro 0.058 0.072 0.072 0.088 0.093 0.075 0.063       0.074  16.84
74) 4-Bromopheny 0.156 0.195 0.182 0.213 0.217 0.191 0.162 0.166 0.185  12.37
75) Hexachlorobe 0.165 0.197 0.180 0.205 0.209 0.190 0.167 0.169 0.185   9.41
76) Pentachlorop 0.077 0.114 0.125 0.145 0.144 0.140 0.100       0.121  21.02
         ----- Quadratic regression -----                Coefficient =  0.9994
              Response Ratio = -0.01178 + 0.13940 *A + 0.00161 *A^2

77) Phenanthrene 1.144 1.406 1.271 1.212 1.182 1.244 1.174 1.221 1.232   6.59
78) Anthracene   1.203 1.450 1.304 1.244 1.211 1.270 1.186 1.231 1.262   6.72
79) Carbazole    1.006 1.214 1.084 1.109 1.097 1.093 1.013 1.030 1.081   6.24
80) Di-n-butylph 1.319 1.655 1.492 1.456 1.421 1.470 1.388 1.353 1.444   7.17
81) Fluoranthene 1.128 1.413 1.342 1.353 1.310 1.335 1.204 1.140 1.278   8.32
82) Octadecane   0.806 0.949 0.760 0.587 0.567 0.676 0.766 0.814 0.740  17.07

83) I   Chrysene-d12          ----------------ISTD---------------------
84) Pyrene       1.478 1.744 1.540 1.600 1.595 1.517 1.421 1.499 1.549   6.35
85) Terphenyl-d1 0.742 0.841 0.734 0.881 0.889 0.777 0.685 0.812 0.795   9.25
86) Butylbenzylp 0.662 0.805 0.716 0.793 0.798 0.721 0.669 0.662 0.728   8.59
87) Butyl steara 0.616 0.744 0.615 0.542 0.531 0.560 0.610 0.607 0.603  11.07
88) Benzo[a]anth 1.301 1.495 1.341 1.357 1.342 1.309 1.253 1.406 1.350   5.45
89) 3,3'-Dichlor 0.453 0.536 0.480 0.449 0.436 0.452 0.455 0.424 0.461   7.46
90) Chrysene     1.064 1.251 1.123 1.272 1.270 1.158 1.027 1.072 1.154   8.59
91) bis(2-Ethylh 0.872 1.051 0.943 1.045 1.050 0.948 0.869 0.868 0.956   8.71

92) I   Perylene-d12          ----------------ISTD---------------------
93) Di-n-octylph 1.791 2.192 2.168 2.158 2.126 2.191 1.908 1.738 2.034   9.37
94) Benzo[b]fluo 1.188 1.489 1.577 1.614 1.642 1.636 1.297 1.159 1.450  14.10
95) Benzo[k]fluo 1.092 1.379 1.321 1.373 1.334 1.400 1.145 1.133 1.272   9.95
```

8.9.10

8

Initial Calibration Summary

Job Number: JC13575 **Sample:** EP4411-ICC4411
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** P100857.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

```
 96) Benzo[a]pyre 1.029 1.258 1.256 1.379 1.388 1.345 1.088 1.033 1.222  12.39
 97) Indeno[1,2,3 0.907 1.053 1.075 1.273 1.321 1.180 0.907 0.910 1.078  15.46
 98) Dibenz(a,h)a 0.690 0.852 0.843 0.995 1.006 0.929 0.710 0.698 0.840  15.52
 99) Dibenz[a,h]a 0.899 1.080 1.113 1.302 1.307 1.234 0.935 0.870 1.093  16.31
100) 7,12-Dimethy       0.481 0.583 0.630 0.623 0.645 0.438       0.567  15.23
101) Benzo[g,h,i] 0.934 1.117 1.103 1.255 1.278 1.196 0.943 0.932 1.095  13.17
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MP4411.M          Mon Dec 07 16:33:13 2015
```

8.9.10

8

Initial Calibration Summary

Job Number: JC13575 **Sample:** EP4412-ICC4412
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** P100868.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

```
                          Response Factor Report  MSP

  Method       : C:\MSDCHEM\1\METHODS\MP4411.M (RTE Integrator)
  Title        : Semi Volatile Extractables by GC/MS
  Last Update  : Mon Dec 07 14:16:59 2015
  Response via : Initial Calibration

  Calibration Files
  2   =P100872A.D  5   =P100871A.D  25  =P100869A.D  80  =P100867A.D
  100 =P100866A.D  50  =P100868A.D  10  =P100870A.D  1   =P100873A.D

   Compound         2     5     25    80    100   50    10    1     Avg %RSD
  ---------------------------------------------------------------------------
159) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
160) Benzaldehyde 1.521 1.525 1.431 1.381 1.305 1.426 1.401 1.541 1.441   5.73

161) I   Phenanthrene-d10b     ----------------ISTD---------------------
162) Atrazine     0.164 0.172 0.180 0.194 0.194 0.187 0.165 0.173 0.179   6.75

163) I   Chrysene-d12b         ----------------ISTD---------------------
164) Benzidine    0.882 0.965 0.951 0.855 0.795 0.946 0.899 0.856 0.894   6.54

165) I   Naphthalene-d8b       ----------------ISTD---------------------
166) Hydroquinone 0.382 0.421 0.429 0.430 0.420 0.429 0.410 0.346 0.408   7.27

167) I   Acenaphthene-d10b     ----------------ISTD---------------------
168) 1,2,4,5-Tetr 0.438 0.472 0.459 0.511 0.502 0.488 0.432 0.424 0.466   7.08
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MP4411.M          Mon Dec 07 16:34:31 2015
```

8.9.11

8

Initial Calibration Verification

Job Number: JC13575 **Sample:** EP4412-ICV4411
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** P100874.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP4412\P100874.D Vial: 10
Acq On : 7 Dec 2015 1:12 pm Operator: linseyk
Sample : icv4411-50 Inst : MSP
Misc : op89240,ep4412 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP4411.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 07 15:38:33 2015
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 48% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	131	0.00	4.44
4	t	N-Nitrosodimethylamine	0.773	0.580	25.0	106	0.00	2.02
11	t	bis(2-Chloroethyl)ether	1.908	1.791	6.1	126	-0.01	4.10
14	t	1,3-Dichlorobenzene	1.637	1.580	3.5	124	0.00	4.37
15	t	1,4-Dichlorobenzene	1.597	1.491	6.6	116	0.00	4.46
17	t	1,2-Dichlorobenzene	1.509	1.465	2.9	124	-0.01	4.65
20	t	2,2'-oxybis(1-Chloropropa	0.494	0.450	8.9	124	-0.01	4.80
22		n-Nitroso-di-n-propylamin	1.338	1.157	13.5	121	-0.02	4.97
23	t	Hexachloroethane	0.457	0.424	7.2	117	0.00	5.11
24	I	Naphthalene-d8	1.000	1.000	0.0	120	0.00	6.20
26	t	Nitrobenzene	0.480	0.427	11.0	114	-0.01	5.19
28	t	Isophorone	0.895	0.826	7.7	116	-0.01	5.53
32	t	bis(2-Chloroethoxy)methan	0.580	0.551	5.0	118	0.00	5.87
36	t	1,2,4-Trichlorobenzene	0.310	0.303	2.3	115	-0.01	6.12
38	t	Naphthalene	1.220	1.013	17.0	100	0.00	6.23
42	t	Hexachlorobutadiene	0.130	0.128	1.5	109	0.00	6.45
47	I	Acenaphthene-d10	1.000	1.000	0.0	114	-0.01	8.92
48	t	Hexachlorocyclopentadiene	0.277	0.292	-5.4	104	-0.01	7.56
52	t	2-Chloronaphthalene	1.132	1.130	0.2	112	-0.01	8.04
55	t	Dimethylphthalate	1.249	1.134	9.2	104	-0.01	8.56
56	t	Acenaphthylene	2.156	1.649	23.5	88	0.00	8.69
57	t	2,6-Dinitrotoluene	0.271	0.253	6.6	102	-0.01	8.63
59	t	Acenaphthene	1.263	1.140	9.7	99	0.00	8.97
63	t	2,4-Dinitrotoluene	0.357	0.318	10.9	97	-0.01	9.26
65	t	Diethylphthalate	1.274	1.196	6.1	106	-0.01	9.69
66	t	Fluorene	1.438	1.238	13.9	95	-0.01	9.80
67	t	4-Chlorophenyl-phenylethe	0.537	0.492	8.4	104	-0.01	9.83
69	I	Phenanthrene-d10	1.000	1.000	0.0	110	-0.02	11.28
71	t	n-Nitrosodiphenylamine	0.580	0.506	12.8	96	-0.02	10.02
72	t	1,2-Diphenylhydrazine	1.100	0.994	9.6	110	-0.01	10.08
74	t	4-Bromophenyl-phenylether	0.185	0.182	1.6	105	-0.01	10.60
75	t	Hexachlorobenzene	0.185	0.177	4.3	103	-0.01	10.68
77	t	Phenanthrene	1.232	1.081	12.3	96	-0.01	11.32
78	t	Anthracene	1.262	1.078	14.6	94	-0.01	11.40
80	t	Di-n-butylphthalate	1.444	1.314	9.0	99	-0.01	12.39
81	t	Fluoranthene	1.278	1.089	14.8	90	-0.02	13.35
83	I	Chrysene-d12	1.000	1.000	0.0	98	-0.02	16.01
84	t	Pyrene	1.549	1.306	15.7	85	-0.01	13.74

Initial Calibration Verification

Job Number: JC13575 **Sample:** EP4412-ICV4411
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** P100874.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

86	t	Butylbenzylphthalate	0.728	0.679	6.7	93	-0.01	15.10
88	t	Benzo[a]anthracene	1.350	1.133	16.1	85	-0.01	16.00
89	t	3,3'-Dichlorobenzidine	0.461	0.375	18.6	82	0.00	16.02
90	t	Chrysene	1.154	0.981	15.0	83	-0.02	16.06
91	t	bis(2-Ethylhexyl)phthalat	0.956	0.905	5.3	94	-0.01	16.27
92	I	Perylene-d12	1.000	1.000	0.0	94	-0.02	18.57
93	t	Di-n-octylphthalate	2.034	2.122	-4.3	91	-0.01	17.47
94	t	Benzo[b]fluoranthene	1.450	1.270	12.4	73	-0.02	17.94
95	t	Benzo[k]fluoranthene	1.272	1.214	4.6	81	-0.02	17.99
96	t	Benzo[a]pyrene	1.222	1.184	3.1	83	-0.02	18.48
97	t	Indeno[1,2,3-cd]pyrene	1.078	0.976	9.5	78	-0.02	20.20
99	t	Dibenz[a,h]anthracene	1.093	1.019	6.8	78	-0.02	20.25
101	t	Benzo[g,h,i]perylene	1.095	0.956	12.7	75	-0.02	20.59

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P100868A.D MP4411.M Mon Dec 07 15:41:14 2015

8.9.12

8

Initial Calibration Verification

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ
Sample: EP4412-ICV4412
Lab FileID: P100874A.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4412\P100874A.D          Vial: 10
Acq On    :  7 Dec 2015   1:12 pm                    Operator: linseyk
Sample    : icv4412-50                               Inst    : MSP
Misc      : op89240,ep4412                           Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4411.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Mon Dec 07 15:38:33 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
163	I	Chrysene-d12b	1.000	1.000	0.0	96	0.00	16.01
164		Benzidine	0.894	0.718	19.7	73	0.00	13.65
167	I	Acenaphthene-d10b	1.000	1.000	0.0	105	0.00	8.92
168		1,2,4,5-Tetrachlorobenzen	0.466	0.551	-18.2	119	0.00	7.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P100868A.D MP4411.M Mon Dec 07 15:52:27 2015

8.9.13

8

Initial Calibration Verification

Job Number: JC13575 **Sample:** EP4412-ICV4411
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** P100875.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP4412\P100875.D Vial: 11
Acq On : 7 Dec 2015 1:42 pm Operator: linseyk
Sample : icv4411-50 Inst : MSP
Misc : op89240,ep4412 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP4411.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 07 15:38:33 2015
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 48% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	131	-0.01	4.43
2	t	1,4-Dioxane	0.960	0.878	8.5	122	0.01	1.86
6	t	Indene	2.945	2.821	4.2	120	0.00	4.77
7	t	Cumene	4.035	3.712	8.0	120	0.00	3.52
13	t	Decane	1.975	1.656	16.2	122	0.00	4.25
18	t	Acetophenone	2.343	2.133	9.0	119	-0.02	4.96
24	I	Naphthalene-d8	1.000	1.000	0.0	129	-0.01	6.19
26	t	Nitrobenzene	0.480	0.431	10.2	124	-0.24	4.96
27	t	Quinoline	0.782	0.736	5.9	121	-0.02	6.72
40	t	2,3-Dichloroaniline	0.360	0.285	20.8	99	0.00	7.73
41	t	Caprolactam	0.227	0.184	18.9	108	-0.05	6.81
45	t	1-Methylnaphthalene	0.715	0.677	5.3	120	0.00	7.44
46	t	Dimethylnaphthalene	0.589	0.561	4.8	118	-0.01	8.27
47	I	Acenaphthene-d10	1.000	1.000	0.0	119	-0.01	8.92
53	t	Biphenyl	1.507	1.505	0.1	114	-0.01	8.03
69	I	Phenanthrene-d10	1.000	1.000	0.0	111	-0.02	11.28
82	t	Octadecane	0.740	0.676	8.6	111	-0.01	11.27
92	I	Perylene-d12	1.000	1.000	0.0	100	-0.02	18.57
100	t	7,12-Dimethylbenz(a)anthr	0.567	0.582	-2.6	91	-0.03	17.95

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P100868A.D MP4411.M Mon Dec 07 15:41:15 2015

8.9.14

8

Initial Calibration Verification

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ
Sample: EP4412-ICV4412
Lab FileID: P100875A.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4412\P100875A.D          Vial: 11
Acq On    :  7 Dec 2015   1:42 pm                    Operator: linseyk
Sample    : icv4412-50                               Inst    : MSP
Misc      : op89240,ep4412                           Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4411.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Mon Dec 07 15:38:33 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
159	I	1,4-Dichlorobenzene-d4b	1.000	1.000	0.0	115	0.00	4.43
160		Benzaldehyde	1.441	1.369	5.0	110	0.00	3.90
161	I	Phenanthrene-d10b	1.000	1.000	0.0	108	0.00	11.28
162		Atrazine	0.179	0.196	-9.5	113	0.00	10.93

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P100868A.D MP4411.M Mon Dec 07 15:52:28 2015

8.9.15

8

Initial Calibration Verification

Job Number: JC13575 **Sample:** EP4412-ICV4411
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** P100876.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4412\P100876.D          Vial: 12
Acq On    :  7 Dec 2015   2:11 pm                   Operator: linseyk
Sample    : icv4411-50                              Inst    : MSP
Misc      : op89240,ep4412                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4411.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Mon Dec 07 15:38:33 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	138	-0.01	4.43
9	t	Phenol	2.601	2.348	9.7	119	-0.01	4.00
12	t	2-Chlorophenol	1.584	1.509	4.7	132	-0.01	4.18
19	t	2-Methylphenol	1.581	1.528	3.4	132	-0.01	4.77
21	t	3&4-Methylphenol	1.720	1.583	8.0	124	-0.01	4.98
24	I	Naphthalene-d8	1.000	1.000	0.0	128	0.00	6.20
29	t	2-Nitrophenol	0.212	0.200	5.7	117	-0.01	5.64
30	t	2,4-Dimethylphenol	0.346	0.375	-8.4	135	-0.01	5.74
31	t	Benzoic acid	0.290	0.236	18.6	96	-0.02	5.91
33	t	2,4-Dichlorophenol	0.281	0.271	3.6	118	-0.01	6.00
34		2,6-Dichlorophenol	0.272	0.270	0.7	121	-0.01	6.33
43	t	4-Chloro-3-methylphenol	0.363	0.333	8.3	116	-0.02	7.10
47	I	Acenaphthene-d10	1.000	1.000	0.0	127	-0.01	8.92
49	t	2,4,6-Trichlorophenol	0.348	0.333	4.3	119	-0.01	7.75
		----------	True	Calc.	% Drift		----------	
60	t	2,4-Dinitrophenol	100.000	73.628	26.3	80	-0.02	9.04
		----------	AvgRF	CCRF	% Dev		----------	
61	t	4-Nitrophenol	0.132	0.116	12.1	107	-0.02	9.20
69	I	Phenanthrene-d10	1.000	1.000	0.0	119	-0.02	11.28
70	t	4,6-Dinitro-2-methylpheno	0.130	0.107	17.7	94	-0.02	9.90
		----------	True	Calc.	% Drift		----------	
76	t	Pentachlorophenol	100.000	86.198	13.8	96	-0.02	11.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P100868A.D MP4411.M Mon Dec 07 15:41:16 2015

8.9.16

8

Initial Calibration Verification

Job Number: JC13575 **Sample:** EP4412-ICV4411
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** P100877.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4412\P100877.D          Vial: 13
Acq On    :  7 Dec 2015   2:41 pm                   Operator: linseyk
Sample    : icv4411-50                              Inst    : MSP
Misc      : op89240,ep4412                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4411.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Mon Dec 07 15:38:33 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	179	-0.01	4.43
5	S	2-Fluorophenol	1.774	1.585	10.7	156	0.00	3.01
8	S	Phenol-d5	2.554	2.019	20.9	139	-0.01	3.98
24	I	Naphthalene-d8	1.000	1.000	0.0	166	-0.01	6.19
25	S	Nitrobenzene-d5	0.472	0.408	13.6	152	-0.01	5.16
47	I	Acenaphthene-d10	1.000	1.000	0.0	161	-0.01	8.92
51	S	2-Fluorobiphenyl	1.202	1.154	4.0	153	-0.01	7.88
69	I	Phenanthrene-d10	1.000	1.000	0.0	152	-0.02	11.28
73	S	2,4,6-Tribromophenol	0.074	0.061	17.6	125	-0.02	10.18
83	I	Chrysene-d12	1.000	1.000	0.0	138	-0.02	16.01
85	S	Terphenyl-d14	0.795	0.760	4.4	135	-0.01	14.11

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 P100868A.D MP4411.M         Mon Dec 07 15:41:17 2015
```

8.9.17

8

Initial Calibration Verification

Job Number: JC13575 **Sample:** EP4412-ICV4411
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** P100878.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4412\P100878.D          Vial: 14
Acq On    :  7 Dec 2015   3:11 pm                   Operator: linseyk
Sample    : icv4411-50                              Inst    : MSP
Misc      : op89240,ep4412                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4411.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Mon Dec 07 15:38:33 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	123	0.00	4.44
3	t	Pyridine	2.417	2.600	-7.6	138	0.08	2.12
10	t	Aniline	2.862	3.145	-9.9	165	0.00	4.04
16	t	Benzyl alcohol	1.136	1.242	-9.3	125	0.00	4.61
24	I	Naphthalene-d8	1.000	1.000	0.0	126	-0.01	6.19
39	t	4-Chloroaniline	0.482	0.455	5.6	121	-0.01	6.32
44	t	2-Methylnaphthalene	0.592	0.580	2.0	120	-0.01	7.29
47	I	Acenaphthene-d10	1.000	1.000	0.0	117	-0.01	8.92
54	t	2-Nitroaniline	0.447	0.444	0.7	120	-0.02	8.22
58	t	3-Nitroaniline	0.383	0.394	-2.9	117	-0.01	8.88
62	t	Dibenzofuran	1.537	1.577	-2.6	116	-0.02	9.25
68	t	4-Nitroaniline	0.362	0.382	-5.5	124	-0.02	9.85
69	I	Phenanthrene-d10	1.000	1.000	0.0	120	-0.02	11.28
79	t	Carbazole	1.081	1.086	-0.5	119	-0.01	11.70

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 P100868A.D MP4411.M         Mon Dec 07 15:41:18 2015
```

8.9.18

8

Initial Calibration Verification

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ
Sample: EP4412-ICV4412
Lab FileID: P100879.D

Evaluate Continuing Calibration Report

```
  Data File : C:\MSDCHEM\1\DATA\EP4412\P100879.D          Vial: 15
  Acq On    :  7 Dec 2015   3:40 pm                   Operator: linseyk
  Sample    : icv4412-50                              Inst    : MSP
  Misc      : op89240,ep4412                          Multiplr: 1.00
  MS Integration Params: rteint.p

  Method       : C:\MSDCHEM\1\METHODS\MP4411.M (RTE Integrator)
  Title        : Semi Volatile Extractables by GC/MS
  Last Update  : Mon Dec 07 14:16:59 2015
  Response via : Multiple Level Calibration

  Min. RRF     :   0.050  Min. Rel. Area :  48%  Max. R.T. Dev  0.50min
  Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
165 I	Naphthalene-d8b	1.000	1.000	0.0	145	0.00	6.20
166	Hydroquinone	0.408	0.395	3.2	133	0.00	6.88

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P100868A.D MP4411.M Mon Dec 07 16:36:48 2015

8.9.19

8

Continuing Calibration Summary

Job Number: JC13575 **Sample:** EP4494-CC4411
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** P102431.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP4494\P102431.D Vial: 2
Acq On : 5 Feb 2016 11:42 am Operator: ashleyd
Sample : CC4411-50 Inst : MSP
Misc : op90955,ep4494 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP4411.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Feb 04 12:28:19 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 48% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	64	0.05	4.28
2	t	1,4-Dioxane	0.960	0.841	12.4	57	0.03	1.74
3	t	Pyridine	2.417	2.173	10.1	60	0.04	1.94
4	t	N-Nitrosodimethylamine	0.773	0.917	-18.6	82	0.04	1.91
5	S	2-Fluorophenol	1.774	1.578	11.0	55	0.03	2.90
6	t	Indene	2.945	2.983	-1.3	62	0.06	4.61
7	t	Cumene	4.035	4.073	-0.9	64	0.04	3.37
8	S	Phenol-d5	2.554	2.248	12.0	55	0.00	3.89
9	t	Phenol	2.601	2.467	5.2	58	0.03	3.90
10	t	Aniline	2.862	2.145	25.1#	58	0.04	3.89
11	t	bis(2-Chloroethyl)ether	1.908	1.759	7.8	60	0.06	3.96
12	t	2-Chlorophenol	1.584	1.561	1.5	63	0.06	4.04
13	t	Decane	1.975	1.736	12.1	62	0.04	4.09
14	t	1,3-Dichlorobenzene	1.637	1.655	-1.1	63	0.05	4.21
15	t	1,4-Dichlorobenzene	1.597	1.646	-3.1	63	0.05	4.30
16	t	Benzyl alcohol	1.136	1.115	1.8	58	0.08	4.48
17	t	1,2-Dichlorobenzene	1.509	1.555	-3.0	64	0.06	4.50
18	t	Acetophenone	2.343	2.470	-5.4	67	0.07	4.81
19	t	2-Methylphenol	1.581	1.557	1.5	62	0.06	4.66
20	t	2,2'-oxybis(1-Chloropropa	0.494	0.512	-3.6	69	0.07	4.65
21	t	3&4-Methylphenol	1.720	1.705	0.9	62	0.02	4.87
22		n-Nitroso-di-n-propylamin	1.338	1.462	-9.3	75	0.06	4.82
23	t	Hexachloroethane	0.457	0.578	-26.5#	78	0.07	4.93
24	I	Naphthalene-d8	1.000	1.000	0.0	64	0.06	6.03
25	S	Nitrobenzene-d5	0.472	0.522	-10.6	75	0.06	5.01
26	t	Nitrobenzene	0.480	0.512	-6.7	73	0.05	5.04
27	t	Quinoline	0.782	0.761	2.7	63	0.07	6.57
28	t	Isophorone	0.895	0.869	2.9	65	0.05	5.37
29	t	2-Nitrophenol	0.212	0.217	-2.4	64	0.07	5.49
30	t	2,4-Dimethylphenol	0.346	0.377	-9.0	69	0.07	5.61
31	t	Benzoic acid	0.290	0.261	10.0	53	0.03	5.82
32	t	bis(2-Chloroethoxy)methan	0.580	0.537	7.4	62	0.06	5.71
33	t	2,4-Dichlorophenol	0.281	0.311	-10.7	69	0.05	5.87
34		2,6-Dichlorophenol	0.272	0.298	-9.6	68	-0.09	6.18
35		1,3,5-Trichlorobenzene	0.315	0.344	-9.2	69	-0.11	5.50
36	t	1,2,4-Trichlorobenzene	0.310	0.324	-4.5	66	0.07	5.95
37		1,2,3-Trichlorobenzene	0.294	0.316	-7.5	64	-0.10	6.29
38	t	Naphthalene	1.220	1.075	11.9	57	0.06	6.06
39	t	4-Chloroaniline	0.482	0.423	12.2	57	0.05	6.17
40	t	2,3-Dichloroaniline	0.360	0.375	-4.2	65	0.10	7.57
41	t	Caprolactam	0.227	0.208	8.4	61	0.05	6.69

Continuing Calibration Summary

Job Number: JC13575 **Sample:** EP4494-CC4411
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** P102431.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

42	t	Hexachlorobutadiene	0.130	0.173	-33.1#	79	-0.11	6.27
43	t	4-Chloro-3-methylphenol	0.363	0.358	1.4	63	0.07	7.00
44	t	2-Methylnaphthalene	0.592	0.590	0.3	63	0.03	7.12
45	t	1-Methylnaphthalene	0.715	0.715	0.0	63	0.09	7.27
46	t	Dimethylnaphthalene	0.589	0.596	-1.2	63	0.09	8.11
47	I	Acenaphthene-d10	1.000	1.000	0.0	65	0.06	8.74
48	t	Hexachlorocyclopentadiene	0.277	0.275	0.7	56	0.03	7.38
49	t	2,4,6-Trichlorophenol	0.348	0.375	-7.8	69	0.06	7.61
50	t	2,4,5-Trichlorophenol	0.364	0.384	-5.5	67	-0.03	7.68
51	S	2-Fluorobiphenyl	1.202	1.264	-5.2	68	-0.11	7.71
52	t	2-Chloronaphthalene	1.132	1.205	-6.4	68	0.08	7.87
53	t	Biphenyl	1.507	1.526	-1.3	64	0.02	7.86
54	t	2-Nitroaniline	0.447	0.466	-4.3	70	0.02	8.08
55	t	Dimethylphthalate	1.249	1.353	-8.3	71	0.06	8.39
56	t	Acenaphthylene	2.156	1.864	13.5	57	0.07	8.52
57	t	2,6-Dinitrotoluene	0.271	0.295	-8.9	68	0.07	8.47
58	t	3-Nitroaniline	0.383	0.371	3.1	61	-0.07	8.74
59	t	Acenaphthene	1.263	1.148	9.1	57	0.01	8.80
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	78.724	21.3#	50	0.09	8.92
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.132	0.186	-40.9#	88	0.04	9.14
62	t	Dibenzofuran	1.537	1.579	-2.7	65	0.09	9.08
63	t	2,4-Dinitrotoluene	0.357	0.387	-8.4	67	0.11	9.12
64		2,3,4,6-Tetrachlorophenol	0.260	0.263	-1.2	61	-0.08	9.32
65	t	Diethylphthalate	1.274	1.333	-4.6	67	0.07	9.53
66	t	Fluorene	1.438	1.294	10.0	56	0.07	9.62
67	t	4-Chlorophenyl-phenylethe	0.537	0.563	-4.8	68	-0.10	9.65
68	t	4-Nitroaniline	0.362	0.345	4.7	62	0.07	9.72
69	I	Phenanthrene-d10	1.000	1.000	0.0	62	0.08	11.11
70	t	4,6-Dinitro-2-methylpheno	0.130	0.145	-11.5	67	0.08	9.77
71	t	n-Nitrosodiphenylamine	0.580	0.601	-3.6	64	0.06	9.86
72	t	1,2-Diphenylhydrazine	1.100	1.194	-8.5	74	0.03	9.90
73	S	2,4,6-Tribromophenol	0.074	0.095	-28.4#	78	0.07	10.02
74	t	4-Bromophenyl-phenylether	0.185	0.210	-13.5	68	0.06	10.43
75	t	Hexachlorobenzene	0.185	0.220	-18.9	71	0.07	10.51
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	100.000	86.646	13.4	52	0.10	10.86
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.232	1.210	1.8	60	0.08	11.15
78	t	Anthracene	1.262	1.196	5.2	58	-0.03	11.23
79	t	Carbazole	1.081	1.214	-12.3	68	0.10	11.54
80	t	Di-n-butylphthalate	1.444	1.558	-7.9	65	0.09	12.20
81	t	Fluoranthene	1.278	1.307	-2.3	60	0.09	13.17
82	t	Octadecane	0.740	0.649	12.3	59	0.07	11.08
83	I	Chrysene-d12	1.000	1.000	0.0	75	0.00	15.82
84	t	Pyrene	1.549	1.263	18.5	62	0.09	13.56
85	S	Terphenyl-d14	0.795	0.758	4.7	73	0.08	13.92
86	t	Butylbenzylphthalate	0.728	0.636	12.6	66	0.09	14.90
87		Butyl stearate	0.603	0.461	23.5#	61	0.08	15.11
88	t	Benzo[a]anthracene	1.350	1.146	15.1	65	0.21	15.81
89	t	3,3'-Dichlorobenzidine	0.461	0.459	0.4	76	0.11	15.83
90	t	Chrysene	1.154	1.061	8.1	68	0.00	15.87

Continuing Calibration Summary

Job Number: JC13575 **Sample:** EP4494-CC4411
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** P102431.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

91	t	bis(2-Ethylhexyl)phthalat	0.956	0.937	2.0	74	0.05	16.06
92	I	Perylene-d12	1.000	1.000	0.0	83	0.05	18.39
93	t	Di-n-octylphthalate	2.034	1.842	9.4	69	0.06	17.26
94	t	Benzo[b]fluoranthene	1.450	1.413	2.6	71	0.06	17.76
95	t	Benzo[k]fluoranthene	1.272	1.254	1.4	74	0.07	17.81
96	t	Benzo[a]pyrene	1.222	1.146	6.2	70	0.05	18.29
97	t	Indeno[1,2,3-cd]pyrene	1.078	1.116	-3.5	78	0.08	20.03
98	t	Dibenz(a,h)acridine	0.840	1.033	-23.0#	92	0.08	19.71
99	t	Dibenz[a,h]anthracene	1.093	1.192	-9.1	80	0.08	20.06
100	t	7,12-Dimethylbenz(a)anthr	0.567	0.631	-11.3	81	0.03	17.76
101	t	Benzo[g,h,i]perylene	1.095	1.196	-9.2	82	0.07	20.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P100868A.D MP4411.M Fri Feb 05 14:06:43 2016

8.9.20

8

Continuing Calibration Summary

Job Number: JC13575 **Sample:** EP4494-CC4412
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** P102432.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4494\P102432.D          Vial: 3
Acq On    :  5 Feb 2016  12:11 pm                   Operator: ashleyd
Sample    : CC4412-50                               Inst    : MSP
Misc      : op90955,ep4494                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4411.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Thu Feb 04 12:28:19 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	I	1,4-Dichlorobenzene-d4b	1.000	1.000	0.0	67	0.05	4.28
103		Benzaldehyde	1.441	1.372	4.8	65	0.05	3.76
104	I	Phenanthrene-d10b	1.000	1.000	0.0	76	0.08	11.11
105		Atrazine	0.179	0.225	-25.7#	92	0.08	10.77
106	I	Chrysene-d12b	1.000	1.000	0.0	87	0.10	15.82
107		Benzidine	0.894	0.663	25.8#	61	0.06	13.47
108	I	Naphthalene-d8b	1.000	1.000	0.0	69	0.05	6.02
109		Hydroquinone	0.408	0.437	-7.1	70	0.08	6.79
110	I	Acenaphthene-d10b	1.000	1.000	0.0	74	0.06	8.74
111		1,2,4,5-Tetrachlorobenzen	0.466	0.518	-11.2	78	0.03	7.39

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 P100868A.D MP4411.M         Fri Feb 05 14:06:45 2016
```

8.9.21

8

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2295\
Data File : 3p50584.D
Acq On : 6 Feb 2016 12:58 am
Operator : juliusj
Sample : jc13575-1
Misc : op91010,e3p2295,100
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 06 12:13:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2260.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Feb 03 13:01:14 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.681	152	209384	40.00 ppm	0.07
24) Naphthalene-d8	5.606	136	795098	40.00 ppm	0.06
47) Acenaphthene-d10	7.024	164	435422	40.00 ppm	0.09
69) Phenanthrene-d10	8.896	188	712713	40.00 ppm	0.11
83) Chrysene-d12	14.169	240	731576	40.00 ppm	0.14
91) Perylene-d12	17.234	264	684070	40.00 ppm	0.15
101) 1,4-Dichlorobenzene-d4a	4.681	152	209384	40.00 ppm	0.07
103) Acenaphthene-d10a	7.024	164	435422	40.00 ppm	0.09
106) Chrysene-d12a	14.169	240	731576	40.00 ppm	0.14
108) Naphthalene-d8a	5.606	136	795098	40.00 ppm	0.06
System Monitoring Compounds					
5) 2-Fluorophenol	3.702	112	203602	21.52 ppm	0.05
Spiked Amount 50.000			Recovery	= 43.04%	
8) Phenol-d5	4.424	99	180303	15.50 ppm	0.07
Spiked Amount 50.000			Recovery	= 31.00%	
25) Nitrobenzene-d5	5.082	82	389204	43.05 ppm	0.05
Spiked Amount 50.000			Recovery	= 86.10%	
51) 2-Fluorobiphenyl	6.408	172	570278	38.56 ppm	0.08
Spiked Amount 50.000			Recovery	= 77.12%	
73) 2,4,6-Tribromophenol	7.911	330	92900	46.75 ppm	0.10
Spiked Amount 50.000			Recovery	= 93.50%	
85) Terphenyl-d14	11.944	244	635386	41.93 ppm	0.11
Spiked Amount 50.000			Recovery	= 83.86%	
Target Compounds					Qvalue
21) 3&4-Methylphenol	4.986	108	14157	1.89 ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

9.1.1

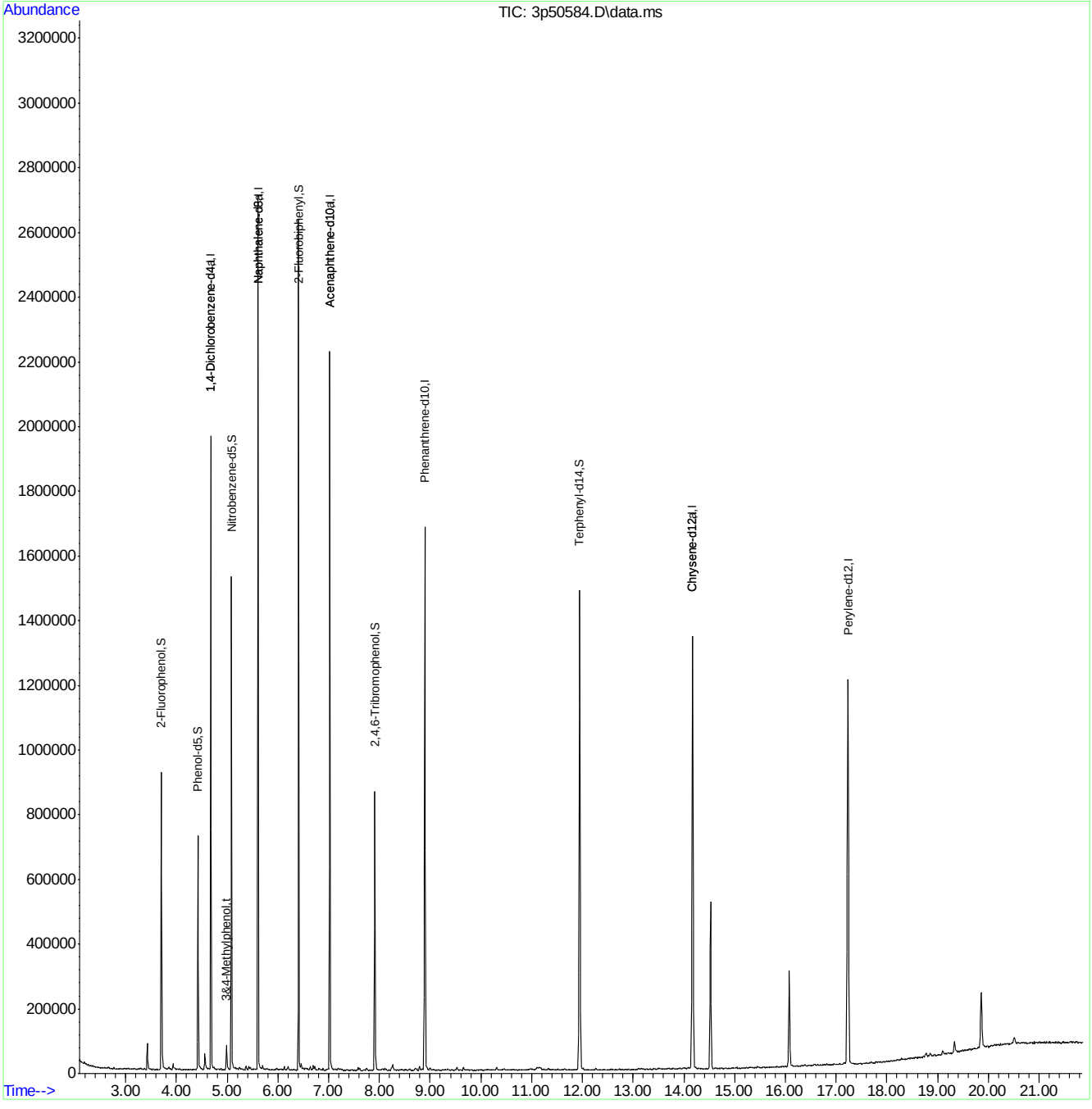
9

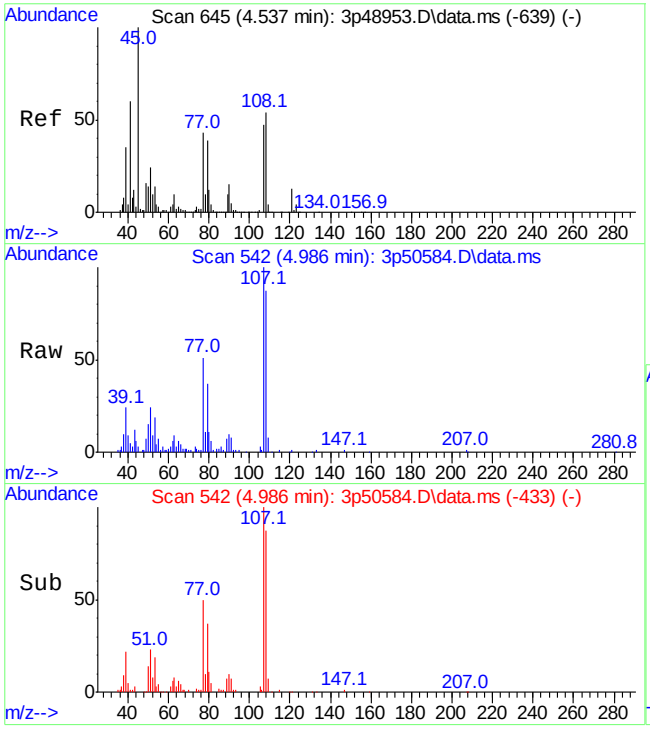
SGS ACCUTEST JC13575

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2295\
Data File : 3p50584.D
Acq On : 6 Feb 2016 12:58 am
Operator : juliusj
Sample : jc13575-1
Misc : op91010,e3p2295,100
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 06 12:13:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2260.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Feb 03 13:01:14 2016
Response via : Initial Calibration

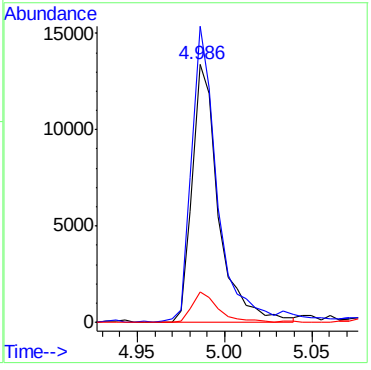




#21
3&4-Methylphenol
Concen: 1.89 ppm
RT: 4.986 min Scan# 542
Delta R.T. 0.085 min
Lab File: 3p50584.D
Acq: 6 Feb 2016 12:58 am

Tgt Ion:108 Resp: 14157

Ion	Ratio	Lower	Upper
108	100		
107	113.8	87.6	147.6
90	11.7	0.0	40.0



9.1.1

9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2295\
Data File : 3p50585.D
Acq On : 6 Feb 2016 1:25 am
Operator : juliusj
Sample : jc13575-3
Misc : op91010,e3p2295,100
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 06 12:14:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2260.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Feb 03 13:01:14 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.681	152	173039	40.00 ppm	0.07
24) Naphthalene-d8	5.606	136	644607	40.00 ppm	0.06
47) Acenaphthene-d10	7.024	164	341064	40.00 ppm	0.09
69) Phenanthrene-d10	8.896	188	564588	40.00 ppm	0.11
83) Chrysene-d12	14.169	240	555936	40.00 ppm	0.14
91) Perylene-d12	17.234	264	521216	40.00 ppm	0.15
101) 1,4-Dichlorobenzene-d4a	4.681	152	173039	40.00 ppm	0.07
103) Acenaphthene-d10a	7.024	164	341064	40.00 ppm	0.09
106) Chrysene-d12a	14.169	240	555936	40.00 ppm	0.14
108) Naphthalene-d8a	5.606	136	644607	40.00 ppm	0.06
System Monitoring Compounds					
5) 2-Fluorophenol	3.702	112	159491	20.40 ppm	0.05
Spiked Amount 50.000			Recovery	= 40.80%	
8) Phenol-d5	4.424	99	142478	14.82 ppm	0.07
Spiked Amount 50.000			Recovery	= 29.64%	
25) Nitrobenzene-d5	5.082	82	322753	44.04 ppm	0.05
Spiked Amount 50.000			Recovery	= 88.08%	
51) 2-Fluorobiphenyl	6.409	172	482730	41.67 ppm	0.08
Spiked Amount 50.000			Recovery	= 83.34%	
73) 2,4,6-Tribromophenol	7.912	330	77457	49.21 ppm	0.10
Spiked Amount 50.000			Recovery	= 98.42%	
85) Terphenyl-d14	11.944	244	510948	44.37 ppm	0.11
Spiked Amount 50.000			Recovery	= 88.74%	

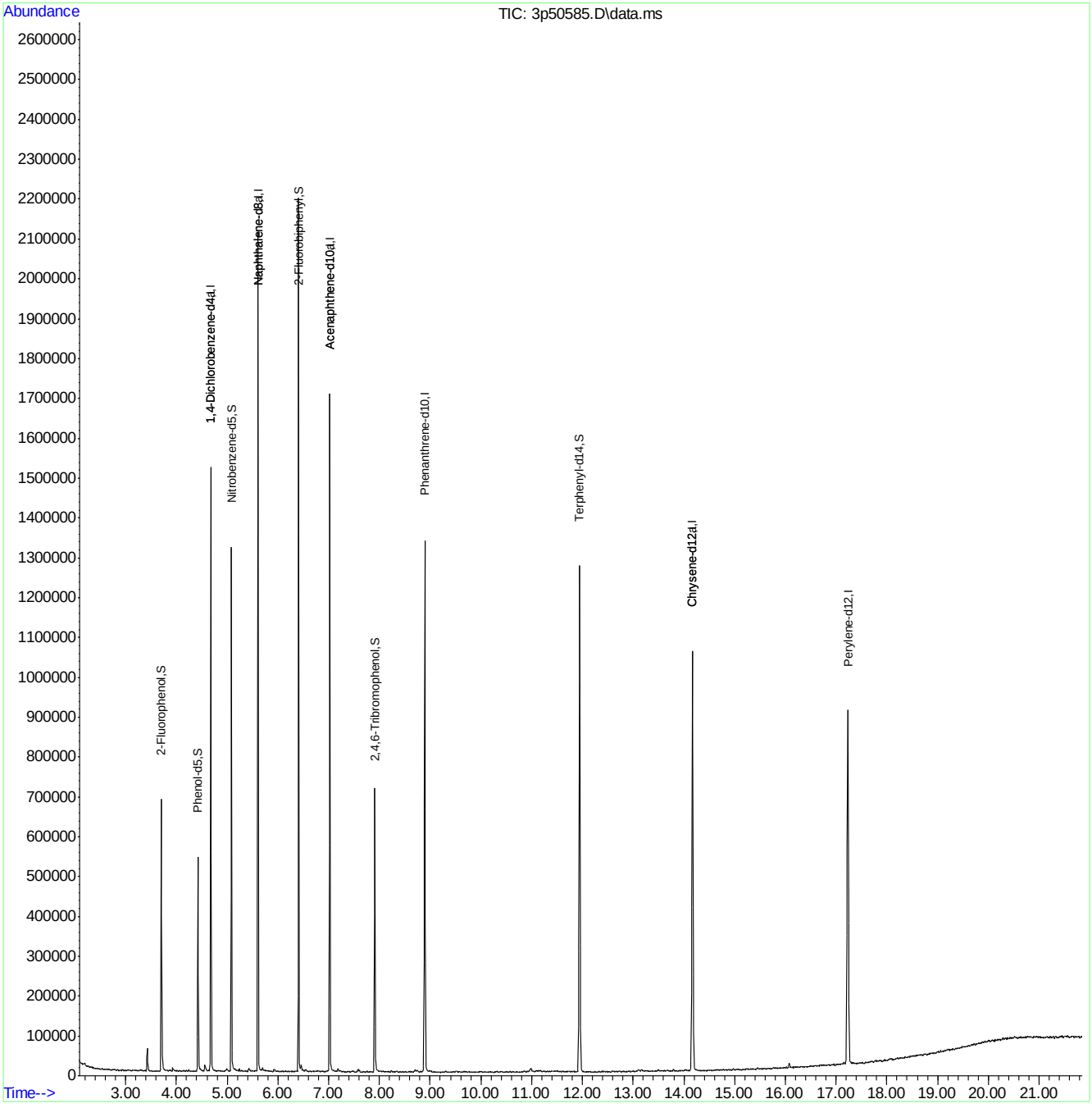
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2295\
Data File : 3p50585.D
Acq On : 6 Feb 2016 1:25 am
Operator : juliusj
Sample : jc13575-3
Misc : op91010,e3p2295,100
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Feb 06 12:14:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2260.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Feb 03 13:01:14 2016
Response via : Initial Calibration



M3P2260.M Sat Feb 06 12:14:57 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2295\
Data File : 3p50577.D
Acq On : 5 Feb 2016 9:49 pm
Operator : juliusj
Sample : op90922-mb2
Misc : op90922,e3p2295,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 06 12:05:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2260.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Feb 03 13:01:14 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.681	152	210330	40.00 ppm	0.07
24) Naphthalene-d8	5.606	136	768357	40.00 ppm	0.06
47) Acenaphthene-d10	7.024	164	414320	40.00 ppm	0.09
69) Phenanthrene-d10	8.896	188	691558	40.00 ppm	0.11
83) Chrysene-d12	14.169	240	695791	40.00 ppm	0.14
91) Perylene-d12	17.234	264	639269	40.00 ppm	0.15
101) 1,4-Dichlorobenzene-d4a	4.681	152	210330	40.00 ppm	0.07
103) Acenaphthene-d10a	7.024	164	414320	40.00 ppm	0.09
106) Chrysene-d12a	14.169	240	695791	40.00 ppm	0.14
108) Naphthalene-d8a	5.606	136	768357	40.00 ppm	0.06
System Monitoring Compounds					
5) 2-Fluorophenol	3.702	112	174116	18.32 ppm	0.05
Spiked Amount 50.000			Recovery	= 36.64%	
8) Phenol-d5	4.424	99	151226	12.94 ppm	0.07
Spiked Amount 50.000			Recovery	= 25.88%	
25) Nitrobenzene-d5	5.082	82	362764	41.52 ppm	0.05
Spiked Amount 50.000			Recovery	= 83.04%	
51) 2-Fluorobiphenyl	6.408	172	549690	39.06 ppm	0.08
Spiked Amount 50.000			Recovery	= 78.12%	
73) 2,4,6-Tribromophenol	7.911	330	85632	44.41 ppm	0.10
Spiked Amount 50.000			Recovery	= 88.82%	
85) Terphenyl-d14	11.950	244	586872	40.72 ppm	0.11
Spiked Amount 50.000			Recovery	= 81.44%	

Target Compounds Qvalue

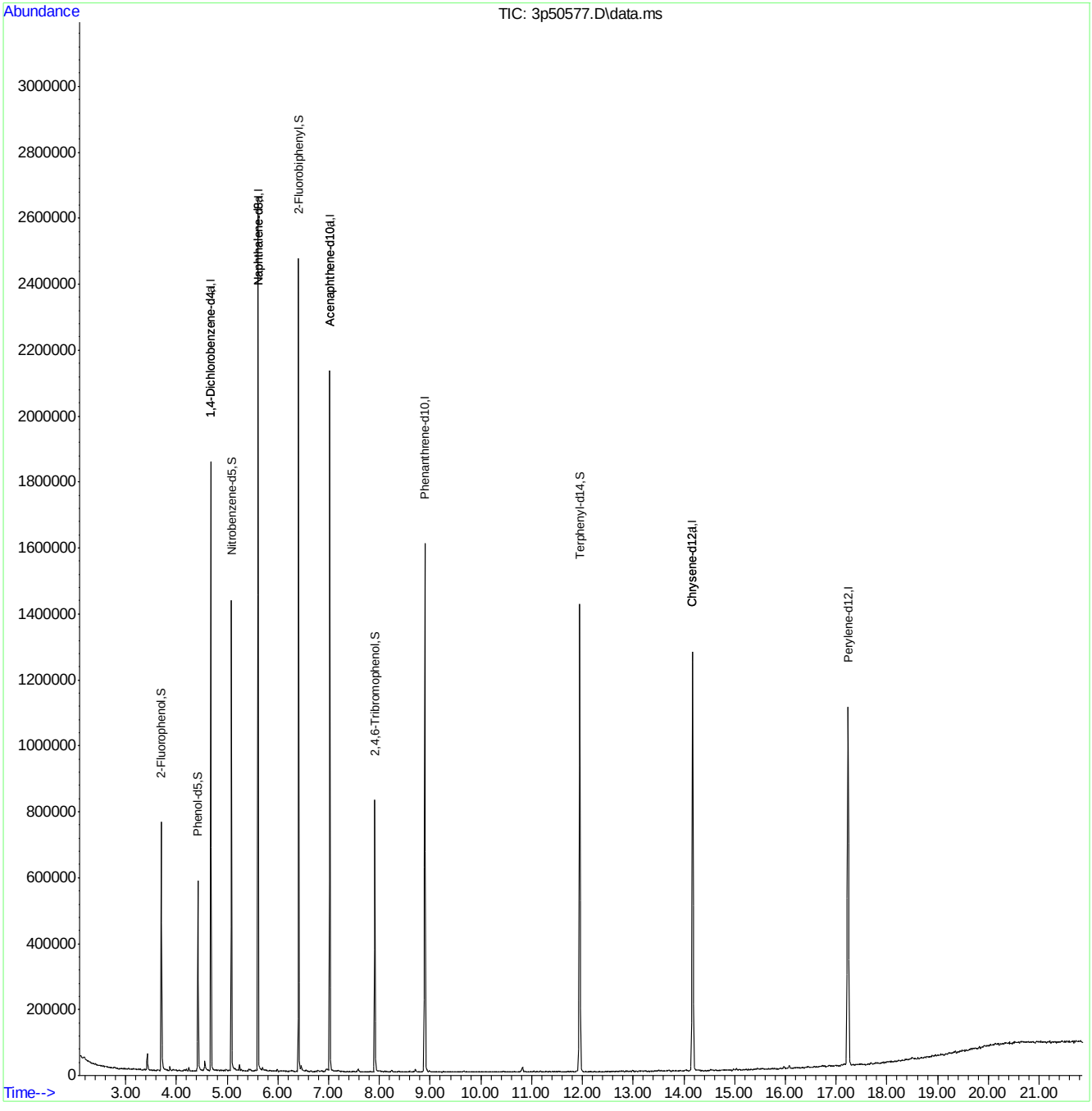
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC13575

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\E3P2295\
Data File : 3p50577.D
Acq On : 5 Feb 2016 9:49 pm
Operator : juliusj
Sample : op90922-mb2
Misc : op90922,e3p2295,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 06 12:05:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3P2260.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Feb 03 13:01:14 2016
Response via : Initial Calibration



M3P2260.M Sat Feb 06 12:05:38 2016 Page: 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4494\P102434.D Vial: 5
Acq On : 5 Feb 2016 1:10 pm Operator: ashleyd
Sample : op90951-mb2 Inst : MSP
Misc : op90951,ep4494,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 05 13:32:15 2016 Quant Results File: MP4411.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4411.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Feb 04 12:28:19 2016
Response via : Initial Calibration
DataAcq Meth : MP4411

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.28	152	41631	40.00 ppm	0.05
24) Naphthalene-d8	6.02	136	168311	40.00 ppm	0.05
47) Acenaphthene-d10	8.74	164	94184	40.00 ppm	0.06
69) Phenanthrene-d10	11.10	188	147488	40.00 ppm	0.07
83) Chrysene-d12	15.81	240	140495	40.00 ppm	-0.02
92) Perylene-d12	18.38	264	129730	40.00 ppm	0.05
102) 1,4-Dichlorobenzene-d4b	4.28	152	41631	40.00 ppm	0.05
104) Phenanthrene-d10b	11.10	188	147488	40.00 ppm	0.07
106) Chrysene-d12b	15.81	240	140495	40.00 ppm	0.09
108) Naphthalene-d8b	6.02	136	168311	40.00 ppm	0.05
110) Acenaphthene-d10b	8.74	164	94184	40.00 ppm	0.06

System Monitoring Compounds					
5) 2-Fluorophenol	2.90	112	41913	22.70 ppm	0.03
Spiked Amount 50.000			Recovery = 45.40%		
8) Phenol-d5	3.89	99	37172	13.98 ppm	0.00
Spiked Amount 50.000			Recovery = 27.96%		
25) Nitrobenzene-d5	5.01	82	82406	41.47 ppm	0.06
Spiked Amount 50.000			Recovery = 82.94%		
51) 2-Fluorobiphenyl	7.71	172	112251	39.67 ppm	-0.11
Spiked Amount 50.000			Recovery = 79.34%		
73) 2,4,6-Tribromophenol	10.02	330	13245	48.42 ppm	0.06
Spiked Amount 50.000			Recovery = 96.84%		
85) Terphenyl-d14	13.91	244	112017	40.10 ppm	0.07
Spiked Amount 50.000			Recovery = 80.20%		

Target Compounds Qvalue

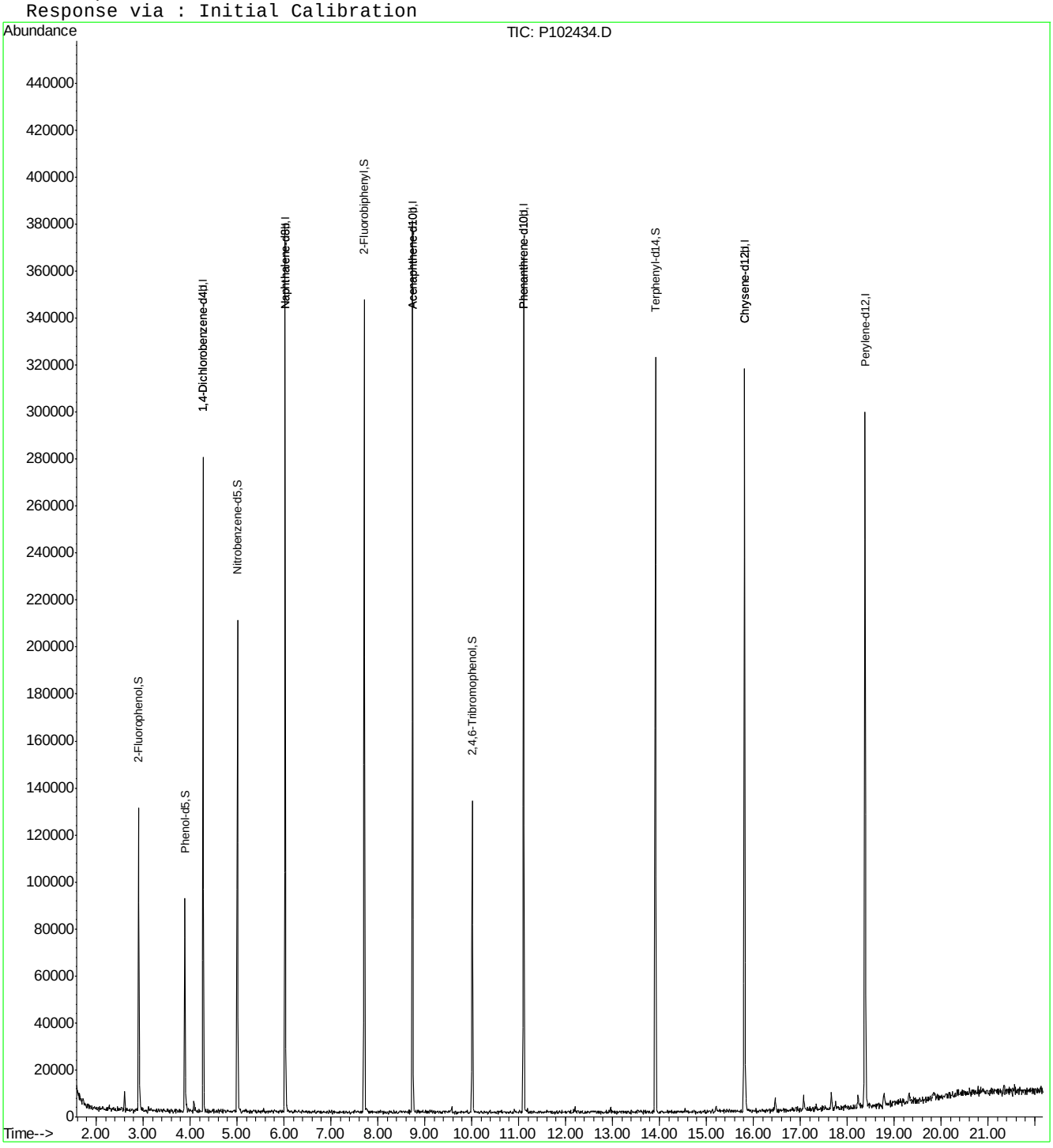
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC13575

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4494\P102434.D Vial: 5
Acq On : 5 Feb 2016 1:10 pm Operator: ashleyd
Sample : op90951-mb2 Inst : MSP
Misc : op90951,ep4494,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 5 14:04 2016 Quant Results File: MP4411.RES

Method : C:\MSDCHEM\1\METHODS\MP4411.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Feb 04 12:28:19 2016
Response via : Initial Calibration



GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GPF3997-MB3	PF130123.D	1	02/03/16	XPL	n/a	n/a	GPF3997

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC13575-2, JC13575-4, JC13575-6, JC13575-8

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	10	1.7	mg/kg	

CAS No.	Surrogate Recoveries		Limits
98-08-8	aaa-Trifluorotoluene	95%	70-116%

Method Blank Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GPF3997-MB1	PF130104.D	1	02/03/16	XPL	n/a	n/a	GPF3997

The QC reported here applies to the following samples: **Method:** SW846 8015C

GPF3997-BS, JC13520-2MS, JC13520-2MSD

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	10	1.7	mg/kg	

CAS No.	Surrogate Recoveries		Limits
98-08-8	aaa-Trifluorotoluene	92%	70-116%

Blank Spike Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GPF3997-BS	PF130111.D	1	02/03/16	XPL	n/a	n/a	GPF3997

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC13575-2, JC13575-4, JC13575-6, JC13575-8

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	400	373	93	75-126

CAS No.	Surrogate Recoveries	BSP	Limits
98-08-8	aaa-Trifluorotoluene	104%	70-116%

10.2.1

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* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC13520-2MS	PF130109.D	1	02/03/16	XPL	n/a	n/a	GPF3997
JC13520-2MSD	PF130110.D	1	02/03/16	XPL	n/a	n/a	GPF3997
JC13520-2	PF130105.D	1	02/03/16	XPL	n/a	n/a	GPF3997

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC13575-2, JC13575-4, JC13575-6, JC13575-8

CAS No.	Compound	JC13520-2 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		524	483	92	524	501	96	4	68-128/11

CAS No.	Surrogate Recoveries	MS	MSD	JC13520-2	Limits
98-08-8	aaa-Trifluorotoluene	99%	102%	91%	70-116%

10.3.1

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* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Method: SW846 8015C **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
JC13575-2	PF130124.D	96
JC13575-4	PF130125.D	93
JC13575-6	PF130126.D	95
JC13575-8	PF130127.D	92
GPF3997-BS	PF130111.D	104
GPF3997-MB3	PF130123.D	95
JC13520-2MS	PF130109.D	99
JC13520-2MSD	PF130110.D	102
GPF3997-MB1	PF130104.D	92

Surrogate Compounds	Recovery Limits
S1 = aaa-Trifluorotoluene	70-116%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Check Std:	GPF3996-CC3880	**Injection Date:**	02/02/16
Lab File ID:	PF130096.D	**Injection Time:**	14:38
Instrument ID:	GCPF	**Method:**	SW846 8015C

	S1 [a] **RT**
Check Std	10.97

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GPF3997-RT	PF130101.D	02/03/16	07:58	10.99

Surrogate Compounds

S1 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Check Std:	GPF3997-CC3880	**Injection Date:**	02/03/16
Lab File ID:	PF130102.D	**Injection Time:**	08:23
Instrument ID:	GCPF	**Method:**	SW846 8015C

	S1 [a] **RT**
Check Std	10.99

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GPF3997-MB1	PF130104.D	02/03/16	09:15	10.97
JC13520-2	PF130105.D	02/03/16	09:41	10.98
ZZZZZZ	PF130106.D	02/03/16	10:07	10.97
ZZZZZZ	PF130107.D	02/03/16	10:33	10.98
ZZZZZZ	PF130108.D	02/03/16	10:59	10.99
JC13520-2MS	PF130109.D	02/03/16	11:25	10.99
JC13520-2MSD	PF130110.D	02/03/16	11:51	10.99
GPF3997-BS	PF130111.D	02/03/16	12:17	10.99

Surrogate Compounds

S1 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Check Std:	GPF3997-CC3880	**Injection Date:**	02/03/16
Lab File ID:	PF130121.D	**Injection Time:**	17:09
Instrument ID:	GCPF	**Method:**	SW846 8015C

	S1 [a] **RT**
Check Std	10.99

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GPF3997-MB3	PF130123.D	02/03/16	18:01	11.00
JC13575-2	PF130124.D	02/03/16	18:27	10.99
JC13575-4	PF130125.D	02/03/16	18:53	10.98
JC13575-6	PF130126.D	02/03/16	19:19	10.98
JC13575-8	PF130127.D	02/03/16	19:45	10.98

Surrogate Compounds

S1 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ
Sample: GPF3880-ICC3880
Lab FileID: PF126984.D

```
                         Response Factor Report  GCPF

 Method       : C:\MSDCHEM\1\METHODS\MPF3880.M (Chemstation Integrator)
 Title        : Method SW846 8015B (GRO)
 Last Update  : Thu Oct 01 16:02:43 2015
 Response via : Initial Calibration

 Calibration Files
 0.2 =PF126981.D  0.8 =PF126982.D  4   =PF126983.D  8   =PF126984.D
 20  =PF126985.D  40  =PF126987.D  30  =PF126986.D

    Compound             0.2   0.8   4     8     20    40    30    Avg   %RSD
 ---------------------------------------------------------------------------
 1)H TPH-GRO (C6-C10)  1.752 1.577 1.687 1.898 1.970 2.060 2.026 1.853 E4   9.91
 2)H TPH-GRO (C6-C12)  1.311 1.267 1.371 1.574 1.667 1.771 1.731 1.527 E4  13.67
 3)H TPH-GRO (C5-C10)  1.852 1.697 1.791 2.044 2.137 2.243 2.199 1.995 E4  10.77
 4)S a,a,a-Trifluoroto 2.364 2.263 1.923 2.098 2.833       2.704 2.364 E4  14.79
---------------------------------------------------------------------------
(#) = Out of Range

          MPF3880.M         Thu Oct 01 17:07:02 2015   RPT1
```

10.6.1

10

Initial Calibration Verification

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ
Sample: GPF3880-ICV3880
Lab FileID: PF126990.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\PF126990.D                Vial: 12
Acq On    : 10-1-2015 04:43:24 PM                   Operator: JAYC
Sample    : ICV3880-8000                            Inst    : GCPF
Misc      : GC46904,GPF3880,10.0,,100,10,1          Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\MPF3880.M (Chemstation Integrator)
Title        : Method SW846 8015B (GRO)
Last Update  : Thu Oct 01 16:02:43 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 H	TPH-GRO (C6-C10)	18.528	18.145 E3	2.1	96	0.00	8.16-13.84
2 H	TPH-GRO (C6-C12)	15.274	16.526 E3	-8.2	105	0.00	7.84-14.16
3 H	TPH-GRO (C5-C10)	19.948	20.229 E3	-1.4	99	0.00	7.25-14.75
4 S	a,a,a-Trifluorotoluene	23.642	20.375 E3	13.8	97	-0.02	10.95-11.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
PF126984.D MPF3880.M Thu Oct 01 17:06:47 2015 RPT1

10.6.2

10

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GPF3996-CC3880
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** PF130096.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\PF130096.D                Vial: 35
Acq On    : 2-2-2016 02:38:26 PM                     Operator: XULIU
Sample    : CC3880-8000                              Inst    : GCPF
Misc      : GC47654,GPF3996,10.0,,100,10,1           Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\MPF3880.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Fri Oct 16 09:33:42 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-GRO (C6-C10)	18.528	16.078 E3	13.2	85	0.00	8.16-13.84
2	H	TPH-GRO (C6-C12)	15.274	13.283 E3	13.0	84	0.00	7.84-14.16
3	H	TPH-GRO (C5-C10)	19.948	17.385 E3	12.8	85	0.00	7.25-14.75
4	S	a,a,a-Trifluorotoluene	23.642	23.177 E3	2.0	110	-0.02	10.89-11.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
PF126984.D MPF3880.M Tue Feb 02 15:42:36 2016 RPT1

10.6.3

10

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GPF3997-CC3880
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** PF130102.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\PF130102.D                Vial: 4
Acq On    : 2-3-2016 08:23:44 AM                    Operator: XULIU
Sample    : CC3880-4000                             Inst    : GCPF
Misc      : GC47659,GPF3997,10.0,,100,10,1          Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\MPF3880.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Fri Oct 16 09:33:42 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 H	TPH-GRO (C6-C10)	18.528	18.536 E3	-0.0	110	0.00	8.16-13.84
2 H	TPH-GRO (C6-C12)	15.274	15.173 E3	0.7	111	0.00	7.84-14.16
3 H	TPH-GRO (C5-C10)	19.948	20.059 E3	-0.6	112	0.00	7.25-14.75
4 S	a,a,a-Trifluorotoluene	23.642	22.789 E3	3.6	119	0.00	10.91-11.06

(#) = Out of Range SPCC's out = 0 CCC's out = 0
PF126983.D MPF3880.M Wed Feb 03 10:03:51 2016 RPT1

10.6.4

10

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GPF3997-CC3880
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** PF130112.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\PF130112.D                Vial: 14
Acq On    : 03 Feb 2016  12:42 pm                   Operator: XULIU
Sample    : CC3880-8000                             Inst    : GCPF
Misc      : GC47659,GPF3997,10.0,,100,10,1          Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\MPF3880.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Fri Oct 16 09:33:42 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-GRO (C6-C10)	18.528	18.567 E3	-0.2	98	0.00	8.16-13.84
2	H	TPH-GRO (C6-C12)	15.274	15.445 E3	-1.1	98	0.00	7.84-14.16
3	H	TPH-GRO (C5-C10)	19.948	20.094 E3	-0.7	98	0.00	7.25-14.75
4	S	a,a,a-Trifluorotoluene	23.642	23.973 E3	-1.4	114	0.00	10.92-11.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0
PF126984.D MPF3880.M Wed Feb 03 13:46:58 2016 RPT1

10.6.5

10

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GPF3997-CC3880
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** PF130121.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\PF130121.D                Vial: 23
Acq On    : 2-3-2016 05:09:27 PM                     Operator: XULIU
Sample    : CC3880-4000                              Inst    : GCPF
Misc      : GC47659,GPF3997,10.0,,100,10,1           Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\MPF3880.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Fri Oct 16 09:33:42 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 H	TPH-GRO (C6-C10)	18.528	18.800 E3	-1.5	111	0.00	8.16-13.84
2 H	TPH-GRO (C6-C12)	15.274	15.268 E3	0.0	111	0.00	7.84-14.16
3 H	TPH-GRO (C5-C10)	19.948	20.253 E3	-1.5	113	0.00	7.25-14.75
4 S	a,a,a-Trifluorotoluene	23.642	23.705 E3	-0.3	123	0.00	10.91-11.06

(#) = Out of Range SPCC's out = 0 CCC's out = 0
PF126983.D MPF3880.M Thu Feb 04 08:14:28 2016 RPT1

10.6.6

10

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GPF3997-CC3880
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** PF130129.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\PF130129.D                Vial: 31
Acq On    : 2-3-2016 08:36:45 PM                     Operator: XULIU
Sample    : CC3880-8000                              Inst    : GCPF
Misc      : GC47661,GPF3997,10.0,,100,10,1           Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\MPF3880.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Fri Oct 16 09:33:42 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 H	TPH-GRO (C6-C10)	18.528	17.598 E3	5.0	93	0.00	8.16-13.84
2 H	TPH-GRO (C6-C12)	15.274	14.486 E3	5.2	92	0.00	7.84-14.16
3 H	TPH-GRO (C5-C10)	19.948	19.036 E3	4.6	93	0.00	7.25-14.75
4 S	a,a,a-Trifluorotoluene	23.642	24.015 E3	-1.6	114	-0.02	10.89-11.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
PF126984.D MPF3880.M Thu Feb 04 08:17:23 2016 RPT1

10.6.7

10

GC Volatiles

Raw Data

Quantitation Report (QT Reviewed)

```
Data File : C:\MSDCHEM\1\DATA\PF130124.D                Vial: 26
Acq On    : 2-3-2016 06:27:21 PM                     Operator: XULIU
Sample    : JC13575-2                                Inst    : GCPF
Misc      : GC47661,GPF3997,10.0,,100,10,1           Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Feb 03 18:47:15 2016  Quant Results File: MPF3880.RES

Quant Method : C:\MSDCHEM\1\METHODS\MPF3880.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Fri Oct 16 09:33:42 2015
Response via : Initial Calibration
DataAcq Meth : MPF3880.M

Volume Inj.  : N/A
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : RTX-502.2 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
-------------------------------------------------------------------------

  System Monitoring Compounds
 4) S   a,a,a-Trifluorotoluene      10.99        6825591  288.710 ppb
Spiked Amount   300.000                   Recovery      =   96.24%

  Target Compounds
```

11.1.1

11

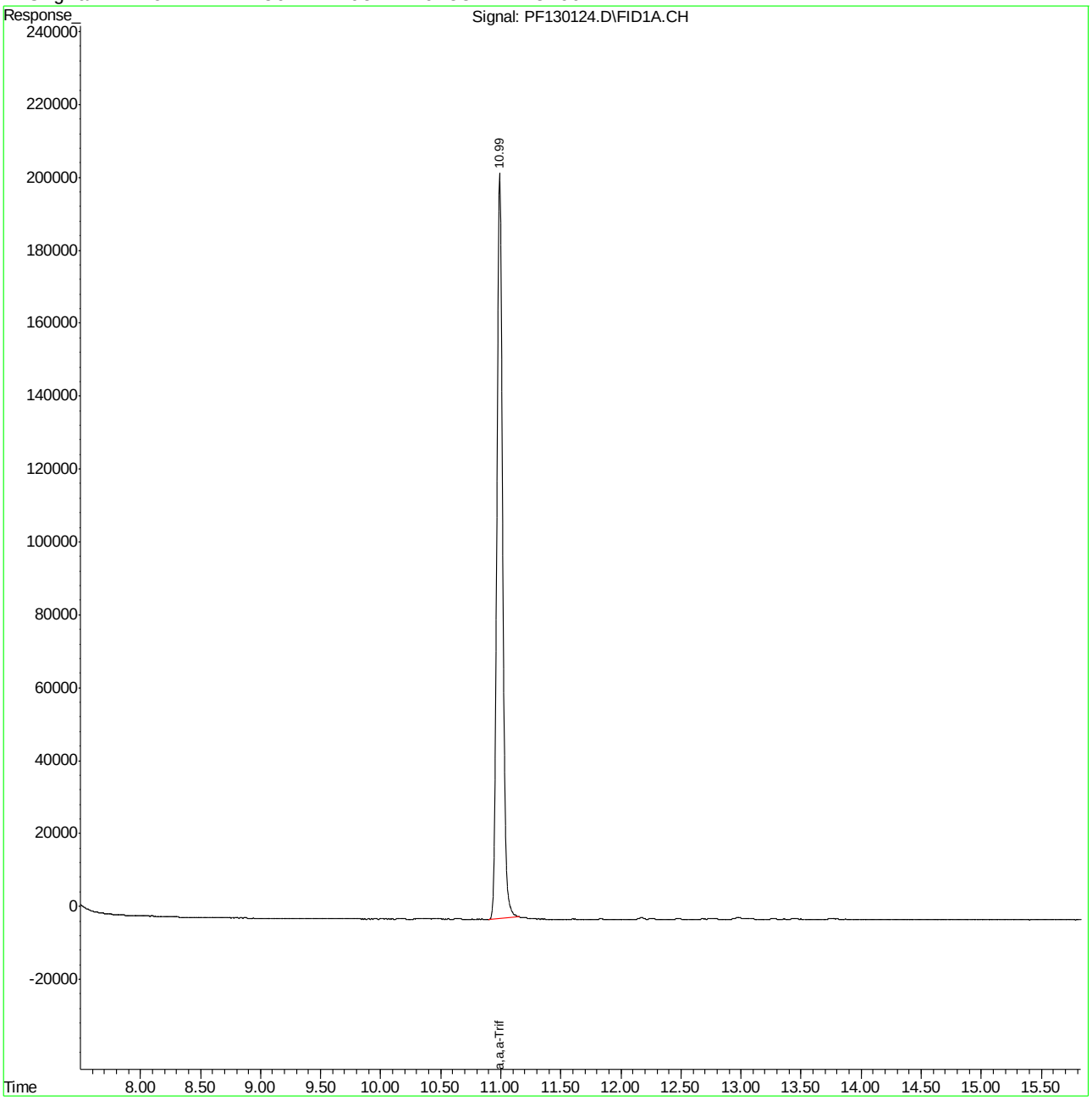
```
-------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window                          (m)=manual int.
PF130124.D  MPF3880.M      Thu Feb 04 08:15:13 2016      RPT1
```

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\PF130124.D Vial: 26
Acq On : 2-3-2016 06:27:21 PM Operator: XULIU
Sample : JC13575-2 Inst : GCPF
Misc : GC47661,GPF3997,10.0,,100,10,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Feb 4 8:15 2016 Quant Results File: MPF3880.RES

Quant Method : C:\MSDCHEM\1\METHODS\MPF3880.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Fri Oct 16 09:33:42 2015
Response via : Multiple Level Calibration
DataAcq Meth : MPF3880.M

Volume Inj. : N/A
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : RTX-502.2 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

```
Data File : C:\MSDCHEM\1\DATA\PF130125.D                Vial: 27
Acq On    : 2-3-2016 06:53:16 PM                     Operator: XULIU
Sample    : JC13575-4                                Inst    : GCPF
Misc      : GC47661,GPF3997,10.3,,100,10,1           Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Feb 03 19:13:11 2016  Quant Results File: MPF3880.RES

Quant Method : C:\MSDCHEM\1\METHODS\MPF3880.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Fri Oct 16 09:33:42 2015
Response via : Initial Calibration
DataAcq Meth : MPF3880.M

Volume Inj.  : N/A
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : RTX-502.2 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 4) S   a,a,a-Trifluorotoluene      10.98        6575439  278.129 ppb
Spiked Amount   300.000                   Recovery      =   92.71%

Target Compounds
```

11.1.2

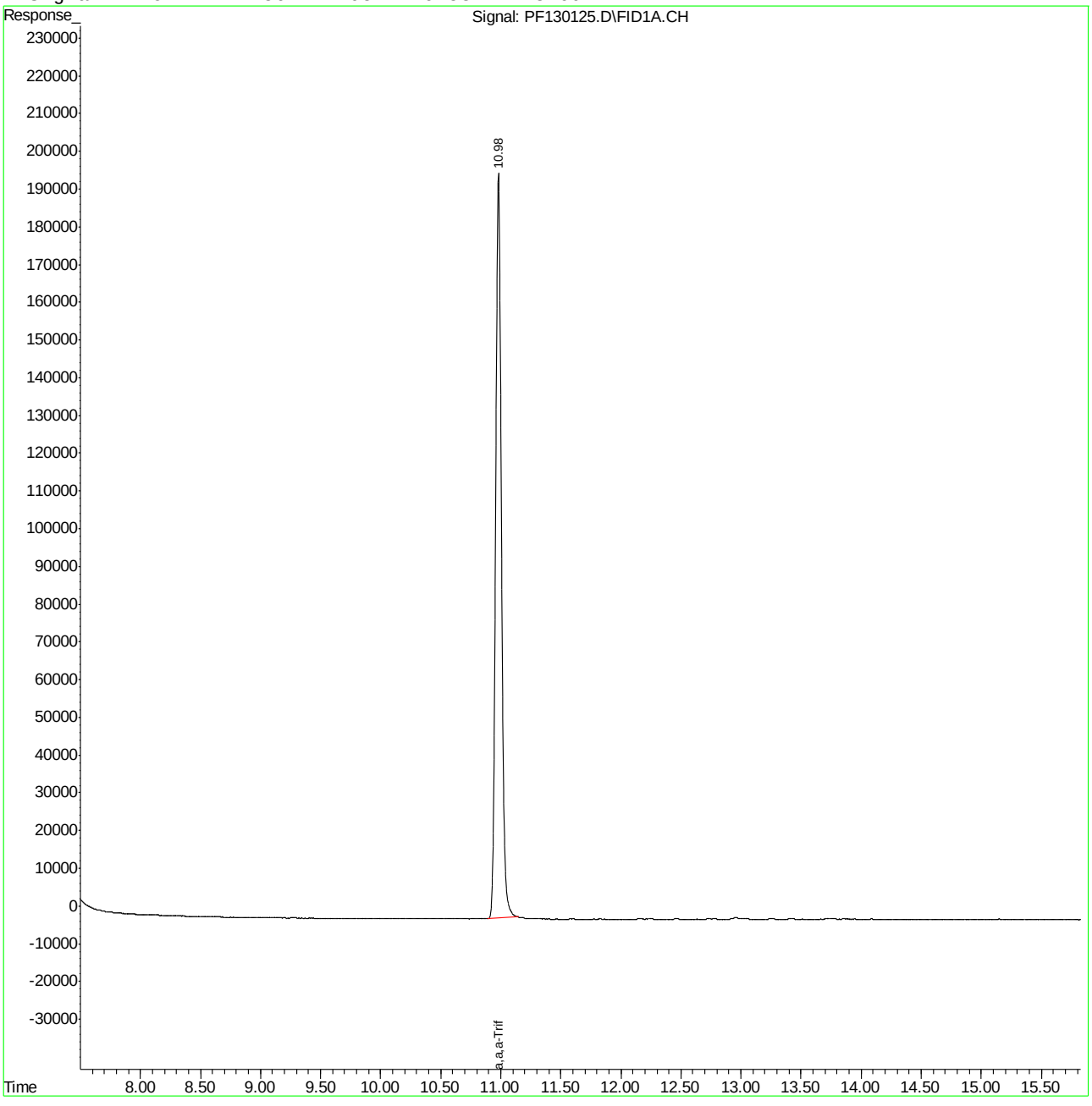
11

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\PF130125.D Vial: 27
Acq On : 2-3-2016 06:53:16 PM Operator: XULIU
Sample : JC13575-4 Inst : GCPF
Misc : GC47661,GPF3997,10.3,,100,10,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Feb 4 8:15 2016 Quant Results File: MPF3880.RES

Quant Method : C:\MSDCHEM\1\METHODS\MPF3880.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Fri Oct 16 09:33:42 2015
Response via : Multiple Level Calibration
DataAcq Meth : MPF3880.M

Volume Inj. : N/A
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : RTX-502.2 105m x 0.53mm x 3.0um



SGS ACCUTEST JC13575

Quantitation Report (QT Reviewed)

```
Data File : C:\MSDCHEM\1\DATA\PF130126.D                Vial: 28
Acq On    : 2-3-2016 07:19:33 PM                     Operator: XULIU
Sample    : JC13575-6                                Inst    : GCPF
Misc      : GC47661,GPF3997,10.0,,100,10,1           Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Feb 03 19:39:27 2016  Quant Results File: MPF3880.RES

Quant Method : C:\MSDCHEM\1\METHODS\MPF3880.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Fri Oct 16 09:33:42 2015
Response via : Initial Calibration
DataAcq Meth : MPF3880.M

Volume Inj.  : N/A
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : RTX-502.2 105m x 0.53mm x 3.0um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 4) S   a,a,a-Trifluorotoluene      10.98        6718588  284.184 ppb
Spiked Amount   300.000                   Recovery      =   94.73%

Target Compounds
```

11.1.3

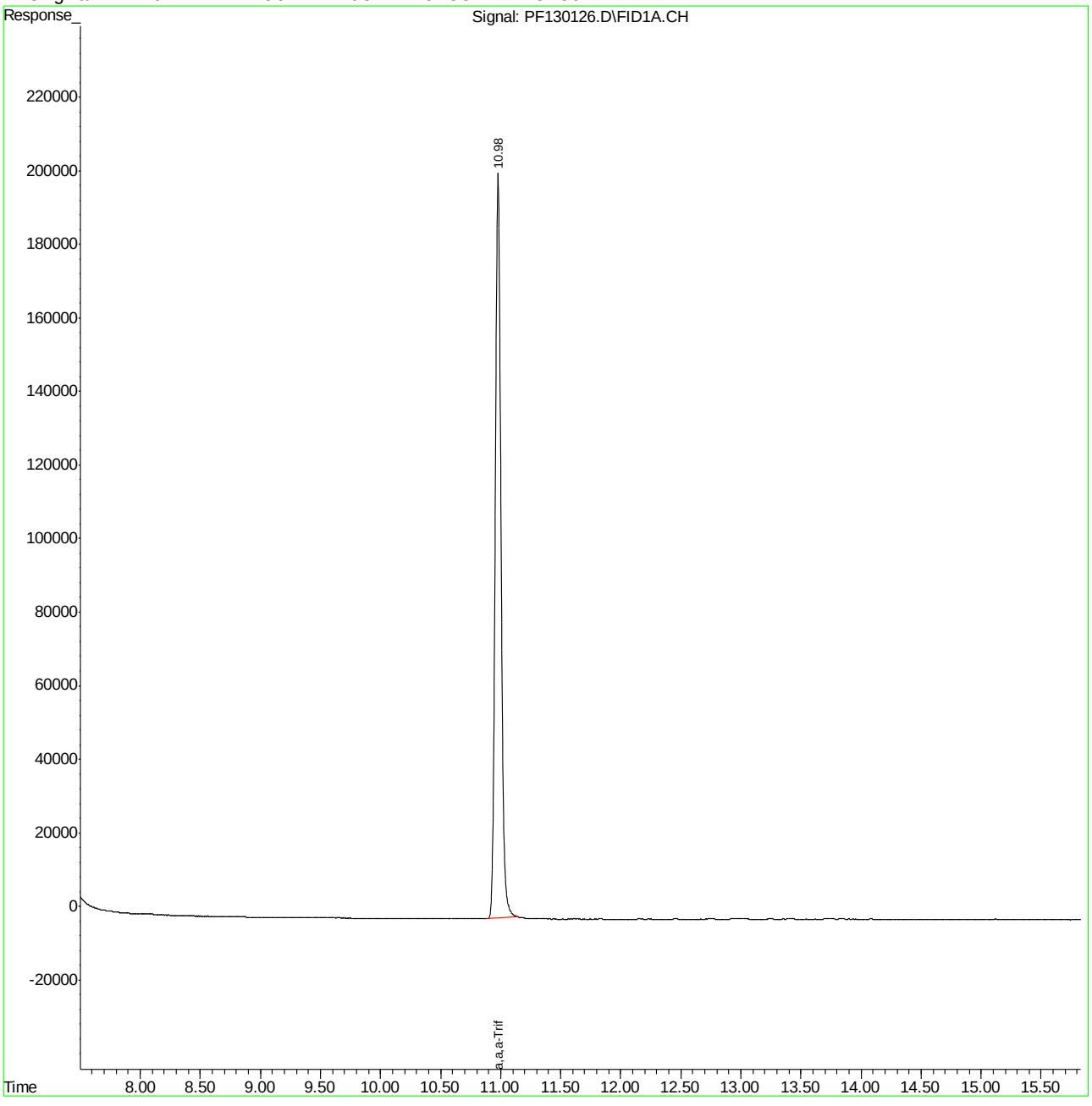
11

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\PF130126.D Vial: 28
Acq On : 2-3-2016 07:19:33 PM Operator: XULIU
Sample : JC13575-6 Inst : GCPF
Misc : GC47661,GPF3997,10.0,,100,10,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Feb 4 8:15 2016 Quant Results File: MPF3880.RES

Quant Method : C:\MSDCHEM\1\METHODS\MPF3880.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Fri Oct 16 09:33:42 2015
Response via : Multiple Level Calibration
DataAcq Meth : MPF3880.M

Volume Inj. : N/A
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : RTX-502.2 105m x 0.53mm x 3.0um



```
                              Quantitation Report    (QT Reviewed)

     Data File : C:\MSDCHEM\1\DATA\PF130127.D                 Vial: 29
     Acq On    : 2-3-2016 07:45:24 PM                      Operator: XULIU
     Sample    : JC13575-8                                 Inst    : GCPF
     Misc      : GC47661,GPF3997,10.1,,100,10,1            Multiplr: 1.00
     IntFile   : autoint1.e
     Quant Time: Feb 03 20:05:18 2016  Quant Results File: MPF3880.RES

     Quant Method : C:\MSDCHEM\1\METHODS\MPF3880.M (Chemstation Integrator)
     Title        : Method SW846 8015C (GRO)
     Last Update  : Fri Oct 16 09:33:42 2015
     Response via : Initial Calibration
     DataAcq Meth : MPF3880.M

     Volume Inj.  : N/A
     Signal Phase : crossbond phenylmethyl polysiloxane
     Signal Info  : RTX-502.2 105m x 0.53mm x 3.0um

         Compound                     R.T.       Response    Conc Units
   ---------------------------------------------------------------------------

   System Monitoring Compounds
 4) S   a,a,a-Trifluorotoluene      10.98        6515927  275.612 ppb
Spiked Amount   300.000                   Recovery      =   91.87%

   Target Compounds
```

11.1.4

11

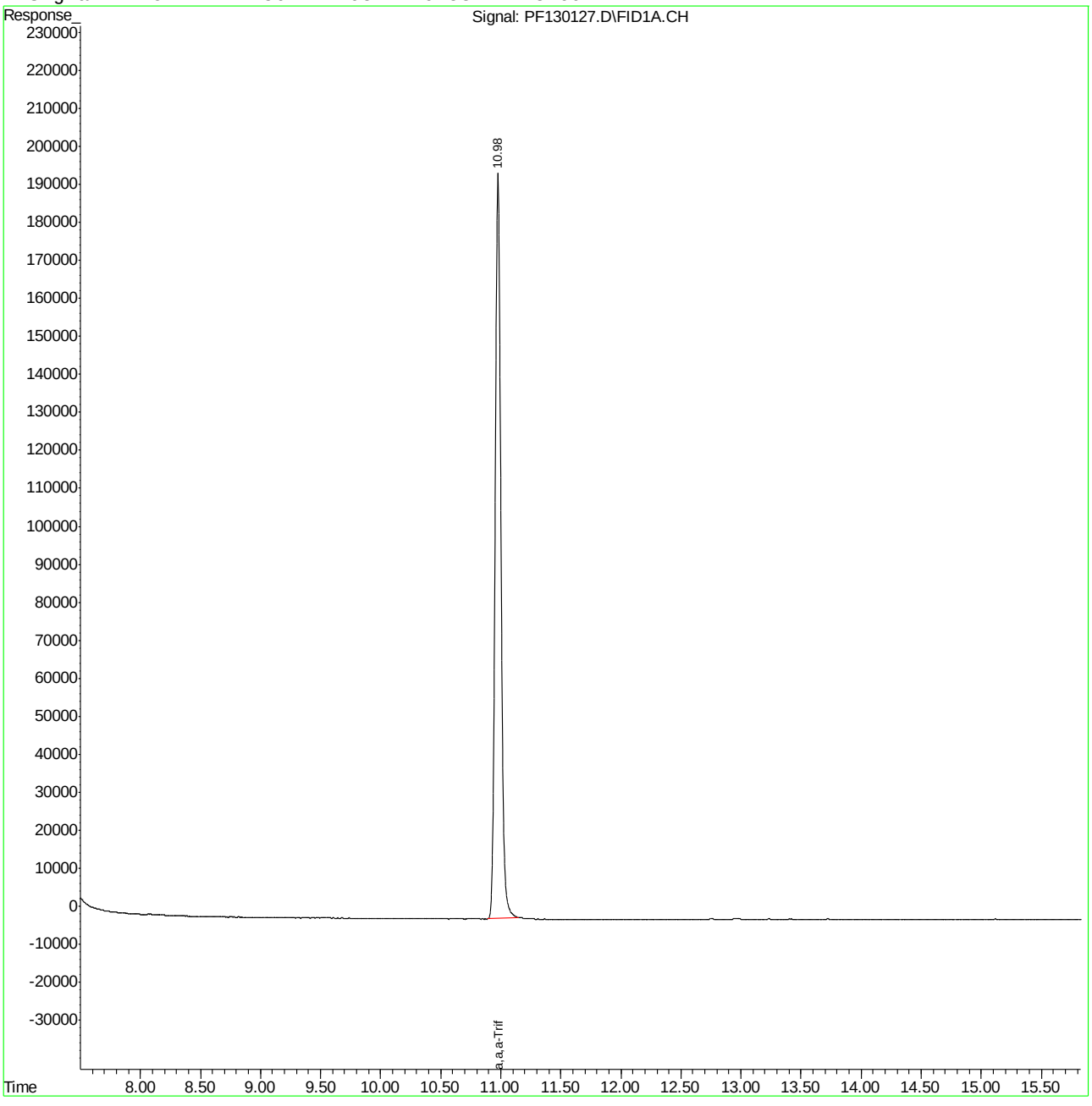
```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window                              (m)=manual int.
PF130127.D  MPF3880.M      Thu Feb 04 08:15:55 2016      RPT1
```

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\PF130127.D Vial: 29
Acq On : 2-3-2016 07:45:24 PM Operator: XULIU
Sample : JC13575-8 Inst : GCPF
Misc : GC47661,GPF3997,10.1,,100,10,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Feb 4 8:15 2016 Quant Results File: MPF3880.RES

Quant Method : C:\MSDCHEM\1\METHODS\MPF3880.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Fri Oct 16 09:33:42 2015
Response via : Multiple Level Calibration
DataAcq Meth : MPF3880.M

Volume Inj. : N/A
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : RTX-502.2 105m x 0.53mm x 3.0um



Quantitation Report (QT Reviewed)

```
Data File : C:\MSDCHEM\1\DATA\PF130123.D                Vial: 25
Acq On    : 2-3-2016 06:01:24 PM                     Operator: XULIU
Sample    : MB3                                      Inst    : GCPF
Misc      : GC47661,GPF3997,10.0,,100,10,1           Multiplr: 1.00
IntFile   : autoint1.e
Quant Time: Feb 03 18:21:18 2016  Quant Results File: MPF3880.RES

Quant Method : C:\MSDCHEM\1\METHODS\MPF3880.M (Chemstation Integrator)
Title        : Method SW846 8015C (GRO)
Last Update  : Fri Oct 16 09:33:42 2015
Response via : Initial Calibration
DataAcq Meth : MPF3880.M

Volume Inj.  : N/A
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info  : RTX-502.2 105m x 0.53mm x 3.0um
```

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) S a,a,a-Trifluorotoluene	11.00	6733316	284.807 ppb
Spiked Amount 300.000		Recovery =	94.94%
Target Compounds			

11.2.1

11

(f)=RT Delta > 1/2 Window (m)=manual int.

PF130123.D MPF3880.M Thu Feb 04 08:14:58 2016 RPT1 Page 1

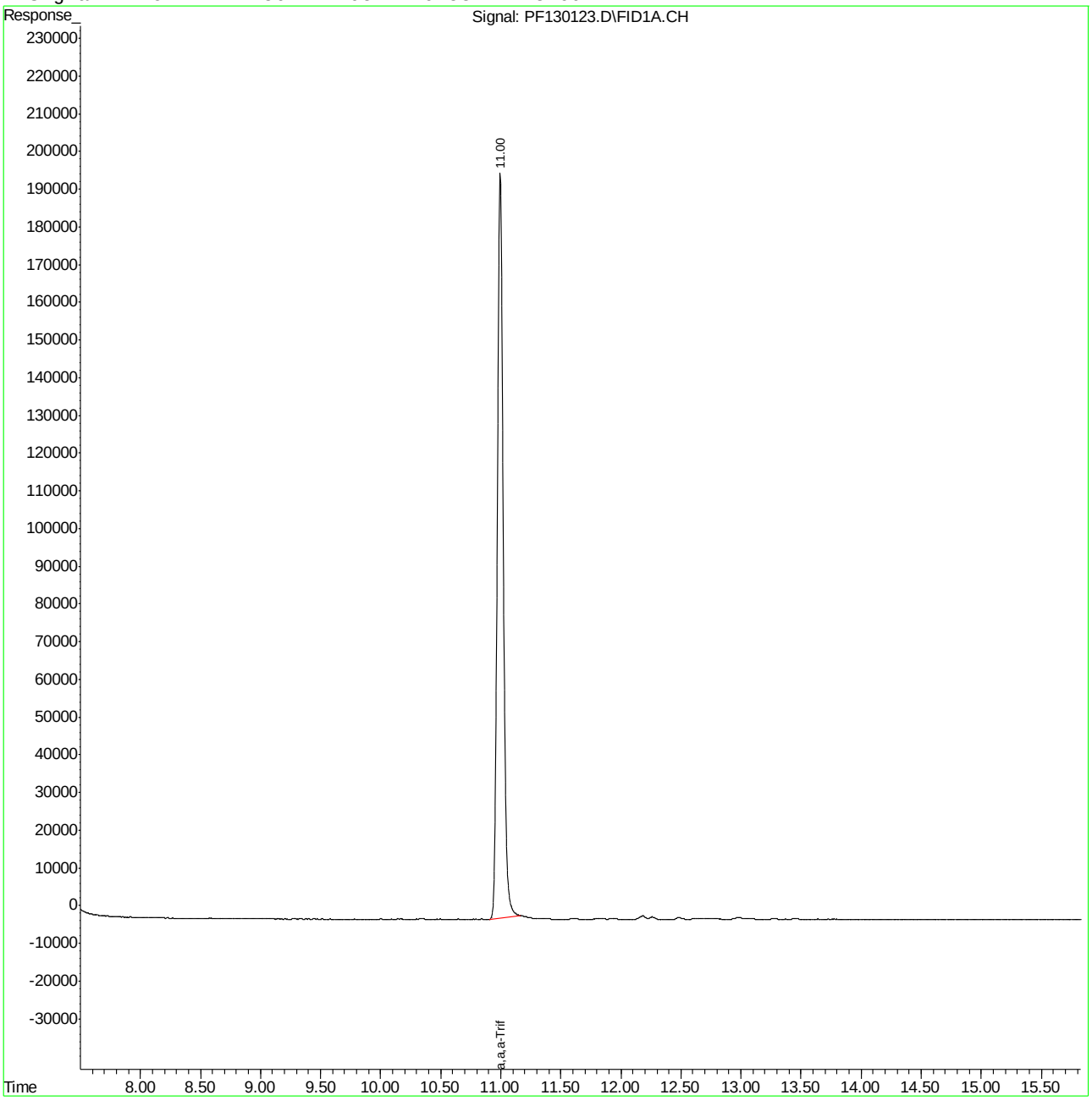
SGS ACCUTEST JC13575

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\PF130123.D Vial: 25
Acq On : 2-3-2016 06:01:24 PM Operator: XULIU
Sample : MB3 Inst : GCPF
Misc : GC47661,GPF3997,10.0,,100,10,1 Multiplr: 1.00
IntFile : autoint1.e
Quant Time: Feb 4 8:14 2016 Quant Results File: MPF3880.RES

Quant Method : C:\MSDCHEM\1\METHODS\MPF3880.M (Chemstation Integrator)
Title : Method SW846 8015C (GRO)
Last Update : Fri Oct 16 09:33:42 2015
Response via : Multiple Level Calibration
DataAcq Meth : MPF3880.M

Volume Inj. : N/A
Signal Phase : crossbond phenylmethyl polysiloxane
Signal Info : RTX-502.2 105m x 0.53mm x 3.0um



SGS ACCUTEST JC13575

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP90954-MB1	EF153618.D	1	02/04/16	CC	02/03/16	OP90954	GEF5564

The QC reported here applies to the following samples: **Method:** SW846 8082A

JC13575-1, JC13575-3, JC13575-5, JC13575-7

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	12	ug/kg	
11104-28-2	Aroclor 1221	ND	33	28	ug/kg	
11141-16-5	Aroclor 1232	ND	33	14	ug/kg	
53469-21-9	Aroclor 1242	ND	33	13	ug/kg	
12672-29-6	Aroclor 1248	ND	33	10	ug/kg	
11097-69-1	Aroclor 1254	ND	33	20	ug/kg	
11096-82-5	Aroclor 1260	ND	33	9.5	ug/kg	
11100-14-4	Aroclor 1268	ND	33	8.7	ug/kg	
37324-23-5	Aroclor 1262	ND	33	12	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	98%	20-152%
877-09-8	Tetrachloro-m-xylene	100%	20-152%
2051-24-3	Decachlorobiphenyl	113%	12-157%
2051-24-3	Decachlorobiphenyl	100%	12-157%

Method Blank Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP90971-MB1	2Z52348.D	1	02/04/16	TL	02/04/16	OP90971	G2Z1991

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC13575-2, JC13575-4, JC13575-6, JC13575-8

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	10	2.9	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	65%	13-142%
16416-32-3	Tetracosane-d50	90%	12-141%
438-22-2	5a-Androstane	80%	13-142%

Method Blank Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP90971-MB1	2Y74277.D	1	02/04/16	TL	02/04/16	OP90971	G2Y2884

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC13575-2, JC13575-4, JC13575-6, JC13575-8

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	10	2.9	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	90%	13-142%
16416-32-3	Tetracosane-d50	94%	12-141%
438-22-2	5a-Androstane	94%	13-142%

Blank Spike Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP90954-BS1	EF153623.D	1	02/04/16	CC	02/03/16	OP90954	GEF5564

The QC reported here applies to the following samples: **Method:** SW846 8082A

JC13575-1, JC13575-3, JC13575-5, JC13575-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	133	159	119	48-167
11104-28-2	Aroclor 1221		ND		70-130
11141-16-5	Aroclor 1232		ND		70-130
53469-21-9	Aroclor 1242		ND		70-130
12672-29-6	Aroclor 1248		ND		70-130
11097-69-1	Aroclor 1254		ND		70-130
11096-82-5	Aroclor 1260	133	211	158	44-162
11100-14-4	Aroclor 1268		ND		50-150 [a]
37324-23-5	Aroclor 1262		ND		50-150 [a]

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	103%	20-152%
877-09-8	Tetrachloro-m-xylene	106%	20-152%
2051-24-3	Decachlorobiphenyl	117%	12-157%
2051-24-3	Decachlorobiphenyl	103%	12-157%

(a) Advisory control limits.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP90971-BS1	2Y74276.D	1	02/04/16	TL	02/04/16	OP90971	G2Y2884

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC13575-2, JC13575-4, JC13575-6, JC13575-8

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	100	76.0	76	46-125

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	103%	13-142%
16416-32-3	Tetracosane-d50	107%	12-141%
438-22-2	5a-Androstane	106%	13-142%

12.2.2

12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP90954-MS	EF153626.D	1	02/04/16	CC	02/03/16	OP90954	GEF5564
OP90954-MSD	EF153627.D	1	02/04/16	CC	02/03/16	OP90954	GEF5564
JC13527-1	EF153628.D	1	02/04/16	CC	02/03/16	OP90954	GEF5564

The QC reported here applies to the following samples: **Method:** SW846 8082A

JC13575-1, JC13575-3, JC13575-5, JC13575-7

CAS No.	Compound	JC13527-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		138	162	118	146	184	126	13	32-176/47
11104-28-2	Aroclor 1221	ND			ND			ND		nc	70-130/30
11141-16-5	Aroclor 1232	ND			ND			ND		nc	70-130/30
53469-21-9	Aroclor 1242	ND			ND			ND		nc	70-130/30
12672-29-6	Aroclor 1248	ND			ND			ND		nc	70-130/30
11097-69-1	Aroclor 1254	ND			ND			ND		nc	70-130/30
11096-82-5	Aroclor 1260	ND		138	200	145	146	218	149	9	19-180/49
11100-14-4	Aroclor 1268	ND			ND			ND		nc	-/30
37324-23-5	Aroclor 1262	ND			ND			ND		nc	-/30

CAS No.	Surrogate Recoveries	MS	MSD	JC13527-1	Limits
877-09-8	Tetrachloro-m-xylene	95%	95%	94%	20-152%
877-09-8	Tetrachloro-m-xylene	94%	99%	94%	20-152%
2051-24-3	Decachlorobiphenyl	116%	120%	110%	12-157%
2051-24-3	Decachlorobiphenyl	101%	105%	99%	12-157%

12.3.1

12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP90971-MS	2Z52350.D	1	02/04/16	TL	02/04/16	OP90971	G2Z1991
OP90971-MSD	2Z52351.D	1	02/04/16	TL	02/04/16	OP90971	G2Z1991
JC13570-1	2Z52349.D	1	02/04/16	TL	02/04/16	OP90971	G2Z1991

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC13575-2, JC13575-4, JC13575-6, JC13575-8

CAS No.	Compound	JC13570-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	12.1		109	91.9	73	120	101	74	9	10-160/50

CAS No.	Surrogate Recoveries	MS	MSD	JC13570-1	Limits
84-15-1	o-Terphenyl	79%	75%	64%	13-142%
16416-32-3	Tetracosane-d50	97%	88%	91%	12-141%
438-22-2	5a-Androstane	89%	84%	80%	13-142%

12.3.2

12

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Method: SW846 8082A **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
JC13575-1	EF153688.D	0* [c]	0* [c]	0* [c]	0* [c]
JC13575-1	EF153675.D	170* [d]	78	298* [d]	226* [d]
JC13575-3	EF153689.D	0* [c]	0* [c]	0* [c]	0* [c]
JC13575-3	EF153676.D	119	71	337* [d]	257* [d]
JC13575-5	EF153690.D	0* [c]	0* [c]	0* [c]	0* [c]
JC13575-5	EF153681.D	159* [d]	72	483* [d]	345* [d]
JC13575-7	EF153691.D	0* [c]	0* [c]	0* [c]	0* [c]
JC13575-7	EF153682.D	143	72	362* [d]	304* [d]
OP90954-BS1	EF153623.D	103	106	117	103
OP90954-MB1	EF153618.D	98	100	113	100
OP90954-MS	EF153626.D	95	94	116	101
OP90954-MSD	EF153627.D	95	99	120	105

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	20-152%
S2 = Decachlorobiphenyl	12-157%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2
(c) Outside control limits due to dilution.
(d) Outside control limits due to matrix interference.

Semivolatile Surrogate Recovery Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Method: SW846 8015C **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]	S3 [a]
JC13575-2	2Y74278.D	100	106	106
JC13575-4	2Y74279.D	105	112	113
JC13575-6	2Y74280.D	101	99	106
JC13575-8	2Y74281.D	116	117	118
OP90971-BS1	2Y74276.D	103	107	106
OP90971-MB1	2Y74277.D	90	94	94
OP90971-MB1	2Z52348.D	65	90	80
OP90971-MS	2Z52350.D	79	97	89
OP90971-MSD	2Z52351.D	75	88	84

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	13-142%
S2 = Tetracosane-d50	12-141%
S3 = 5a-Androstane	13-142%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Check Std:	GEF5564-CC5560	**Injection Date:**	02/04/16
Lab File ID:	EF153616.D	**Injection Time:**	09:19
Instrument ID:	GCEF	**Method:**	SW846 8082A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.91	4.06	14.31	17.47

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP90954-MB1	EF153618.D	02/04/16	10:08	2.90	4.05	14.30	17.47
OP90261-MB1	EF153619.D	02/04/16	10:33	2.91	4.06	14.30	17.47
ZZZZZZ	EF153621.D	02/04/16	11:23	2.90	4.05	14.30	17.47
OP90262-MB1	EF153622.D	02/04/16	11:48	2.87	4.03	14.30	17.47
OP90954-BS1	EF153623.D	02/04/16	12:13	2.91	4.06	14.30	17.47

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Check Std:	GEF5564-CC5560	**Injection Date:**	02/04/16
Lab File ID:	EF153624.D	**Injection Time:**	12:38
Instrument ID:	GCEF	**Method:**	SW846 8082A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.90	4.06	14.30	17.47

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP90954-MS	EF153626.D	02/04/16	13:28	2.90	4.05	14.30	17.47
OP90954-MSD	EF153627.D	02/04/16	13:53	2.90	4.05	14.29	17.47
JC13527-1	EF153628.D	02/04/16	14:17	2.90	4.05	14.29	17.46
ZZZZZZ	EF153629.D	02/04/16	14:42	2.90	4.05	14.29	17.46
ZZZZZZ	EF153630.D	02/04/16	15:07	2.90	4.05	14.29	17.46
ZZZZZZ	EF153631.D	02/04/16	15:32	2.90	4.05	14.29	17.46
ZZZZZZ	EF153632.D	02/04/16	15:57	2.89	4.05	14.29	17.46
OP90262-MB1	EF153633.D	02/04/16	16:22	2.90	4.05	14.29	17.46

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Check Std:	GEF5564-CC5560	**Injection Date:**	02/05/16
Lab File ID:	EF153668.D	**Injection Time:**	06:51
Instrument ID:	GCEF	**Method:**	SW846 8082A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.91	4.06	14.30	17.47

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	EF153672.D	02/05/16	08:30	2.89	4.04	14.28	17.45
ZZZZZZ	EF153674.D	02/05/16	09:20	2.89	4.04	14.28	17.45
JC13575-1	EF153675.D	02/05/16	09:45	2.88	4.04	14.29	17.45
JC13575-3	EF153676.D	02/05/16	10:09	2.88	4.04	14.28	17.45
ZZZZZZ	EF153677.D	02/05/16	10:35	0.00	0.00	0.00	0.00
ZZZZZZ	EF153678.D	02/05/16	10:59	0.00	0.00	0.00	0.00

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Check Std:	GEF5564-CC5560	**Injection Date:**	02/05/16
Lab File ID:	EF153679.D	**Injection Time:**	11:42
Instrument ID:	GCEF	**Method:**	SW846 8082A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.89	4.04	14.29	17.46

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
JC13575-5	EF153681.D	02/05/16	12:31	2.88	4.04	14.28	17.45
JC13575-7	EF153682.D	02/05/16	12:56	2.89	4.04	14.29	17.45

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Check Std:	GEF5564-CC5560	**Injection Date:**	02/05/16
Lab File ID:	EF153684.D	**Injection Time:**	13:50
Instrument ID:	GCEF	**Method:**	SW846 8082A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.91	4.05	14.29	17.46

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	EF153686.D	02/05/16	14:52	2.92	4.06	14.30	17.46
ZZZZZZ	EF153687.D	02/05/16	15:17	2.89	4.04	14.28	17.45
JC13575-1	EF153688.D	02/05/16	15:42	0.00	0.00	0.00	0.00
JC13575-3	EF153689.D	02/05/16	16:07	0.00	0.00	0.00	0.00
JC13575-5	EF153690.D	02/05/16	16:32	0.00	0.00	0.00	0.00
JC13575-7	EF153691.D	02/05/16	16:56	0.00	0.00	0.00	0.00
ZZZZZZ	EF153692.D	02/05/16	17:21	2.88	4.04	14.28	17.45

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Check Std:	G2Y2884-CC2871	**Injection Date:**	02/04/16
Lab File ID:	2Y74273.D	**Injection Time:**	09:08
Instrument ID:	GC2Y	**Method:**	SW846 8015C

	S1 [a] RT	S2 [a] RT	S3 [a] RT
Check Std	8.42	10.40	9.08

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S3 [a] RT
G2Y2884-RT	2Y74275.D	02/04/16	10:24			
OP90971-BS1	2Y74276.D	02/04/16	11:06	8.43	10.41	9.09
OP90971-MB1	2Y74277.D	02/04/16	11:41	8.42	10.40	9.09
JC13575-2	2Y74278.D	02/04/16	12:16	8.42	10.40	9.09
JC13575-4	2Y74279.D	02/04/16	12:52	8.43	10.41	9.09
JC13575-6	2Y74280.D	02/04/16	13:27	8.43	10.40	9.09
JC13575-8	2Y74281.D	02/04/16	14:03	8.43	10.41	9.09
G2Y2884-ECC2871	2Y74282.D	02/04/16	14:41	8.42	10.40	9.09

Surrogate Compounds

S1 = o-Terphenyl
S2 = Tetracosane-d50
S3 = 5a-Androstane

(a) Retention time from GC signal #1

12.5.6

12

GC Surrogate Retention Time Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Check Std:	G2Z1991-CC1906	**Injection Date:**	02/04/16
Lab File ID:	2Z52345.D	**Injection Time:**	09:08
Instrument ID:	GC2Z	**Method:**	SW846 8015C

	S1 [a] RT	S2 [a] RT	S3 [a] RT
Check Std	8.42	10.47	9.12

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT	S3 [a] RT
G2Z1991-RT	2Z52346.D	02/04/16	09:48			
OP90971-MB1	2Z52348.D	02/04/16	11:06	8.43	10.47	9.13
JC13570-1	2Z52349.D	02/04/16	11:41	8.43	10.47	9.13
OP90971-MS	2Z52350.D	02/04/16	12:16	8.43	10.47	9.13
OP90971-MSD	2Z52351.D	02/04/16	12:52	8.43	10.47	9.13
OP90972-MB1	2Z52352.D	02/04/16	13:27			

Surrogate Compounds

S1 = o-Terphenyl
S2 = Tetracosane-d50
S3 = 5a-Androstane

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample: G2Y2871-ICC2871
Lab FileID: 2Y73973.D

```
                         Response Factor Report  GC2Y2Z

 Method       : C:\MSDCHEM\1\METHODS\DRO2Y2871.M (Chemstation Integrator)
 Title        :
 Last Update  : Wed Jan 13 12:11:23 2016
 Response via : Initial Calibration

 Calibration Files
 250 =2Y73971.D   500 =2Y73972.D   1000=2Y73973.D   2500=2Y73974.D
 5000=2Y73975.D  100 =2Y73970.D  10k =2Y73976.D  50k =2Y73977.D  25  =2Y73968.D  50  =2Y73969.D

 Compound        250   500   1000  2500  5000  100   10k   50k    25     50     Avg   %RSD
 ---------------------------------------------------------------------------
 1) TPH-DRO      1.557 1.413 1.580 1.343 1.418 1.664 1.432 1.910 1.958 1.537 1.581 E6 13.23
 2) TPH-DRO (C10 1.557 1.413 1.580 1.343 1.418 1.664 1.432 1.910 1.958 1.537 1.581 E6 13.23
 3) TPH (C12-C40 1.557 1.413 1.580 1.343 1.418 1.664 1.432 1.910 1.958 1.537 1.581 E6 13.23
 4) TPH-ORO (>C2 1.557 1.413 1.580 1.343 1.418 1.664 1.432 1.910 1.958 1.537 1.581 E6 13.23
 5) TPH-HRO (C18 1.557 1.413 1.580 1.343 1.418 1.664 1.432 1.910 1.958 1.537 1.581 E6 13.23
 6) TPH-DRO (C10 1.557 1.413 1.580 1.343 1.418 1.664 1.432 1.910 1.958 1.537 1.581 E6 13.23
 7) TPH-ORO (C20 1.557 1.413 1.580 1.343 1.418 1.664 1.432 1.910 1.958 1.537 1.581 E6 13.23
 8) TPH (C9-C16) 1.557 1.413 1.580 1.343 1.418 1.664 1.432 1.910 1.958 1.537 1.581 E6 13.23
 9) o-Terphenyl  2.002 1.604 2.064 1.903 2.151 1.674                  2.143 1.934 E6 11.35
10) 5a-Androstan 1.810 1.617 1.930 1.814 1.914 1.688             1.405 1.701 1.735 E6  9.94
11) Tetracosane- 1.542 1.398 1.660 1.577 1.676 1.438             1.288 1.459 1.505 E6  8.88
---------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          DRO2Y2871.M        Wed Jan 13 12:13:10 2016   RPT1
```

12.6.1

12

Initial Calibration Verification

Job Number: JC13575 **Sample:** G2Y2871-ICV2871
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2Y73978.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Y2871\2Y73978.D          Vial: 16
Acq On    : 12 Jan 2016   6:52 pm                    Operator: gladiand
Sample    : icv2871-1000                             Inst    : GC2Y2Z
Misc      : op90355,g2y2871,300,,,1,1                Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Y2871.M (Chemstation Integrator)
Title        :
Last Update  : Wed Jan 13 12:11:23 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.581	1.545 E6	2.3	98	0.00	2.69-11.99
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl		----------NA----------				
10	S	5a-Androstane		----------NA----------				
11	S	Tetracosane-d50		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Y73973.D DRO2Y2871.M Wed Jan 13 12:12:35 2016 RPT1

12.6.2

12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** G2Y2884-CC2871
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2Y74273.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Y2884\2Y74273.D          Vial: 3
Acq On    : 04 Feb 2016   9:08 am                    Operator: thomasl
Sample    : cc2871-500                               Inst    : GC2Y2Z
Misc      : op90946,g2y2884,10.0,,,1,1               Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Y2871.M (Chemstation Integrator)
Title        :
Last Update  : Tue Jan 19 12:12:11 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.581	1.750 E6	-10.7	124	0.00	2.69-11.99
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl	1.934	2.205 E6	-14.0	137	-0.01	8.39- 8.45
10	S	5a-Androstane	1.735	2.060 E6	-18.7	127	-0.01	9.05- 9.11
11	S	Tetracosane-d50	1.505	1.735 E6	-15.3	124	-0.01	10.37-10.43

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Y73972.D DRO2Y2871.M Thu Feb 04 16:36:14 2016 RPT1

12.6.3 12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** G2Y2884-ECC2871
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2Y74282.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Y2884\2Y74282.D          Vial: 4
Acq On    : 04 Feb 2016   2:41 pm                    Operator: khaliahd
Sample    : ecc2871-1000                             Inst    : GC2Y2Z
Misc      : op90971,g2y2884,10.5,,,1,1               Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Y2871.M (Chemstation Integrator)
Title        :
Last Update  : Tue Jan 19 12:12:11 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.581	1.756 E6	-11.1	111	0.00	2.69-11.99
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl	1.934	2.374 E6	-22.8#	115	-0.02	8.39- 8.45
10	S	5a-Androstane	1.735	2.122 E6	-22.3#	110	-0.01	9.06- 9.12
11	S	Tetracosane-d50	1.505	1.840 E6	-22.3#	111	-0.01	10.37-10.43

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Y73973.D DRO2Y2871.M Thu Feb 04 16:35:56 2016 RPT1

12.6.4

12

Initial Calibration Summary

Job Number: JC13575 **Sample:** G2Z1906-ICC1906
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2Z50574.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

```
                         Response Factor Report  GC2Y2Z

 Method       : C:\MSDCHEM\1\METHODS\DRO2Z1906.M (Chemstation Integrator)
 Title        :
 Last Update  : Sat Oct 10 13:19:20 2015
 Response via : Initial Calibration

 Calibration Files
 250 =2Z50572.D   500 =2Z50573.D   1000=2Z50574.D   2500=2Z50575.D
 5000=2Z50576.D  100 =2Z50571.D  10k =2Z50577.D  50k =2Z50578.D  25  =2Z50569.D  50  =2Z50570.D

 Compound        250   500   1000  2500  5000  100   10k   50k    25     50     Avg   %RSD
 ---------------------------------------------------------------------------
 1) TPH-DRO      1.723 1.506 1.733 1.682 1.638 1.689 1.480 1.636 1.762 1.752 1.660 E6  5.92
 2) TPH-DRO (C10 1.723 1.506 1.733 1.682 1.638 1.689 1.480 1.636 1.762 1.752 1.660 E6  5.92
 3) TPH (C12-C40 1.723 1.506 1.733 1.682 1.638 1.689 1.480 1.636 1.762 1.752 1.660 E6  5.92
 4) TPH-ORO (>C2 1.723 1.506 1.733 1.682 1.638 1.689 1.480 1.636 1.762 1.752 1.660 E6  5.92
 5) TPH-HRO (C18 1.723 1.506 1.733 1.682 1.638 1.689 1.480 1.636 1.762 1.752 1.660 E6  5.92
 6) TPH-DRO (C10 1.723 1.506 1.733 1.682 1.638 1.689 1.480 1.636 1.762 1.752 1.660 E6  5.92
 7) TPH-ORO (C20 1.723 1.506 1.733 1.682 1.638 1.689 1.480 1.636 1.762 1.752 1.660 E6  5.92
 8) TPH (C9-C16) 1.723 1.506 1.733 1.682 1.638 1.689 1.480 1.636 1.762 1.752 1.660 E6  5.92
 9) o-Terphenyl  3.021 2.634 3.022 2.930 2.830 2.948             2.817 2.936 2.892 E6  4.45
10) 5a-Androstan 2.227 1.946 2.219 2.161 2.124 2.191             2.115 2.180 2.145 E6  4.20
11) Tetracosane- 1.851 1.610 1.843 1.784 1.737 1.808             1.780 1.829 1.780 E6  4.41
---------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          DRO2Z1906.M        Sat Oct 10 13:24:28 2015   RPT1
```

12.6.5

12

Initial Calibration Verification

Job Number: JC13575 **Sample:** G2Z1906-ICV1906
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2Z50579.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Z1906\2Z50579.D          Vial: 62
Acq On    : 10 Oct 2015  12:36 am                    Operator: gladiand
Sample    : icv1906-1000                             Inst    : GC2Y2Z
Misc      : op87757,g2z1906,10.0,,,1,1               Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Z1906.M (Chemstation Integrator)
Title        :
Last Update  : Sat Oct 10 13:19:20 2015
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.660	1.574 E6	5.2	91	0.00	2.86-12.05
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl		----------NA----------				
10	S	5a-Androstane		----------NA----------				
11	S	Tetracosane-d50		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Z50574.D DRO2Z1906.M Sat Oct 10 13:22:33 2015 RPT1

12.6.6

12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** G2Z1991-CC1906
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2Z52345.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Z1991\2Z52345.D          Vial: 4
Acq On    : 04 Feb 2016   9:08 am                    Operator: thomasl
Sample    : cc1906-1000                              Inst    : GC2Y2Z
Misc      : op90946,g2z1991,10.7,,,1,1               Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Z1906.M (Chemstation Integrator)
Title        :
Last Update  : Tue Jan 19 12:14:39 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.660	1.754 E6	-5.7	101	0.00	2.70-12.10
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl	2.892	3.129 E6	-8.2	104	-0.01	8.39- 8.45
10	S	5a-Androstane	2.145	2.249 E6	-4.8	101	-0.01	9.09- 9.15
11	S	Tetracosane-d50	1.780	2.045 E6	-14.9	111	-0.01	10.44-10.50

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Z50574.D DRO2Z1906.M Thu Feb 04 16:47:28 2016 RPT1

12.6.7

12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** G2Z1991-CC1906
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2Z52354.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\G2Z1991\2Z52354.D          Vial: 3
Acq On    : 04 Feb 2016   2:41 pm                    Operator: khaliahd
Sample    : cc1906-500                               Inst    : GC2Y2Z
Misc      : op90972,g2z1991,1.0,,,10,1               Multiplr: 1.00
IntFile   : autoint1.e

Method       : C:\MSDCHEM\1\METHODS\DRO2Z1906.M (Chemstation Integrator)
Title        :
Last Update  : Tue Jan 19 12:14:39 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.660	1.681 E6	-1.3	112	0.00	2.70-12.10
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH (C12-C40)		----------NA----------				
4	H	TPH-ORO (>C28-C40)		----------NA----------				
5	H	TPH-HRO (C18-C36)		----------NA----------				
6	H	TPH-DRO (C10-C20)		----------NA----------				
7	H	TPH-ORO (C20-C34)		----------NA----------				
8	H	TPH (C9-C16)		----------NA----------				
9	S	o-Terphenyl	2.892	3.010 E6	-4.1	114	-0.01	8.39- 8.45
10	S	5a-Androstane	2.145	2.201 E6	-2.6	113	-0.01	9.09- 9.15
11	S	Tetracosane-d50	1.780	1.998 E6	-12.2	124	-0.01	10.44-10.50

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2Z50573.D DRO2Z1906.M Thu Feb 04 16:47:13 2016 RPT1

12.6.8 12

Initial Calibration Summary

Job Number: JC13575 **Sample:** GEF5560-ICC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153478.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Response Factor Report gcef

Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Feb 02 13:37:50 2016
Response via : Initial Calibration

Calibration Files
3000=EF153480.D 2000=EF153479.D 1000=EF153478.D 500 =EF153477.D
250 =EF153476.D 50 =EF153475.D

	Compound	3000	2000	1000	500	250	50	Avg	%RSD
1) S	Tetrachloro-m-xylen	1.080	1.022	0.931	0.861	0.827	0.782	0.917 E4	12.64
2)	AR1221-A			1.443				1.443 E2	0.00
3)	AR1221-B			1.073				1.073 E2	0.00
4)	AR1221-C			4.013				4.013 E2	0.00
5)	AR1221-D			4.035				4.035 E1	0.00
6)	AR1221-E			4.214				4.214 E1	0.00
7)	AR1232-A			3.440				3.440 E2	0.00
8)	AR1232-B			2.512				2.512 E2	0.00
9)	AR1232-C			3.075				3.075 E2	0.00
10)	AR1232-D			1.545				1.545 E2	0.00
11)	AR1232-E			1.452				1.452 E2	0.00
12)	AR1242-A			4.249				4.249 E2	0.00
13)	AR1242-B			5.924				5.924 E2	0.00
14)	AR1242-C			2.923				2.923 E2	0.00
15)	AR1242-D			3.068				3.068 E2	0.00
16)	AR1242-E			2.673				2.673 E2	0.00
17)	AR1248-A			2.196				2.196 E2	0.00
18)	AR1248-B			3.415				3.415 E2	0.00
19)	AR1248-C			7.903				7.903 E2	0.00
20)	AR1248-D			4.616				4.616 E2	0.00
21)	AR1248-E			2.038				2.038 E2	0.00
22)	AR1248-F			4.365				4.365 E2	0.00
23)	AR1248-G			4.231				4.231 E2	0.00
24)	AR1254-A			7.071				7.071 E2	0.00
25)	AR1254-B			7.490				7.490 E2	0.00
26)	AR1254-C			3.598				3.598 E2	0.00
27)	AR1254-D			7.049				7.049 E2	0.00
28)	AR1254-E			3.356				3.356 E2	0.00
29)	AR1254-F			6.358				6.358 E2	0.00
30)	AR1254-G			5.784				5.784 E2	0.00
31)	AR1262-A			4.916				4.916 E2	0.00
32)	AR1262-B			7.227				7.227 E2	0.00
33)	AR1262-C			6.161				6.161 E2	0.00
34)	AR1262-D			1.283				1.283 E3	0.00
35)	AR1262-E			1.473				1.473 E3	0.00
36)	AR1268-A			1.320				1.320 E3	0.00
37)	AR1268-B			1.849				1.849 E3	0.00
38)	AR1268-C			1.328				1.328 E3	0.00
39)	AR1268-D			3.902				3.902 E2	0.00
40)	AR1268-E			4.042				4.042 E3	0.00
41)	AR1016-A	2.597	2.626	2.673	2.703	2.740	2.577	2.653 E2	2.38
42)	AR1016-B	4.616	4.775	5.014	5.185	5.337	5.644	5.095 E2	7.38
43)	AR1016-C	8.592	8.325	7.979	7.472	7.064	7.166	7.766 E2	8.10
44)	AR1016-D	3.569	3.560	3.533	3.487	3.398	3.437	3.497 E2	1.97
45)	AR1016-E	3.798	3.762	3.686	3.574	3.316	3.283	3.570 E2	6.25
46)	AR1260-A	5.776	5.891	5.993	5.834	5.803	6.073	5.895 E2	1.97
47)	AR1260-B	7.946	7.950	7.742	7.193	6.542	7.417	7.465 E2	7.26

Initial Calibration Summary

Job Number: JC13575 **Sample:** GEF5560-ICC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153478.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

48)		AR1260-C	9.373	8.982	8.616	7.512	6.721	7.170	8.062	E2	13.32
49)		AR1260-D	1.099	1.062	0.903	0.799	0.787	0.799	0.908	E3	15.46
50)		AR1260-E	1.023	0.946	0.801	0.734	0.749	0.703	0.826	E3	15.66
51)	S	Decachlorobiphenyl	1.190	1.174	1.126	1.059	1.074	1.195	1.136	E4	5.23

Signal #2

1)	S	Tetrachloro-m-xylen	1.552	1.526	1.434	1.323	1.260	1.267	1.393	E4	9.26
2)		AR1221-A			1.794				1.794	E2	0.00
3)		AR1221-B			1.769				1.769	E2	0.00
4)		AR1221-C			4.821				4.821	E2	0.00
5)		AR1221-D			9.984				9.984	E1	0.00
6)		AR1221-E			6.454				6.454	E1	0.00
7)		AR1232-A			4.092				4.092	E2	0.00
8)		AR1232-B			3.561				3.561	E2	0.00
9)		AR1232-C			5.390				5.390	E2	0.00
10)		AR1232-D			2.692				2.692	E2	0.00
11)		AR1232-E			1.682				1.682	E2	0.00
12)		AR1242-A			6.089				6.089	E2	0.00
13)		AR1242-B			1.001				1.001	E3	0.00
14)		AR1242-C			4.352				4.352	E2	0.00
15)		AR1242-D			3.411				3.411	E2	0.00
16)		AR1242-E			3.993				3.993	E2	0.00
17)		AR1248-A			3.208				3.208	E2	0.00
18)		AR1248-B			6.347				6.347	E2	0.00
19)		AR1248-C			4.305				4.305	E2	0.00
20)		AR1248-D			5.113				5.113	E2	0.00
21)		AR1248-E			5.897				5.897	E2	0.00
22)		AR1248-F			7.068				7.068	E2	0.00
23)		AR1248-G			4.233				4.233	E2	0.00
24)		AR1254-A			6.951				6.951	E2	0.00
25)		AR1254-B			7.061				7.061	E2	0.00
26)		AR1254-C			5.058				5.058	E2	0.00
27)		AR1254-D			1.205				1.205	E3	0.00
28)		AR1254-E			5.642				5.642	E2	0.00
29)		AR1254-F			5.972				5.972	E2	0.00
30)		AR1254-G			1.018				1.018	E3	0.00
31)		AR1262-A			7.787				7.787	E2	0.00
32)		AR1262-B			1.035				1.035	E3	0.00
33)		AR1262-C			9.523				9.523	E2	0.00
34)		AR1262-D			1.771				1.771	E3	0.00
35)		AR1262-E			1.019				1.019	E3	0.00
36)		AR1268-A			1.947				1.947	E3	0.00
37)		AR1268-B			2.385				2.385	E3	0.00
38)		AR1268-C			1.742				1.742	E3	0.00
39)		AR1268-D			7.083				7.083	E2	0.00
40)		AR1268-E			5.442				5.442	E3	0.00
41)		AR1016-A	3.039	3.135	3.382	3.569	3.736	3.873	3.456	E2	9.58
42)		AR1016-B	6.109	6.491	7.146	7.692	8.254	9.051	7.457	E2	14.79
43)		AR1016-C	1.150	1.178	1.205	1.180	1.158	1.121	1.166	E3	2.50
44)		AR1016-D	4.773	4.975	5.199	5.304	5.378	5.180	5.135	E2	4.36
45)		AR1016-E	3.664	3.796	3.995	3.958	4.037	4.217	3.945	E2	4.89
46)		AR1260-A	0.760	0.788	0.906	0.965	0.999	1.104	0.920	E3	14.21
47)		AR1260-B	0.909	0.963	1.047	1.108	1.133	1.140	1.050	E3	9.10
48)		AR1260-C	1.383	1.393	1.386	1.357	1.282	1.381	1.364	E3	3.08
49)		AR1260-D	1.409	1.429	1.446	1.415	1.364	1.520	1.430	E3	3.63
50)		AR1260-E	1.480	1.476	1.443	1.402	1.333	1.340	1.412	E3	4.60
51)	S	Decachlorobiphenyl	1.560	1.609	1.673	1.680	1.684	1.827	1.672	E4	5.40

(#) = Out of Range

12.6.9 12

Initial Calibration Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ
Sample: GEF5560-ICC5560
Lab FileID: EF153478.D

PCB5560.M Tue Feb 02 13:38:46 2016 GCEF

Initial Calibration Verification

Job Number: JC13575 **Sample:** GEF5560-ICV5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153485.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5560\EF153485.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\GEF5560\EF153485.D\ECD2B.CH
Acq On    :  1 Feb 2016   9:20 pm                    Operator: josephr
Sample    : icv5560-1000                             Inst    : gcef
Misc      : op90831,gef5560,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 13:37:50 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	9.172	10.282 E3	-12.1	110	0.00	2.76- 3.01
41		AR1016-A	265.283	265.205	0.0	99	0.00	3.38- 3.57
42		AR1016-B	509.491	528.142	-3.7	105	0.00	4.03- 4.16
43		AR1016-C	776.625	837.662	-7.9	105	0.00	4.89- 4.96
44		AR1016-D	349.734	368.255	-5.3	104	0.00	5.15- 5.21
45		AR1016-E	356.962	381.929	-7.0	104	0.00	5.95- 6.01
46		AR1260-A	589.508	607.093	-3.0	101	0.00	8.44- 8.58
47		AR1260-B	746.492	755.564	-1.2	98	0.00	9.03- 9.17
48		AR1260-C	806.212	777.458	3.6	90	0.00	9.64- 9.77
49		AR1260-D	0.908	0.991 E3	-9.1	110	0.01	11.13-11.25
50		AR1260-E	0.826	0.873 E3	-5.7	109	0.09	11.83-11.97
51	S	Decachlorobiphenyl	11.362	12.575 E3	-10.7	112	0.00	14.22-14.36

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	13.934	15.855 E3	-13.8	111	0.00	3.93- 4.14
41		AR1016-A	345.570	335.885	2.8	99	0.00	5.01- 5.14
42		AR1016-B	745.700	740.527	0.7	104	0.00	5.91- 5.97
43		AR1016-C	1.166	1.244 E3	-6.7	103	0.00	6.89- 6.95
44		AR1016-D	513.483	541.877	-5.5	104	0.00	7.20- 7.26
45		AR1016-E	394.451	410.778	-4.1	103	0.00	8.24- 8.31
46		AR1260-A	920.244	826.461	10.2	91	0.00	11.08-11.21
47		AR1260-B	1049.898	997.187	5.0	95	0.00	11.54-11.67
48		AR1260-C	1.364	1.291 E3	5.4	93	0.00	12.39-12.51
49		AR1260-D	1.430	1.433 E3	-0.2	99	0.00	13.84-13.97
50		AR1260-E	1.412	1.469 E3	-4.0	102	0.00	14.71-14.84
51	S	Decachlorobiphenyl	16.723	18.009 E3	-7.7	108	0.00	17.40-17.52

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF153478.D PCB5560.M Tue Feb 02 14:21:58 2016 GCEF

12.6.10 12

Initial Calibration Verification

Job Number: JC13575 **Sample:** GEF5560-ICV5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153486.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5560\EF153486.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\GEF5560\EF153486.D\ECD2B.CH
Acq On    :  1 Feb 2016   9:45 pm                    Operator: josephr
Sample    : icv5560-1000                             Inst    : gcef
Misc      : op90831,gef5560,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 12:06:44 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
2	AR1221-A	144.279	145.639	-0.9	101	0.00	2.02- 2.22
3	AR1221-B	107.332	110.262	-2.7	103	0.00	3.07- 3.27
4	AR1221-C	401.304	417.843	-4.1	104	0.00	3.37- 3.57
5	AR1221-D	40.348	32.660	19.1	81	0.00	4.00- 4.20
6	AR1221-E	42.140	39.475	6.3	94	0.00	4.21- 4.41

***** Signal #2 *****

2	AR1221-A	179.434	180.737	-0.7	101	0.00	3.08- 3.28
3	AR1221-B	176.870	179.965	-1.7	102	0.00	4.55- 4.75
4	AR1221-C	482.083	486.619	-0.9	101	0.00	4.97- 5.17
5	AR1221-D	99.841	88.253	11.6	88	0.00	5.84- 6.04
6	AR1221-E	64.540	61.866	4.1	96	0.00	5.96- 6.16

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF153478.D PCB5560.M Tue Feb 02 12:19:51 2016 GCEF

12.6.11

12

Initial Calibration Verification

Job Number: JC13575 **Sample:** GEF5560-ICV5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153487.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5560\EF153487.D\ECD1A.CH Vial: 15
Signal #2 : C:\HPCHEM\1\DATA\GEF5560\EF153487.D\ECD2B.CH
Acq On    :  1 Feb 2016  10:10 pm                    Operator: josephr
Sample    : icv5560-1000                             Inst    : gcef
Misc      : op90831,gef5560,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 12:06:44 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
24	AR1254-A	707.100	681.475	3.6	96	0.00	6.65- 6.85
25	AR1254-B	749.020	727.004	2.9	97	0.00	7.18- 7.38
26	AR1254-C	359.762	349.012	3.0	97	0.00	7.75- 7.95
27	AR1254-D	704.886	680.925	3.4	97	0.00	8.01- 8.21
28	AR1254-E	335.621	353.193	-5.2	105	0.00	8.62- 8.82
29	AR1254-F	635.790	598.335	5.9	94	0.00	9.01- 9.21
30	AR1254-G	578.387	574.205	0.7	99	0.00	9.61- 9.81

***** Signal #2 *****

24	AR1254-A	695.098	667.100	4.0	96	0.00	9.12- 9.32
25	AR1254-B	706.091	683.943	3.1	97	0.00	9.53- 9.73
26	AR1254-C	505.838	486.606	3.8	96	0.00	10.34-10.54
27	AR1254-D	1.205	1.151 E3	4.5	96	0.00	10.61-10.81
28	AR1254-E	564.181	557.769	1.1	99	0.00	11.04-11.24
29	AR1254-F	597.180	627.763	-5.1	105	0.00	11.88-12.08
30	AR1254-G	1.018	0.970 E3	4.7	95	0.00	12.36-12.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF153478.D PCB5560.M Tue Feb 02 12:19:53 2016 GCEF

12.6.12

12

Initial Calibration Verification

Job Number: JC13575 **Sample:** GEF5560-ICV5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153488.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5560\EF153488.D\ECD1A.CH Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\GEF5560\EF153488.D\ECD2B.CH
Acq On    :  1 Feb 2016  10:35 pm                    Operator: josephr
Sample    : icv5560-1000                             Inst    : gcef
Misc      : op90831,gef5560,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 13:37:50 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
7	AR1232-A	343.974	335.661	2.4	98	0.00	3.38- 3.58
8	AR1232-B	251.178	249.474	0.7	99	0.00	4.00- 4.20
9	AR1232-C	307.481	300.642	2.2	98	0.00	4.83- 5.03
10	AR1232-D	154.476	154.671	-0.1	100	0.00	5.08- 5.28
11	AR1232-E	145.228	144.067	0.8	99	0.00	5.88- 6.08
31	AR1262-A	491.639	474.181	3.6	96	0.00	9.00- 9.20
32	AR1262-B	722.703	708.074	2.0	98	0.00	9.86-10.06
33	AR1262-C	616.126	598.821	2.8	97	0.00	10.40-10.60
34	AR1262-D	1.283	1.283 E3	0.0	100	0.00	11.09-11.29
35	AR1262-E	1.473	1.480 E3	-0.5	100	0.00	11.80-12.00

***** Signal #2 *****

7	AR1232-A	409.228	411.341	-0.5	101	0.00	4.97- 5.17
8	AR1232-B	356.068	355.068	0.3	100	0.00	5.84- 6.04
9	AR1232-C	539.031	539.566	-0.1	100	0.00	6.82- 7.02
10	AR1232-D	269.221	270.364	-0.4	100	0.00	7.13- 7.33
11	AR1232-E	168.229	166.870	0.8	99	0.00	8.18- 8.38
31	AR1262-A	778.736	775.580	0.4	100	0.00	11.51-11.71
32	AR1262-B	1.035	1.019 E3	1.5	98	0.00	12.54-12.74
33	AR1262-C	952.312	935.114	1.8	98	0.00	13.24-13.44
34	AR1262-D	1.771	1.760 E3	0.6	99	0.00	13.81-14.01
35	AR1262-E	1.019	0.974 E3	4.4	96	0.00	14.64-14.84

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF153478.D PCB5560.M Tue Feb 02 14:22:00 2016 GCEF

12.6.13 12

Initial Calibration Verification

Job Number: JC13575 **Sample:** GEF5560-ICV5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153489.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5560\EF153489.D\ECD1A.CH Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\GEF5560\EF153489.D\ECD2B.CH
Acq On    :  1 Feb 2016  11:00 pm                    Operator: josephr
Sample    : icv5560-1000                             Inst    : gcef
Misc      : op90831,gef5560,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 13:37:50 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
12	AR1242-A	424.947	419.871	1.2	99	0.00	3.99- 4.19
13	AR1242-B	592.394	576.566	2.7	97	0.00	4.82- 5.02
14	AR1242-C	292.279	287.834	1.5	98	0.00	5.08- 5.28
15	AR1242-D	306.850	296.249	3.5	97	0.00	5.88- 6.08
16	AR1242-E	267.303	254.437	4.8	95	0.00	6.77- 6.97
36	AR1268-A	1.320	1.250 E3	5.3	95	0.00	11.80-12.00
37	AR1268-B	1.849	1.760 E3	4.8	95	0.00	11.88-12.08
38	AR1268-C	1.328	1.268 E3	4.5	95	0.00	12.33-12.53
39	AR1268-D	390.215	367.227	5.9	94	0.00	13.11-13.31
40	AR1268-E	4.042	3.842 E3	4.9	95	0.00	13.75-13.95

***** Signal #2 *****

12	AR1242-A	608.879	603.284	0.9	99	0.00	5.84- 6.04
13	AR1242-B	1.001	0.987 E3	1.4	99	0.00	6.82- 7.02
14	AR1242-C	435.208	432.265	0.7	99	0.00	7.12- 7.32
15	AR1242-D	341.080	328.860	3.6	96	0.00	8.18- 8.38
16	AR1242-E	399.306	379.517	5.0	95	0.00	9.13- 9.33
36	AR1268-A	1.947	1.866 E3	4.2	96	0.00	14.63-14.83
37	AR1268-B	2.385	2.242 E3	6.0	94	0.00	14.74-14.94
38	AR1268-C	1.742	1.652 E3	5.2	95	0.00	15.33-15.53
39	AR1268-D	708.314	679.980	4.0	96	0.00	16.00-16.20
40	AR1268-E	5.442	5.139 E3	5.6	94	0.00	16.75-16.95

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF153478.D PCB5560.M Tue Feb 02 14:22:02 2016 GCEF

12.6.14 12

Initial Calibration Verification

Job Number: JC13575 **Sample:** GEF5560-ICV5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153490.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5560\EF153490.D\ECD1A.CH Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\GEF5560\EF153490.D\ECD2B.CH
Acq On    :  1 Feb 2016  11:25 pm                    Operator: josephr
Sample    : icv5560-1000                             Inst    : gcef
Misc      : op90831,gef5560,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 13:37:50 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
17	AR1248-A	219.561	207.195	5.6	94	0.00	3.99- 4.19
18	AR1248-B	341.524	340.535	0.3	100	0.00	4.82- 5.02
19	AR1248-C	790.274	815.410	-3.2	103	0.00	5.48- 5.68
20	AR1248-D	461.614	480.504	-4.1	104	0.00	5.88- 6.08
21	AR1248-E	203.776	216.901	-6.4	106	0.00	6.05- 6.25
22	AR1248-F	436.483	473.231	-8.4	108	0.00	6.76- 6.96
23	AR1248-G	423.075	451.234	-6.7	107	0.00	7.18- 7.38

***** Signal #2 *****

17	AR1248-A	320.844	302.048	5.9	94	0.00	5.84- 6.04
18	AR1248-B	634.712	632.382	0.4	100	0.00	6.82- 7.02
19	AR1248-C	430.540	437.459	-1.6	102	0.00	7.56- 7.76
20	AR1248-D	511.322	526.845	-3.0	103	0.00	8.17- 8.37
21	AR1248-E	589.673	622.574	-5.6	106	0.00	8.45- 8.65
22	AR1248-F	706.770	757.223	-7.1	107	0.00	9.12- 9.32
23	AR1248-G	423.314	456.887	-7.9	108	0.00	9.67- 9.87

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF153478.D PCB5560.M Tue Feb 02 14:25:12 2016 GCEF

12.6.15

12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5564-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153616.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5564\EF153616.D\ECD1A.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\GEF5564\EF153616.D\ECD2B.CH
Acq On    :  4 Feb 2016   9:19 am                    Operator: curtisc
Sample    : cc5560-1000                              Inst    : gcef
Misc      : op90942,gef5564,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 13:37:50 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	9.172	10.166 E3	-10.8	109	0.02	2.79- 3.04
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1262-A		----------NA----------				
32	AR1262-B		----------NA----------				
33	AR1262-C		----------NA----------				
34	AR1262-D		----------NA----------				
35	AR1262-E		----------NA----------				
36	AR1268-A		----------NA----------				
37	AR1268-B		----------NA----------				
38	AR1268-C		----------NA----------				
39	AR1268-D		----------NA----------				
40	AR1268-E		----------NA----------				
41	AR1016-A	265.283	287.925	-8.5	108	0.02	3.41- 3.60

12.6.16

12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5564-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153616.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

42		AR1016-B	509.491	533.736	-4.8	106	0.03	4.06- 4.19
43		AR1016-C	776.625	835.398	-7.6	105	0.03	4.92- 4.99
44		AR1016-D	349.734	384.909	-10.1	109	0.03	5.18- 5.24
45		AR1016-E	356.962	409.211	-14.6	111	0.03	5.98- 6.04
46		AR1260-A	589.508	671.607	-13.9	112	0.03	8.46- 8.60
47		AR1260-B	746.492	984.720	-31.9#	127	0.03	9.05- 9.19
48		AR1260-C	806.212	1082.643	-34.3#	126	0.02	9.65- 9.79
49		AR1260-D	0.908	1.182 E3	-30.2#	131	0.02	11.13-11.26
50		AR1260-E	0.826	1.074 E3	-30.0#	134	0.02	11.75-11.89
51	S	Decachlorobiphenyl	11.362	13.383 E3	-17.8	119	0.02	14.24-14.38

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	13.934	14.695 E3	-5.5	102	0.02	3.95- 4.16
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1262-A		----------NA----------				
32		AR1262-B		----------NA----------				
33		AR1262-C		----------NA----------				
34		AR1262-D		----------NA----------				
35		AR1262-E		----------NA----------				
36		AR1268-A		----------NA----------				
37		AR1268-B		----------NA----------				
38		AR1268-C		----------NA----------				
39		AR1268-D		----------NA----------				
40		AR1268-E		----------NA----------				
41		AR1016-A	345.570	342.285	1.0	101	0.02	5.03- 5.15
42		AR1016-B	745.700	729.408	2.2	102	0.02	5.93- 5.99
43		AR1016-C	1.166	1.258 E3	-7.9	104	0.02	6.91- 6.97
44		AR1016-D	513.483	529.332	-3.1	102	0.02	7.22- 7.28
45		AR1016-E	394.451	411.571	-4.3	103	0.02	8.26- 8.33
46		AR1260-A	920.244	955.970	-3.9	106	0.02	11.10-11.22
47		AR1260-B	1049.898	1041.013	0.8	99	0.02	11.56-11.68

12.6.16

12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5564-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153616.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

48		AR1260-C	1.364	1.580	E3	-15.8	114	0.02	12.40-12.53
49		AR1260-D	1.430	1.465	E3	-2.4	101	0.02	13.85-13.97
50		AR1260-E	1.412	1.588	E3	-12.5	110	0.01	14.72-14.85
51	S	Decachlorobiphenyl	16.723	17.700	E3	-5.8	106	0.01	17.41-17.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF153478.D PCB5560.M Thu Feb 04 13:30:56 2016 GCEF

12.6.16

12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5564-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153624.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5564\EF153624.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\GEF5564\EF153624.D\ECD2B.CH
Acq On    :  4 Feb 2016  12:38 pm                    Operator: curtisc
Sample    : cc5560-500                               Inst    : gcef
Misc      : op90262,gef5564,250,,,2,1                Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 13:37:50 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	9.172	9.614 E3	-4.8	112	0.01	2.78- 3.03
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1262-A		----------NA----------				
32	AR1262-B		----------NA----------				
33	AR1262-C		----------NA----------				
34	AR1262-D		----------NA----------				
35	AR1262-E		----------NA----------				
36	AR1268-A		----------NA----------				
37	AR1268-B		----------NA----------				
38	AR1268-C		----------NA----------				
39	AR1268-D		----------NA----------				
40	AR1268-E		----------NA----------				
41	AR1016-A	265.283	296.504	-11.8	110	0.02	3.40- 3.59

12.6.17

12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5564-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153624.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

42		AR1016-B	509.491	560.880	-10.1	108	0.02	4.05- 4.18
43		AR1016-C	776.625	861.095	-10.9	115	0.01	4.91- 4.98
44		AR1016-D	349.734	389.957	-11.5	112	0.02	5.17- 5.23
45		AR1016-E	356.962	403.022	-12.9	113	0.02	5.97- 6.03
46		AR1260-A	589.508	737.700	-25.1#	126	0.02	8.45- 8.59
47		AR1260-B	746.492	1024.703	-37.3#	142	0.02	9.05- 9.19
48		AR1260-C	806.212	1075.630	-33.4#	143	0.02	9.65- 9.78
49		AR1260-D	0.908	1.205 E3	-32.7#	151#	0.01	11.13-11.25
50		AR1260-E	0.826	0.767 E3	7.1	105	0.01	11.74-11.88
51	S	Decachlorobiphenyl	11.362	13.300 E3	-17.1	126	0.00	14.23-14.37

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	13.934	13.591 E3	2.5	103	0.02	3.95- 4.16
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1262-A		----------NA----------				
32		AR1262-B		----------NA----------				
33		AR1262-C		----------NA----------				
34		AR1262-D		----------NA----------				
35		AR1262-E		----------NA----------				
36		AR1268-A		----------NA----------				
37		AR1268-B		----------NA----------				
38		AR1268-C		----------NA----------				
39		AR1268-D		----------NA----------				
40		AR1268-E		----------NA----------				
41		AR1016-A	345.570	365.562	-5.8	102	0.02	5.03- 5.15
42		AR1016-B	745.700	791.718	-6.2	103	0.01	5.93- 5.99
43		AR1016-C	1.166	1.249 E3	-7.1	106	0.01	6.91- 6.97
44		AR1016-D	513.483	545.318	-6.2	103	0.02	7.21- 7.27
45		AR1016-E	394.451	422.447	-7.1	107	0.02	8.26- 8.33
46		AR1260-A	920.244	1040.419	-13.1	108	0.02	11.10-11.22
47		AR1260-B	1049.898	1094.761	-4.3	99	0.02	11.55-11.68

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5564-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153624.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

48		AR1260-C	1.364	1.616 E3	-18.5	119	0.02	12.40-12.52
49		AR1260-D	1.430	1.543 E3	-7.9	109	0.01	13.85-13.97
50		AR1260-E	1.412	1.613 E3	-14.2	115	0.01	14.72-14.84
51	S	Decachlorobiphenyl	16.723	18.305 E3	-9.5	109	0.01	17.41-17.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF153477.D PCB5560.M Thu Feb 04 13:33:33 2016 GCEF

12.6.17

12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5564-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153635.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5564\EF153635.D\ECD1A.CH Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\GEF5564\EF153635.D\ECD2B.CH
Acq On    :  4 Feb 2016   5:12 pm                    Operator: curtisc
Sample    : cc5560-1000                              Inst    : gcef
Misc      : op90954,gef5564,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 13:37:50 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	9.172	10.150 E3	-10.7	109	-0.03	2.74- 2.99
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1262-A		----------NA----------				
32		AR1262-B		----------NA----------				
33		AR1262-C		----------NA----------				
34		AR1262-D		----------NA----------				
35		AR1262-E		----------NA----------				
36		AR1268-A		----------NA----------				
37		AR1268-B		----------NA----------				
38		AR1268-C		----------NA----------				
39		AR1268-D		----------NA----------				
40		AR1268-E		----------NA----------				
41		AR1016-A	265.283	289.173	-9.0	108	-0.02	3.37- 3.55

12.6.18

12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5564-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153635.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

42		AR1016-B	509.491	537.776		-5.6	107	-0.02	4.02- 4.14
43		AR1016-C	776.625	911.008		-17.3	114	-0.01	4.88- 4.95
44		AR1016-D	349.734	387.350		-10.8	110	0.00	5.14- 5.20
45		AR1016-E	356.962	410.566		-15.0	111	0.00	5.95- 6.01
46		AR1260-A	589.508	669.687		-13.6	112	0.00	8.44- 8.58
47		AR1260-B	746.492	971.903		-30.2#	126	0.00	9.03- 9.17
48		AR1260-C	806.212	1067.931		-32.5#	124	0.00	9.63- 9.77
49		AR1260-D	0.908	1.168	E3	-28.6#	129	0.00	11.12-11.24
50		AR1260-E	0.826	1.077	E3	-30.4#	134	0.00	11.73-11.87
51	S	Decachlorobiphenyl	11.362	13.123	E3	-15.5	117	0.00	14.22-14.36

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	13.934	14.578	E3	-4.6	102	-0.02	3.92- 4.13
2		AR1221-A		----------NA----------					
3		AR1221-B		----------NA----------					
4		AR1221-C		----------NA----------					
5		AR1221-D		----------NA----------					
6		AR1221-E		----------NA----------					
7		AR1232-A		----------NA----------					
8		AR1232-B		----------NA----------					
9		AR1232-C		----------NA----------					
10		AR1232-D		----------NA----------					
11		AR1232-E		----------NA----------					
12		AR1242-A		----------NA----------					
13		AR1242-B		----------NA----------					
14		AR1242-C		----------NA----------					
15		AR1242-D		----------NA----------					
16		AR1242-E		----------NA----------					
17		AR1248-A		----------NA----------					
18		AR1248-B		----------NA----------					
19		AR1248-C		----------NA----------					
20		AR1248-D		----------NA----------					
21		AR1248-E		----------NA----------					
22		AR1248-F		----------NA----------					
23		AR1248-G		----------NA----------					
24		AR1254-A		----------NA----------					
25		AR1254-B		----------NA----------					
26		AR1254-C		----------NA----------					
27		AR1254-D		----------NA----------					
28		AR1254-E		----------NA----------					
29		AR1254-F		----------NA----------					
30		AR1254-G		----------NA----------					
31		AR1262-A		----------NA----------					
32		AR1262-B		----------NA----------					
33		AR1262-C		----------NA----------					
34		AR1262-D		----------NA----------					
35		AR1262-E		----------NA----------					
36		AR1268-A		----------NA----------					
37		AR1268-B		----------NA----------					
38		AR1268-C		----------NA----------					
39		AR1268-D		----------NA----------					
40		AR1268-E		----------NA----------					
41		AR1016-A	345.570	338.326		2.1	100	0.00	5.00- 5.13
42		AR1016-B	745.700	723.306		3.0	101	0.00	5.91- 5.97
43		AR1016-C	1.166	1.243	E3	-6.6	103	0.00	6.89- 6.95
44		AR1016-D	513.483	520.484		-1.4	100	0.00	7.20- 7.26
45		AR1016-E	394.451	397.992		-0.9	100	0.00	8.24- 8.31
46		AR1260-A	920.244	887.706		3.5	98	0.00	11.08-11.21
47		AR1260-B	1049.898	954.268		9.1	91	0.00	11.54-11.67

12.6.18

12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5564-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153635.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

48		AR1260-C	1.364	1.447 E3	-6.1	104	0.00	12.39-12.51
49		AR1260-D	1.430	1.316 E3	8.0	91	0.00	13.84-13.96
50		AR1260-E	1.412	1.387 E3	1.8	96	0.00	14.71-14.83
51	S	Decachlorobiphenyl	16.723	15.925 E3	4.8	95	0.00	17.40-17.52

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF153478.D PCB5560.M Fri Feb 05 08:39:51 2016 GCEF

12.6.18

12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5564-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153668.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5564\EF153668.D\ECD1A.CH Vial: 47
Signal #2 : C:\HPCHEM\1\DATA\GEF5564\EF153668.D\ECD2B.CH
Acq On    :  5 Feb 2016   6:51 am                    Operator: curtisc
Sample    : cc5560-500                               Inst    : gcef
Misc      : op90261,gef5564,250,,,2,1                Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 13:37:50 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	9.172	9.064 E3	1.2	105	0.02	2.79- 3.04
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1262-A		----------NA----------				
32		AR1262-B		----------NA----------				
33		AR1262-C		----------NA----------				
34		AR1262-D		----------NA----------				
35		AR1262-E		----------NA----------				
36		AR1268-A		----------NA----------				
37		AR1268-B		----------NA----------				
38		AR1268-C		----------NA----------				
39		AR1268-D		----------NA----------				
40		AR1268-E		----------NA----------				
41		AR1016-A	265.283	284.485	-7.2	105	0.02	3.41- 3.59

12.6.19

12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5564-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153668.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

42		AR1016-B	509.491	536.681		-5.3	104	0.02	4.05- 4.18
43		AR1016-C	776.625	811.393		-4.5	109	0.01	4.90- 4.97
44		AR1016-D	349.734	370.116		-5.8	106	0.01	5.17- 5.23
45		AR1016-E	356.962	384.333		-7.7	108	0.01	5.96- 6.02
46		AR1260-A	589.508	659.141		-11.8	113	0.01	8.45- 8.59
47		AR1260-B	746.492	894.199		-19.8	124	0.01	9.04- 9.18
48		AR1260-C	806.212	920.977		-14.2	123	0.01	9.64- 9.78
49		AR1260-D	0.908	1.060	E3	-16.7	133	0.01	11.13-11.25
50		AR1260-E	0.826	0.981	E3	-18.8	134	0.01	11.74-11.88
51	S	Decachlorobiphenyl	11.362	12.406	E3	-9.2	117	0.00	14.23-14.36

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	13.934	13.243	E3	5.0	100	0.02	3.95- 4.16
2		AR1221-A		----------NA----------					
3		AR1221-B		----------NA----------					
4		AR1221-C		----------NA----------					
5		AR1221-D		----------NA----------					
6		AR1221-E		----------NA----------					
7		AR1232-A		----------NA----------					
8		AR1232-B		----------NA----------					
9		AR1232-C		----------NA----------					
10		AR1232-D		----------NA----------					
11		AR1232-E		----------NA----------					
12		AR1242-A		----------NA----------					
13		AR1242-B		----------NA----------					
14		AR1242-C		----------NA----------					
15		AR1242-D		----------NA----------					
16		AR1242-E		----------NA----------					
17		AR1248-A		----------NA----------					
18		AR1248-B		----------NA----------					
19		AR1248-C		----------NA----------					
20		AR1248-D		----------NA----------					
21		AR1248-E		----------NA----------					
22		AR1248-F		----------NA----------					
23		AR1248-G		----------NA----------					
24		AR1254-A		----------NA----------					
25		AR1254-B		----------NA----------					
26		AR1254-C		----------NA----------					
27		AR1254-D		----------NA----------					
28		AR1254-E		----------NA----------					
29		AR1254-F		----------NA----------					
30		AR1254-G		----------NA----------					
31		AR1262-A		----------NA----------					
32		AR1262-B		----------NA----------					
33		AR1262-C		----------NA----------					
34		AR1262-D		----------NA----------					
35		AR1262-E		----------NA----------					
36		AR1268-A		----------NA----------					
37		AR1268-B		----------NA----------					
38		AR1268-C		----------NA----------					
39		AR1268-D		----------NA----------					
40		AR1268-E		----------NA----------					
41		AR1016-A	345.570	352.893		-2.1	99	0.01	5.03- 5.15
42		AR1016-B	745.700	762.836		-2.3	99	0.01	5.92- 5.98
43		AR1016-C	1.166	1.206	E3	-3.4	102	0.01	6.91- 6.97
44		AR1016-D	513.483	526.207		-2.5	99	0.01	7.21- 7.27
45		AR1016-E	394.451	406.136		-3.0	103	0.01	8.25- 8.32
46		AR1260-A	920.244	941.053		-2.3	98	0.01	11.09-11.22
47		AR1260-B	1049.898	1018.097		3.0	92	0.01	11.55-11.67

12.6.19

12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5564-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153668.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

48		AR1260-C	1.364	1.443 E3	-5.8	106	0.01	12.40-12.52
49		AR1260-D	1.430	1.364 E3	4.6	96	0.01	13.85-13.97
50		AR1260-E	1.412	1.415 E3	-0.2	101	0.01	14.72-14.84
51	S	Decachlorobiphenyl	16.723	17.466 E3	-4.4	104	0.00	17.40-17.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF153477.D PCB5560.M Fri Feb 05 08:41:08 2016 GCEF

12.6.19

12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5564-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153679.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5564\EF153679.D\ECD1A.CH Vial: 55
Signal #2 : C:\HPCHEM\1\DATA\GEF5564\EF153679.D\ECD2B.CH
Acq On    :  5 Feb 2016  11:42 am                    Operator: curtisc
Sample    : cc5560-1000                              Inst    : gcef
Misc      : op90954,gef5564,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Fri Feb 05 10:35:05 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	9.172	10.160 E3	-10.8	109	0.00	2.77- 3.02
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1262-A		----------NA----------				
32		AR1262-B		----------NA----------				
33		AR1262-C		----------NA----------				
34		AR1262-D		----------NA----------				
35		AR1262-E		----------NA----------				
36		AR1268-A		----------NA----------				
37		AR1268-B		----------NA----------				
38		AR1268-C		----------NA----------				
39		AR1268-D		----------NA----------				
40		AR1268-E		----------NA----------				
41		AR1016-A	265.283	288.032	-8.6	108	0.00	3.39- 3.58

12.6.20

12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5564-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153679.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

42		AR1016-B	509.491	539.047	-5.8	108	0.00	4.04- 4.16
43		AR1016-C	776.625	882.042	-13.6	111	0.00	4.89- 4.96
44		AR1016-D	349.734	380.473	-8.8	108	0.00	5.16- 5.22
45		AR1016-E	356.962	395.025	-10.7	107	0.00	5.95- 6.01
46		AR1260-A	589.508	647.266	-9.8	108	0.00	8.44- 8.58
47		AR1260-B	746.492	946.754	-26.8#	122	0.00	9.03- 9.17
48		AR1260-C	806.212	1036.419	-28.6#	120	0.00	9.63- 9.77
49		AR1260-D	0.908	1.132 E3	-24.7#	125	0.00	11.12-11.24
50		AR1260-E	0.826	1.066 E3	-29.1#	133	0.00	11.73-11.87
51	S	Decachlorobiphenyl	11.362	13.369 E3	-17.7	119	0.00	14.22-14.36

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	13.934	14.813 E3	-6.3	103	0.00	3.94- 4.15
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1262-A		----------NA----------				
32		AR1262-B		----------NA----------				
33		AR1262-C		----------NA----------				
34		AR1262-D		----------NA----------				
35		AR1262-E		----------NA----------				
36		AR1268-A		----------NA----------				
37		AR1268-B		----------NA----------				
38		AR1268-C		----------NA----------				
39		AR1268-D		----------NA----------				
40		AR1268-E		----------NA----------				
41		AR1016-A	345.570	338.997	1.9	100	0.00	5.02- 5.14
42		AR1016-B	745.700	732.037	1.8	102	0.00	5.92- 5.98
43		AR1016-C	1.166	1.245 E3	-6.8	103	0.00	6.90- 6.96
44		AR1016-D	513.483	528.522	-2.9	102	0.00	7.20- 7.26
45		AR1016-E	394.451	409.953	-3.9	103	0.00	8.25- 8.32
46		AR1260-A	920.244	927.601	-0.8	102	0.00	11.08-11.21
47		AR1260-B	1049.898	983.495	6.3	94	0.00	11.54-11.67

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5564-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153679.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

48	AR1260-C	1.364	1.545	E3	-13.3	111	0.00	12.39-12.51
49	AR1260-D	1.430	1.485	E3	-3.8	103	0.00	13.84-13.96
50	AR1260-E	1.412	1.555	E3	-10.1	108	0.00	14.71-14.83
51 S	Decachlorobiphenyl	16.723	18.183	E3	-8.7	109	0.00	17.40-17.52

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF153478.D PCB5560.M Fri Feb 05 12:08:43 2016 GCEF

12.6.20

12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5564-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153684.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5564\EF153684.D\ECD1A.CH Vial: 58
Signal #2 : C:\HPCHEM\1\DATA\GEF5564\EF153684.D\ECD2B.CH
Acq On    :  5 Feb 2016   1:50 pm                    Operator: curtisc
Sample    : cc5560-500                               Inst    : gcef
Misc      : op90954,gef5564,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Fri Feb 05 10:35:05 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	9.172	9.172 E3	0.0	106	0.01	2.78- 3.03
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1262-A		----------NA----------				
32		AR1262-B		----------NA----------				
33		AR1262-C		----------NA----------				
34		AR1262-D		----------NA----------				
35		AR1262-E		----------NA----------				
36		AR1268-A		----------NA----------				
37		AR1268-B		----------NA----------				
38		AR1268-C		----------NA----------				
39		AR1268-D		----------NA----------				
40		AR1268-E		----------NA----------				
41		AR1016-A	265.283	276.626	-4.3	102	0.02	3.41- 3.59

12.6.21

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Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5564-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153684.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

42		AR1016-B	509.491	549.361		-7.8	106	0.02	4.06- 4.18
43		AR1016-C	776.625	838.797		-8.0	112	0.02	4.91- 4.98
44		AR1016-D	349.734	372.260		-6.4	107	0.02	5.17- 5.23
45		AR1016-E	356.962	380.788		-6.7	107	0.02	5.97- 6.03
46		AR1260-A	589.508	656.107		-11.3	112	0.02	8.46- 8.59
47		AR1260-B	746.492	949.839		-27.2#	132	0.02	9.05- 9.18
48		AR1260-C	806.212	980.342		-21.6#	131	0.02	9.64- 9.78
49		AR1260-D	0.908	1.077	E3	-18.6	135	0.01	11.13-11.25
50		AR1260-E	0.826	0.990	E3	-19.9	135	0.00	11.74-11.88
51	S	Decachlorobiphenyl	11.362	12.586	E3	-10.8	119	0.00	14.22-14.36

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	13.934	13.309	E3	4.5	101	0.00	3.94- 4.16
2		AR1221-A		----------NA----------					
3		AR1221-B		----------NA----------					
4		AR1221-C		----------NA----------					
5		AR1221-D		----------NA----------					
6		AR1221-E		----------NA----------					
7		AR1232-A		----------NA----------					
8		AR1232-B		----------NA----------					
9		AR1232-C		----------NA----------					
10		AR1232-D		----------NA----------					
11		AR1232-E		----------NA----------					
12		AR1242-A		----------NA----------					
13		AR1242-B		----------NA----------					
14		AR1242-C		----------NA----------					
15		AR1242-D		----------NA----------					
16		AR1242-E		----------NA----------					
17		AR1248-A		----------NA----------					
18		AR1248-B		----------NA----------					
19		AR1248-C		----------NA----------					
20		AR1248-D		----------NA----------					
21		AR1248-E		----------NA----------					
22		AR1248-F		----------NA----------					
23		AR1248-G		----------NA----------					
24		AR1254-A		----------NA----------					
25		AR1254-B		----------NA----------					
26		AR1254-C		----------NA----------					
27		AR1254-D		----------NA----------					
28		AR1254-E		----------NA----------					
29		AR1254-F		----------NA----------					
30		AR1254-G		----------NA----------					
31		AR1262-A		----------NA----------					
32		AR1262-B		----------NA----------					
33		AR1262-C		----------NA----------					
34		AR1262-D		----------NA----------					
35		AR1262-E		----------NA----------					
36		AR1268-A		----------NA----------					
37		AR1268-B		----------NA----------					
38		AR1268-C		----------NA----------					
39		AR1268-D		----------NA----------					
40		AR1268-E		----------NA----------					
41		AR1016-A	345.570	350.164		-1.3	98	0.01	5.02- 5.15
42		AR1016-B	745.700	774.488		-3.9	101	0.01	5.92- 5.98
43		AR1016-C	1.166	1.202	E3	-3.1	102	0.01	6.90- 6.96
44		AR1016-D	513.483	524.630		-2.2	99	0.01	7.21- 7.27
45		AR1016-E	394.451	395.096		-0.2	100	0.01	8.25- 8.32
46		AR1260-A	920.244	928.739		-0.9	96	0.01	11.09-11.22
47		AR1260-B	1049.898	987.016		6.0	89	0.01	11.55-11.67

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5564-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153684.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

48		AR1260-C	1.364	1.402 E3	-2.8	103	0.00	12.39-12.52
49		AR1260-D	1.430	1.297 E3	9.3	92	0.00	13.84-13.97
50		AR1260-E	1.412	1.337 E3	5.3	95	0.00	14.71-14.84
51	S	Decachlorobiphenyl	16.723	17.620 E3	-5.4	105	0.00	17.39-17.52

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF153477.D PCB5560.M Fri Feb 05 14:15:16 2016 GCEF

12.6.21

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Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5565-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153695.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5565\EF153695.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\GEF5565\EF153695.D\ECD2B.CH
Acq On    :  5 Feb 2016   6:36 pm                    Operator: curtisc
Sample    : cc5560-1000                              Inst    : gcef
Misc      : op90928,gef5565,16.3,,,10,1              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Fri Feb 05 10:35:05 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	9.172	9.888 E3	-7.8	106	0.00	2.76- 3.01
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1262-A		----------NA----------				
32	AR1262-B		----------NA----------				
33	AR1262-C		----------NA----------				
34	AR1262-D		----------NA----------				
35	AR1262-E		----------NA----------				
36	AR1268-A		----------NA----------				
37	AR1268-B		----------NA----------				
38	AR1268-C		----------NA----------				
39	AR1268-D		----------NA----------				
40	AR1268-E		----------NA----------				
41	AR1016-A	265.283	280.851	-5.9	105	0.00	3.39- 3.57

12.6.22

12

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5565-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153695.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

42		AR1016-B	509.491	527.363	-3.5	105	0.00	4.04- 4.16
43		AR1016-C	776.625	858.742	-10.6	108	0.00	4.89- 4.96
44		AR1016-D	349.734	370.948	-6.1	105	0.00	5.15- 5.21
45		AR1016-E	356.962	385.676	-8.0	105	0.00	5.95- 6.01
46		AR1260-A	589.508	632.971	-7.4	106	0.00	8.44- 8.58
47		AR1260-B	746.492	930.918	-24.7#	120	0.00	9.03- 9.17
48		AR1260-C	806.212	1019.931	-26.5#	118	0.00	9.63- 9.77
49		AR1260-D	0.908	1.114 E3	-22.7#	123	0.00	11.11-11.24
50		AR1260-E	0.826	1.029 E3	-24.6#	129	0.00	11.73-11.86
51	S	Decachlorobiphenyl	11.362	12.655 E3	-11.4	112	0.00	14.21-14.35

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	13.934	14.290 E3	-2.6	100	0.00	3.93- 4.15
2		AR1221-A	----------NA----------					
3		AR1221-B	----------NA----------					
4		AR1221-C	----------NA----------					
5		AR1221-D	----------NA----------					
6		AR1221-E	----------NA----------					
7		AR1232-A	----------NA----------					
8		AR1232-B	----------NA----------					
9		AR1232-C	----------NA----------					
10		AR1232-D	----------NA----------					
11		AR1232-E	----------NA----------					
12		AR1242-A	----------NA----------					
13		AR1242-B	----------NA----------					
14		AR1242-C	----------NA----------					
15		AR1242-D	----------NA----------					
16		AR1242-E	----------NA----------					
17		AR1248-A	----------NA----------					
18		AR1248-B	----------NA----------					
19		AR1248-C	----------NA----------					
20		AR1248-D	----------NA----------					
21		AR1248-E	----------NA----------					
22		AR1248-F	----------NA----------					
23		AR1248-G	----------NA----------					
24		AR1254-A	----------NA----------					
25		AR1254-B	----------NA----------					
26		AR1254-C	----------NA----------					
27		AR1254-D	----------NA----------					
28		AR1254-E	----------NA----------					
29		AR1254-F	----------NA----------					
30		AR1254-G	----------NA----------					
31		AR1262-A	----------NA----------					
32		AR1262-B	----------NA----------					
33		AR1262-C	----------NA----------					
34		AR1262-D	----------NA----------					
35		AR1262-E	----------NA----------					
36		AR1268-A	----------NA----------					
37		AR1268-B	----------NA----------					
38		AR1268-C	----------NA----------					
39		AR1268-D	----------NA----------					
40		AR1268-E	----------NA----------					
41		AR1016-A	345.570	328.389	5.0	97	0.00	5.01- 5.14
42		AR1016-B	745.700	710.006	4.8	99	0.00	5.91- 5.97
43		AR1016-C	1.166	1.195 E3	-2.5	99	0.00	6.90- 6.96
44		AR1016-D	513.483	503.474	1.9	97	0.00	7.20- 7.26
45		AR1016-E	394.451	389.369	1.3	97	0.00	8.24- 8.31
46		AR1260-A	920.244	889.246	3.4	98	0.00	11.08-11.20
47		AR1260-B	1049.898	966.525	7.9	92	0.00	11.54-11.66

Continuing Calibration Summary

Job Number: JC13575 **Sample:** GEF5565-CC5560
Account: LSRPNJL LSRP Consulting, LLC **Lab FileID:** EF153695.D
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

48		AR1260-C	1.364	1.421 E3	-4.2	102	0.00	12.38-12.51
49		AR1260-D	1.430	1.267 E3	11.4	88	0.00	13.83-13.95
50		AR1260-E	1.412	1.366 E3	3.3	95	0.00	14.70-14.83
51	S	Decachlorobiphenyl	16.723	15.712 E3	6.0	94	0.00	17.39-17.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF153478.D PCB5560.M Sat Feb 06 12:39:44 2016 GCEF

12.6.22

12

GC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna 02/16/16 17:39

Quantitation Report (QT Reviewed)

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5564\EF153675.D\ECD1A.CH Vial: 53
Signal #2 : C:\HPCHEM\1\DATA\GEF5564\EF153675.D\ECD2B.CH
Acq On    :  5 Feb 2016   9:45 am                    Operator: curtisc
Sample    : jc13575-1                                Inst    : gcef
Misc      : op90954,gef5564,15.5,,,10,1              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E
Quant Time: Feb 16 17:33 2016  Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 13:37:50 2016
Response via : Initial Calibration
DataAcq Meth : PCB5560.M

Volume Inj.     : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1          Signal #2 Phase: RTX-CLP2
Signal #1 Info  : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
1) S	Tetrachloro-m-xy	2.88	4.04	622412	435884	67.861	31.282	#
Spiked Amount	40.000			Recovery	=	169.65%	78.20%	
51) S	Decachlorobiphen	14.29	17.45	1354875	1513691	119.244m	90.518m	
Spiked Amount	40.000			Recovery	=	298.11%	226.30%	
	Target Compounds							
17)	AR1248-A	4.10	5.95	7238305	8445175	32967.235	26321.752	
18)	AR1248-B	4.93	6.93	25870079	31345446	75748.855	49385.292	#
19)	AR1248-C	5.59	7.66	34176557	20219701	43246.477	46963.555	
20)	AR1248-D	5.98	8.28	33927642	28076808	73497.815	54910.201	#
21)	AR1248-E	6.15	8.55	19245623	36929449	94445.213	62626.948	#
22)	AR1248-F	6.87	9.22	38879834	41066333	89075.178	58104.249	#
23)	AR1248-G	7.27	9.75	27701474	39181939	65476.524	92560.080	#
48)	AR1260-C	9.69	12.44	10093243	12457590	12519.343	9135.404	#
49)	AR1260-D	11.17	13.89	6394883	8472852	7039.518	5923.691	
50)	AR1260-E	11.79	14.76	4493580	8313377	5440.171m	5886.288	

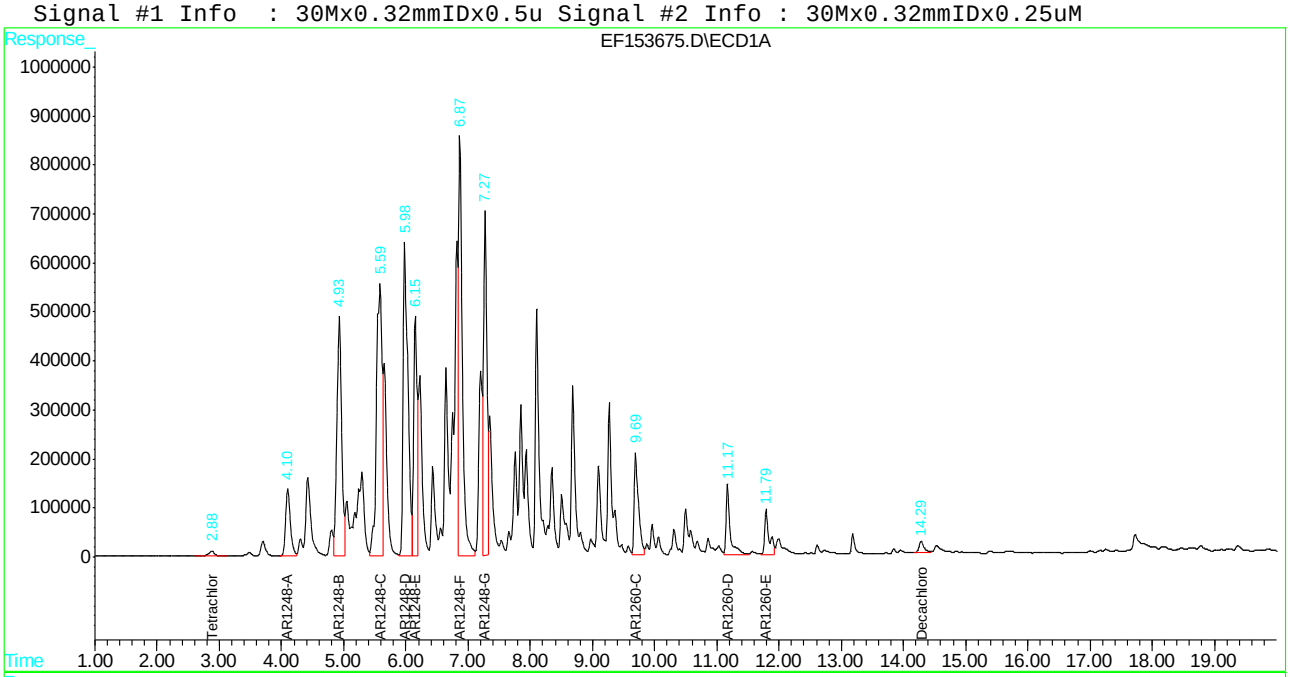
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

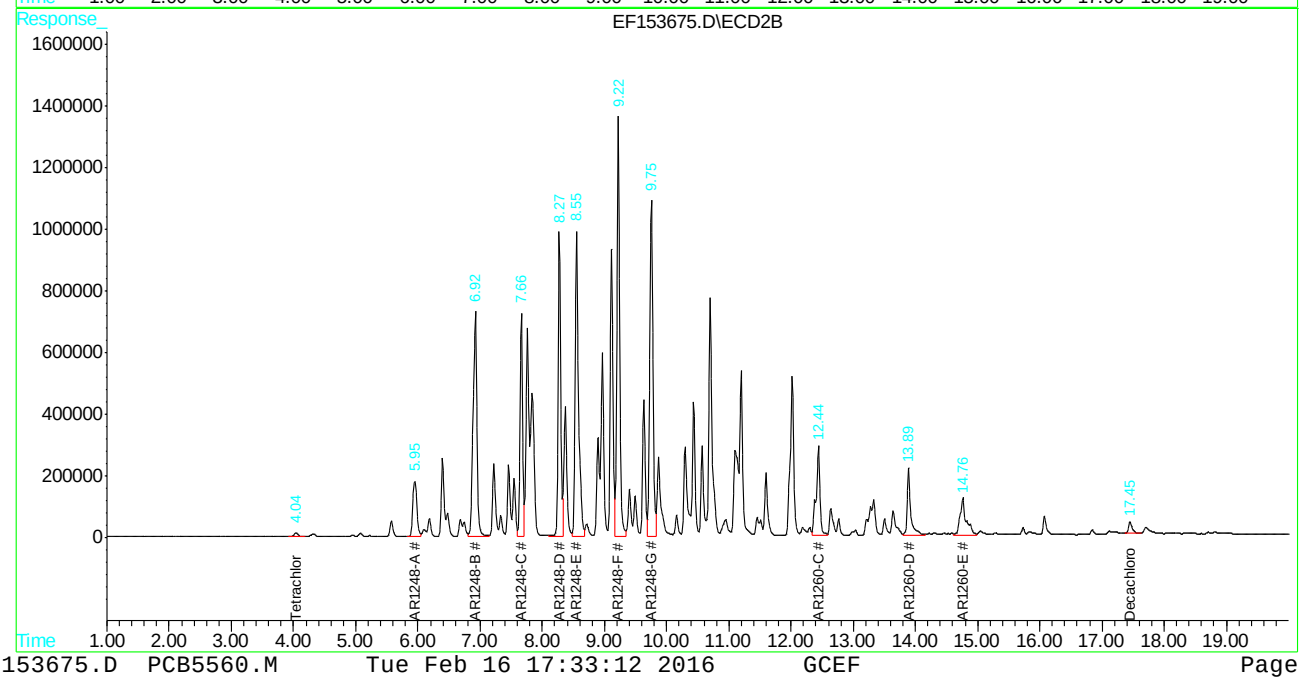
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\GEF5564\EF153675.D\ECD1A.CH Vial: 53
Signal #2 : C:\HPCHEM\1\DATA\GEF5564\EF153675.D\ECD2B.CH
Acq On : 5 Feb 2016 9:45 am Operator: curtisc
Sample : jc13575-1 Inst : gcef
Misc : op90954,gef5564,15.5,,,10,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Feb 16 17:33 2016 Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Feb 02 13:37:50 2016
Response via : Multiple Level Calibration
DataAcq Meth : PCB5560.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM





Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna
02/16/16 17:39

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GEF5565\EF153688.D\ECD1A.CH Vial: 5
Acq On    :  5 Feb 2016   3:42 pm                    Operator: curtisc
Sample    : jc13575-1                                Inst    : gcef
Misc      : op90954,gef5565,15.5,,,10,100            Multiplr: 1.00
IntFile   : EVENTS.E

Data File : C:\HPCHEM\1\DATA\GEF5565\EF153688.D\ECD2B.CH Vial: 5
Acq On    :  5 Feb 2016   3:42 pm                    Operator: curtisc
Sample    : jc13575-1                                Inst    : gcef
Misc      : op90954,gef5565,16.7,,,10,100            Multiplr: 1.00
IntFile   : EVENTS2.E
Quant Time: Feb 16 17:35 2016  Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 13:37:50 2016
Response via : Initial Calibration
DataAcq Meth : PCB5560.M

Volume Inj.     : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1          Signal #2 Phase: RTX-CLP2
Signal #1 Info  : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
	Target Compounds						
17)	AR1248-A	4.10	5.95	148861	210035	677.994	654.633
18)	AR1248-B	4.93	6.93	387264	613847	1133.929	967.126
19)	AR1248-C	5.59	7.67	1167076	519614	1476.800	1206.888
20)	AR1248-D	5.98	8.28	713976	655430	1546.694	1281.834
21)	AR1248-E	6.15	8.56	336738	783210	1652.496	1328.210
48)	AR1260-C	9.70	12.45	148228	204395	183.858	149.887
49)	AR1260-D	11.18	13.90	81217	132706	89.404	92.780
50)	AR1260-E	11.80	14.77	56031	120730	67.834m	85.483 #

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

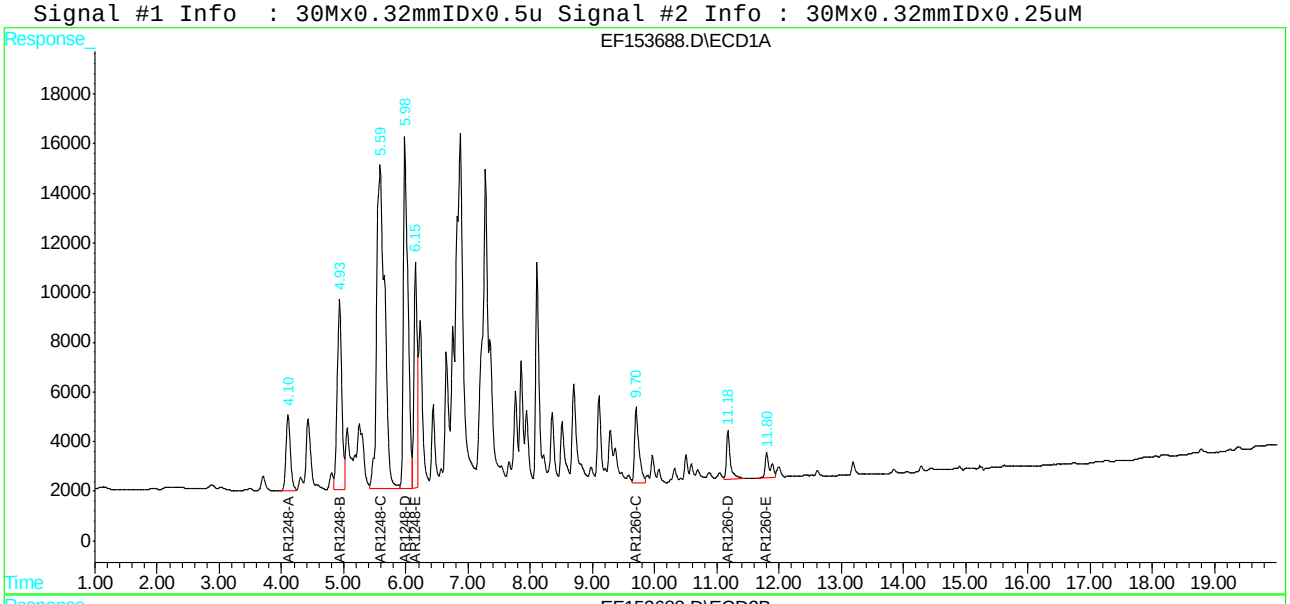
Quantitation Report

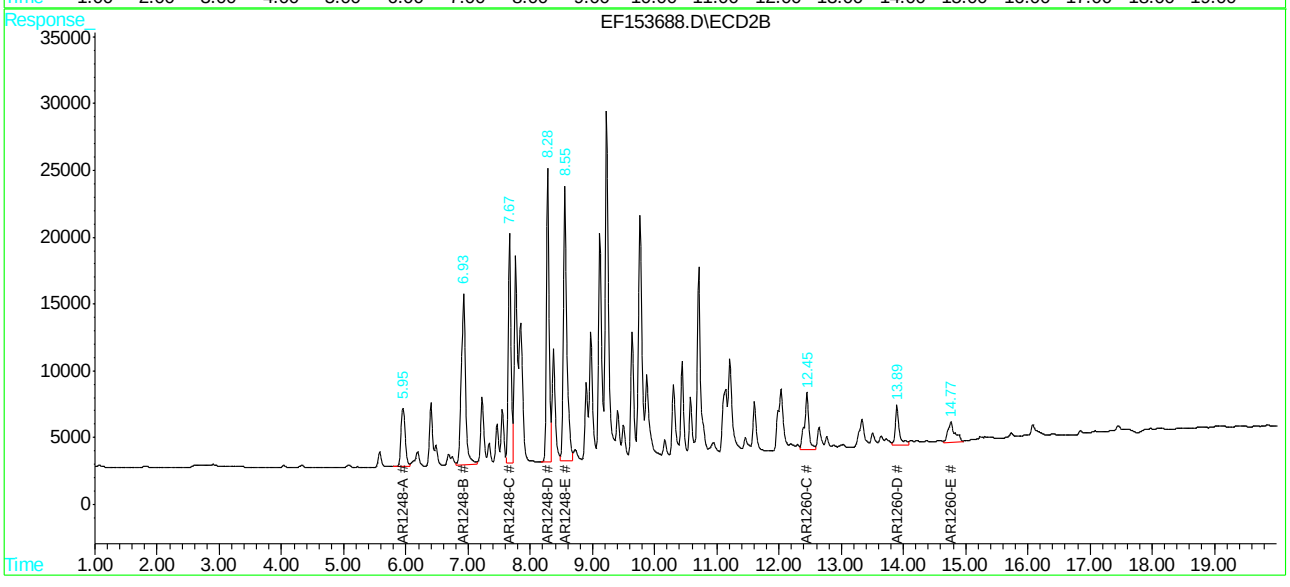
```
Data File : C:\HPCHEM\1\DATA\GEF5565\EF153688.D\ECD1A.CH Vial: 5
Acq On    :  5 Feb 2016   3:42 pm                    Operator: curtisc
Sample    : jc13575-1                                Inst    : gcef
Misc      : op90954,gef5565,15.5,,,10,100            Multiplr: 1.00
IntFile   : EVENTS.E

Data File : C:\HPCHEM\1\DATA\GEF5565\EF153688.D\ECD2B.CH Vial: 5
Acq On    :  5 Feb 2016   3:42 pm                    Operator: curtisc
Sample    : jc13575-1                                Inst    : gcef
Misc      : op90954,gef5565,16.7,,,10,100            Multiplr: 1.00
IntFile   : EVENTS2.E
Quant Time: Feb 16 17:35 2016  Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 13:37:50 2016
Response via : Multiple Level Calibration
DataAcq Meth : PCB5560.M

Volume Inj.     : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1          Signal #2 Phase: RTX-CLP2
Signal #1 Info  : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM
```





Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna 02/16/16 17:39

Quantitation Report (QT Reviewed)

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5564\EF153676.D\ECD1A.CH Vial: 54
Signal #2 : C:\HPCHEM\1\DATA\GEF5564\EF153676.D\ECD2B.CH
Acq On    :  5 Feb 2016  10:09 am                    Operator: curtisc
Sample    : jc13575-3                                Inst    : gcef
Misc      : op90954,gef5564,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E
Quant Time: Feb 16 17:33 2016  Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 13:37:50 2016
Response via : Initial Calibration
DataAcq Meth : PCB5560.M

Volume Inj.     : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1          Signal #2 Phase: RTX-CLP2
Signal #1 Info  : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
1) S	Tetrachloro-m-xy	2.88	4.04	437147	397395	47.662	28.520	#
Spiked Amount	40.000			Recovery	=	119.15%	71.30%	
51) S	Decachlorobiphen	14.28	17.45	1529942	1717886	134.651m	102.729m	
Spiked Amount	40.000			Recovery	=	336.63%	256.82%	
	Target Compounds							
17)	AR1248-A	4.10	5.95	5570854	6480342	25372.741	20197.801	
18)	AR1248-B	4.93	6.92	21953436	26431899	64280.734	41643.914	#
19)	AR1248-C	5.58	7.66	29953972	17775601	37903.284	41286.734	
20)	AR1248-D	5.98	8.27	29968181	24460533	64920.394	47837.803	#
21)	AR1248-E	6.15	8.55	16860270	31849053	82739.427	54011.339	#
22)	AR1248-F	6.87	9.22	35895541	37919274	82238.050	53651.515	#
23)	AR1248-G	7.27	9.75	25641738	35729267	60608.034	84403.782	#
48)	AR1260-C	9.69	12.44	10802420	13184568	13398.985	9668.511	#
49)	AR1260-D	11.17	13.89	5268731	8443899	5799.845	5903.449	
50)	AR1260-E	11.79	14.76	4656553	8506653	5637.475m	6023.137	

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

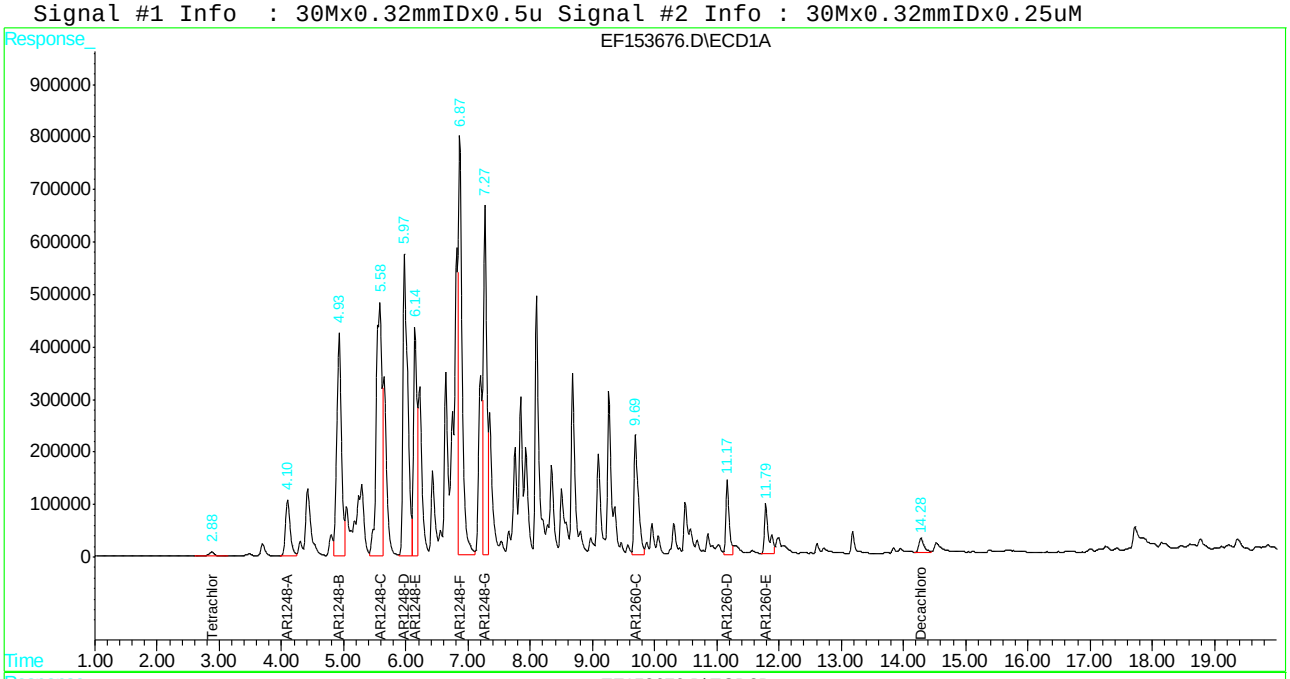
SGS ACCUTEST JC13575

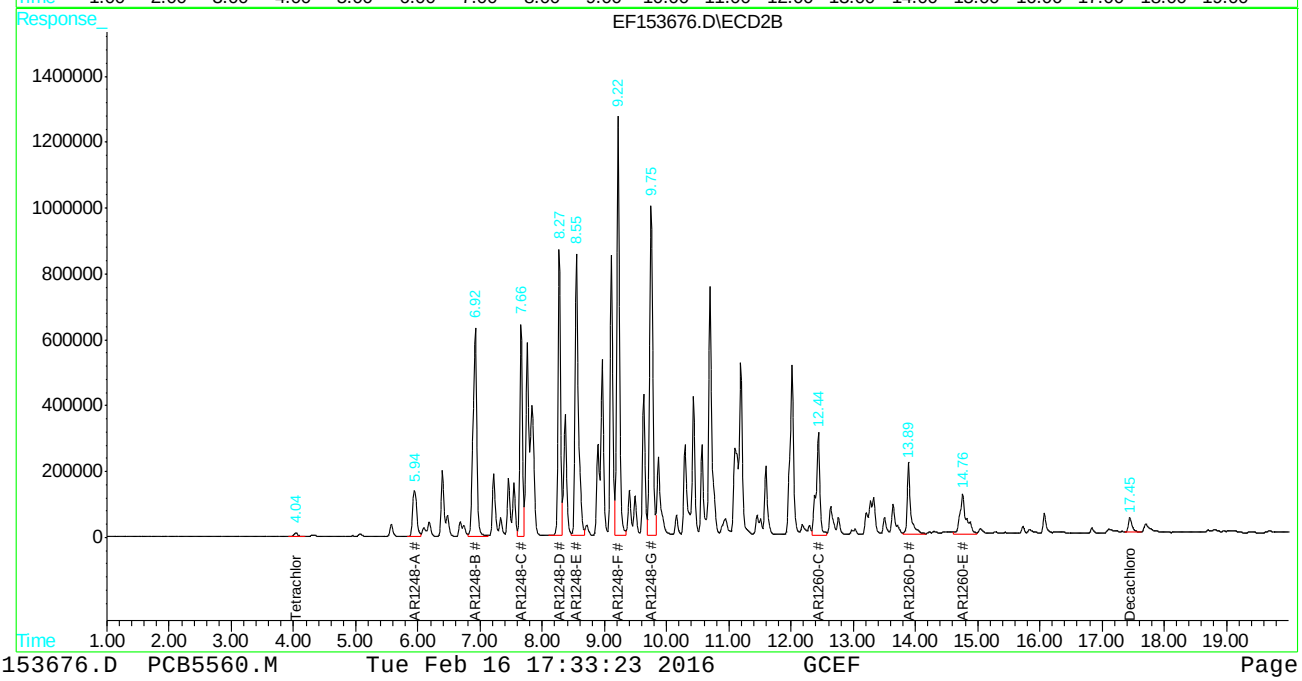
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\GEF5564\EF153676.D\ECD1A.CH Vial: 54
Signal #2 : C:\HPCHEM\1\DATA\GEF5564\EF153676.D\ECD2B.CH
Acq On : 5 Feb 2016 10:09 am Operator: curtisc
Sample : jc13575-3 Inst : gcef
Misc : op90954,gef5564,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Feb 16 17:33 2016 Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Feb 02 13:37:50 2016
Response via : Multiple Level Calibration
DataAcq Meth : PCB5560.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM





Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna 02/16/16 17:39

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GEF5565\EF153689.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\GEF5565\EF153689.D\ECD2B.CH
Acq On : 5 Feb 2016 4:07 pm Operator: curtisc
Sample : jc13575-3 Inst : gcef
Misc : op90954,gef5565,16.7,,,10,100 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Feb 16 17:36 2016 Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Feb 02 13:37:50 2016
Response via : Initial Calibration
DataAcq Meth : PCB5560.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
	Target Compounds						
17)	AR1248-A	4.10	5.95	104336	153121	475.205	477.243
18)	AR1248-B	4.93	6.93	288388	482734	844.414	760.555
19)	AR1248-C	5.58	7.67	933034	444382	1180.646	1032.149
20)	AR1248-D	5.98	8.28	567138	554946	1228.597	1085.316
21)	AR1248-E	6.15	8.55	264746	662548	1299.203	1123.584
47)	AR1260-B	9.10	11.60	139805	170777	187.283	162.661
48)	AR1260-C	9.70	12.45	149960	229124	186.006	168.021
49)	AR1260-D	11.18	13.90	78432	119263	86.339	83.381
50)	AR1260-E	11.80	14.77	54160	105597	65.569m	74.768

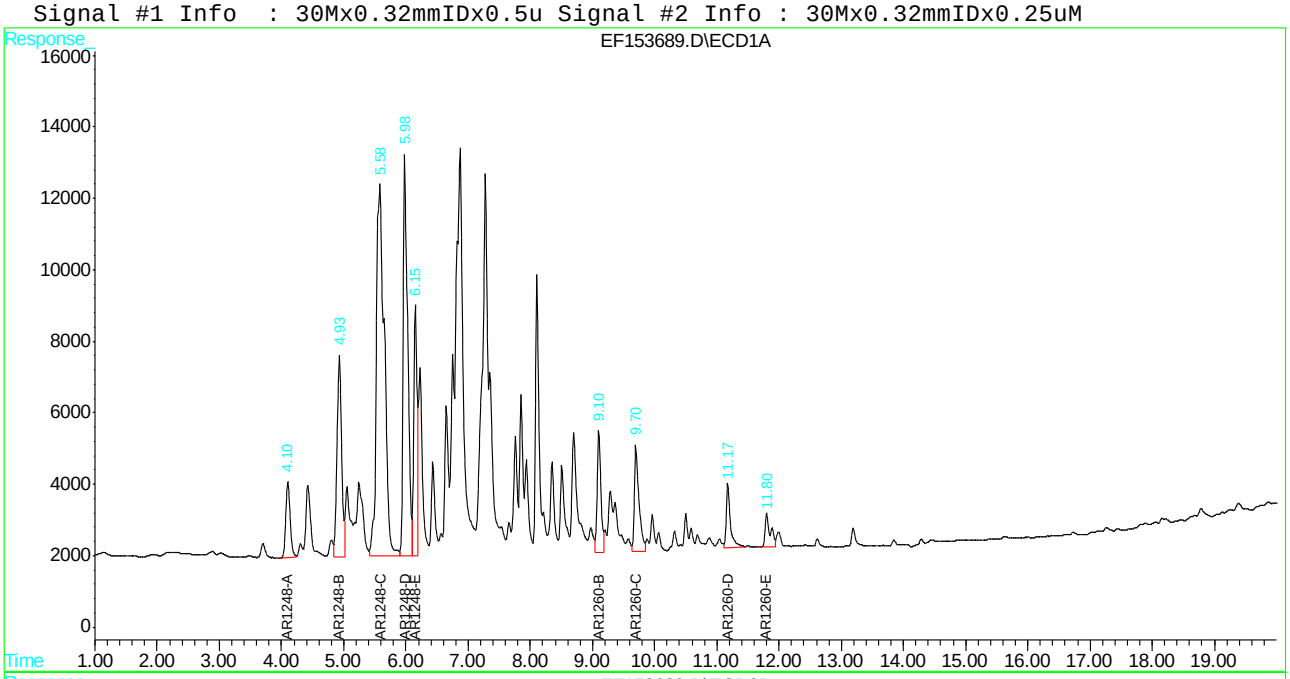
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
EF153689.D PCB5560.M Tue Feb 16 17:36:10 2016 GCEF

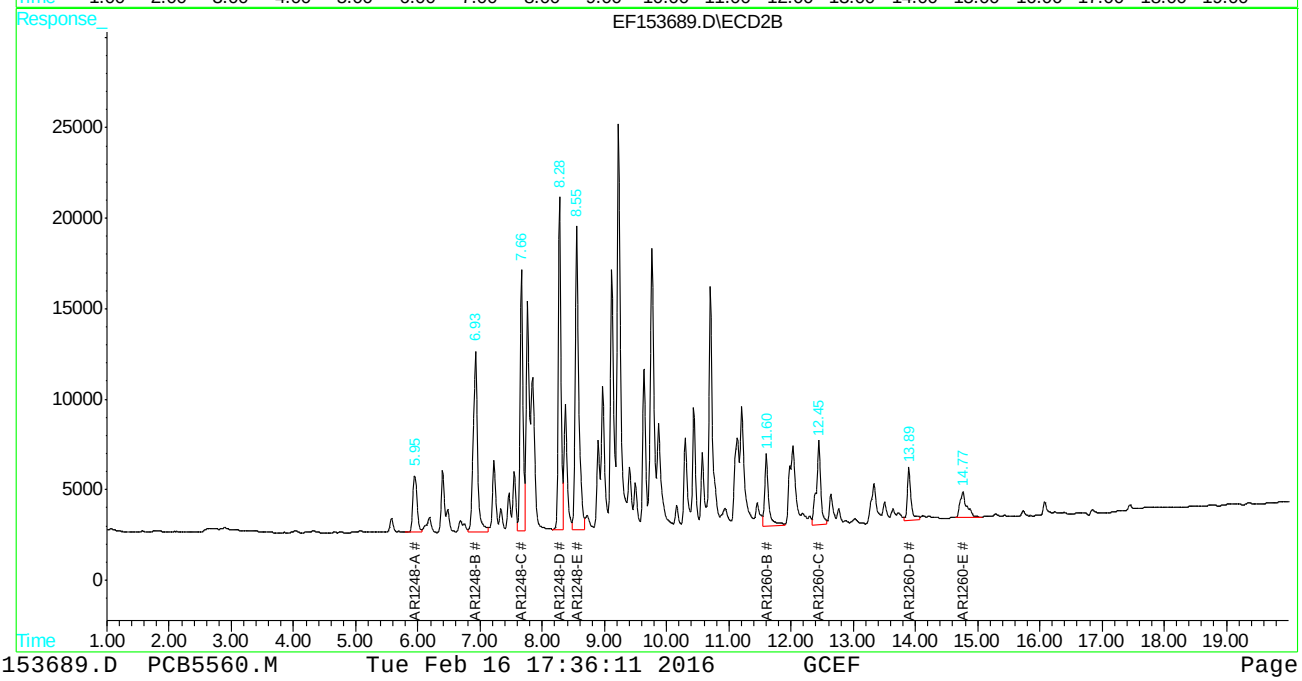
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\GEF5565\EF153689.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\GEF5565\EF153689.D\ECD2B.CH
Acq On : 5 Feb 2016 4:07 pm Operator: curtisc
Sample : jc13575-3 Inst : gcef
Misc : op90954,gef5565,16.7,,,10,100 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Feb 16 17:36 2016 Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Feb 02 13:37:50 2016
Response via : Multiple Level Calibration
DataAcq Meth : PCB5560.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM





Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna 02/16/16 17:39

Quantitation Report (QT Reviewed)

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5564\EF153681.D\ECD1A.CH Vial: 56
Signal #2 : C:\HPCHEM\1\DATA\GEF5564\EF153681.D\ECD2B.CH
Acq On    :  5 Feb 2016  12:31 pm                    Operator: curtisc
Sample    : jc13575-5                                Inst    : gcef
Misc      : op90954,gef5564,16.4,,,10,1              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E
Quant Time: Feb 16 17:33 2016  Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 13:37:50 2016
Response via : Initial Calibration
DataAcq Meth : PCB5560.M

Volume Inj.     : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1          Signal #2 Phase: RTX-CLP2
Signal #1 Info  : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	2.88	4.04	584426	398825	63.720	28.623 #
Spiked Amount	40.000			Recovery	=	159.30%	71.56%
51) S	Decachlorobiphen	14.28	17.45	2196227	2309784	193.292m	138.124m#
Spiked Amount	40.000			Recovery	=	483.23%	345.31%
	Target Compounds						
17)	AR1248-A	4.10	5.95	8093857	9403210	36863.890	29307.738
18)	AR1248-B	4.93	6.93	28542367	34566368	83573.445	54459.909 #
19)	AR1248-C	5.59	7.67	36274008	21788658	45900.559	50607.714
20)	AR1248-D	5.98	8.28	36746072	30486773	79603.412	59623.405 #
21)	AR1248-E	6.15	8.55	20930663	40149434	102714.311	68087.572 #
22)	AR1248-F	6.87	9.22	42692302	45007007	97809.689	63679.861 #
23)	AR1248-G	7.27	9.76	30808163	44339297	72819.642	104743.384 #
48)	AR1260-C	9.69	12.45	11746705	14518638	14570.246	10646.812 #
49)	AR1260-D	11.17	13.90	5847738	10284185	6437.218	7190.062
50)	AR1260-E	11.79	14.77	5204602	9797119	6300.972m	6936.852

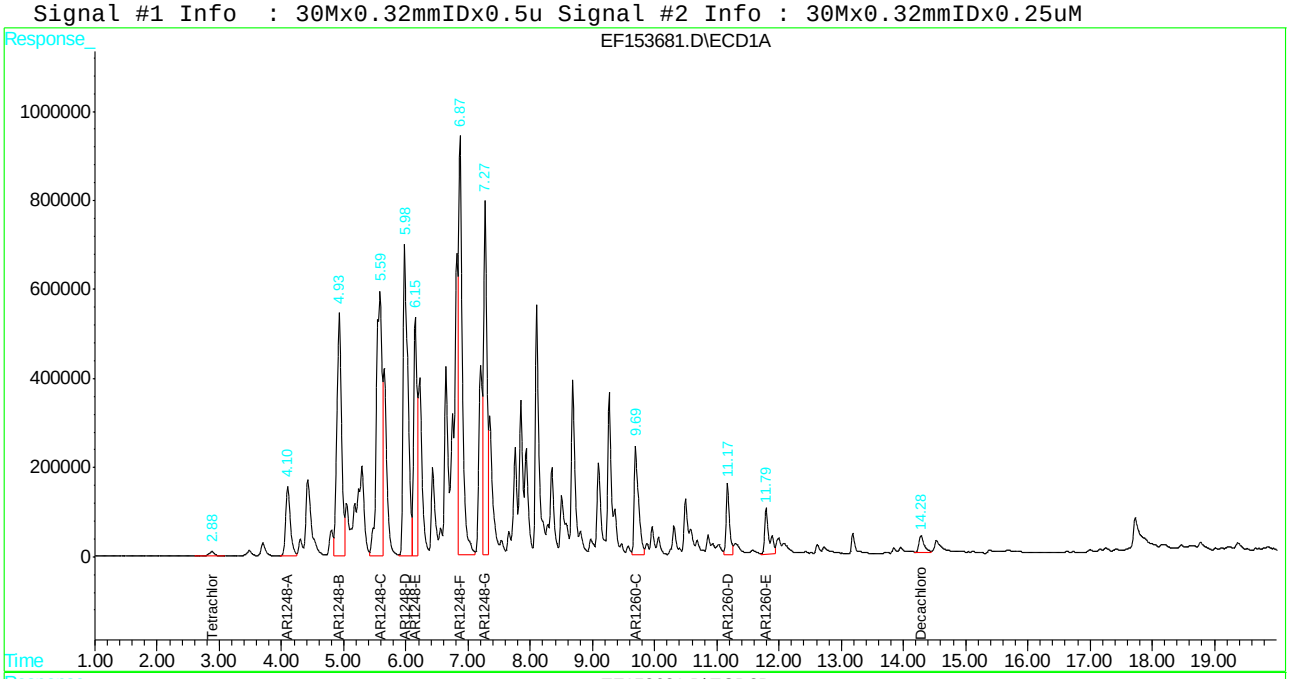
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

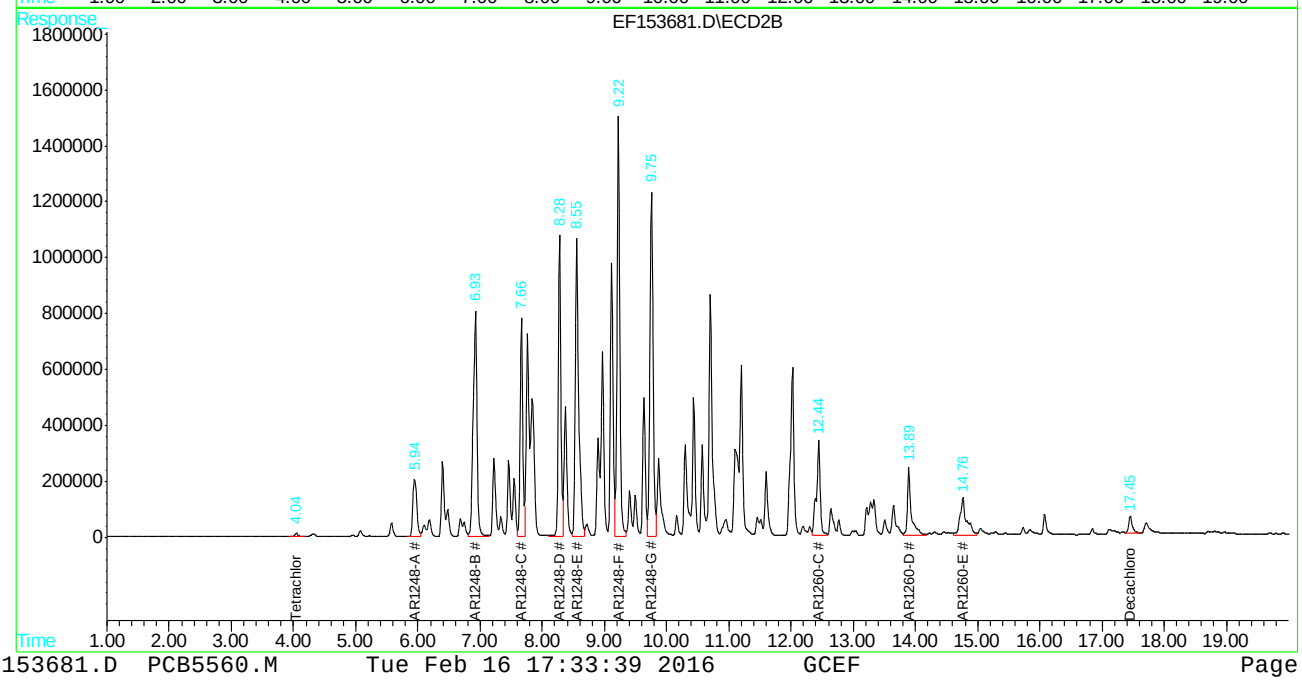
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\GEF5564\EF153681.D\ECD1A.CH Vial: 56
Signal #2 : C:\HPCHEM\1\DATA\GEF5564\EF153681.D\ECD2B.CH
Acq On : 5 Feb 2016 12:31 pm Operator: curtisc
Sample : jc13575-5 Inst : gcef
Misc : op90954,gef5564,16.4,,,10,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Feb 16 17:33 2016 Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Feb 02 13:37:50 2016
Response via : Multiple Level Calibration
DataAcq Meth : PCB5560.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM





Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna 02/16/16 17:39

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GEF5565\EF153690.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GEF5565\EF153690.D\ECD2B.CH
Acq On : 5 Feb 2016 4:32 pm Operator: curtisc
Sample : jc13575-5 Inst : gcef
Misc : op90954,gef5565,16.4,,,10,100 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Feb 16 17:36 2016 Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Feb 02 13:37:50 2016
Response via : Initial Calibration
DataAcq Meth : PCB5560.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
	Target Compounds						
17)	AR1248-A	4.10	5.95	164951	233507	751.277	727.789
18)	AR1248-B	4.93	6.93	419528	694174	1228.400	1093.684
19)	AR1248-C	5.58	7.66	867059	570478	1097.163	1325.028
20)	AR1248-D	5.98	8.28	761915	733410	1650.544	1434.341
21)	AR1248-E	6.15	8.55	361210	884409	1772.586	1499.828
48)	AR1260-C	9.70	12.45	176058	276133	218.377	202.494
49)	AR1260-D	11.17	13.90	91458	148981	100.677	104.158
50)	AR1260-E	11.80	14.77	60570	127753	73.330m	90.456m

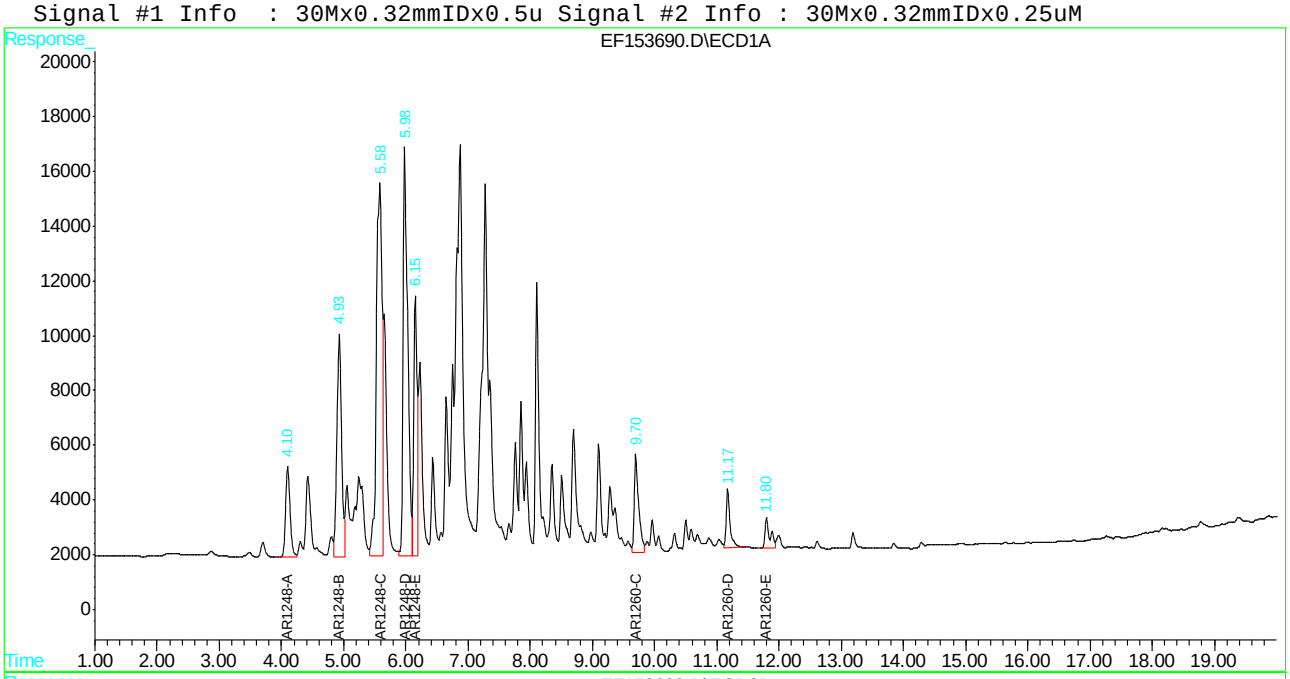
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
EF153690.D PCB5560.M Tue Feb 16 17:36:58 2016 GCEF

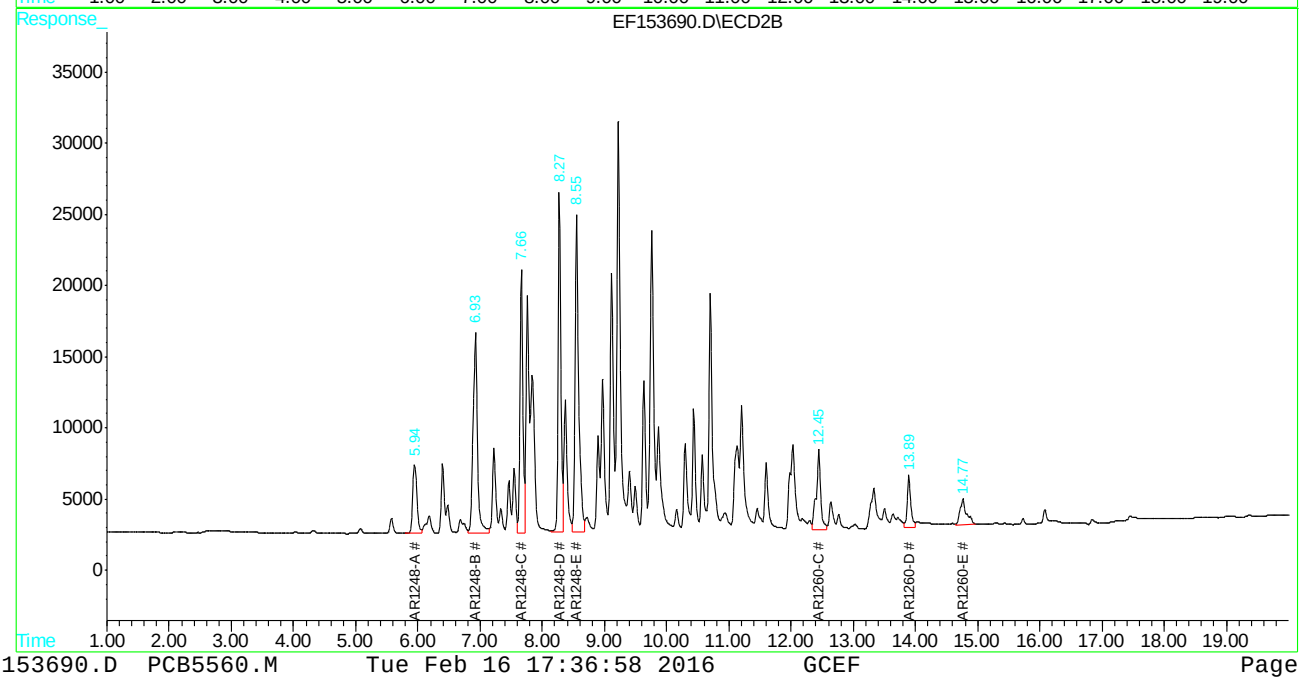
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\GEF5565\EF153690.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\GEF5565\EF153690.D\ECD2B.CH
Acq On : 5 Feb 2016 4:32 pm Operator: curtisc
Sample : jc13575-5 Inst : gcef
Misc : op90954,gef5565,16.4,,,10,100 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Feb 16 17:36 2016 Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Feb 02 13:37:50 2016
Response via : Multiple Level Calibration
DataAcq Meth : PCB5560.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM





Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna 02/16/16 17:39

Quantitation Report (QT Reviewed)

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5564\EF153682.D\ECD1A.CH Vial: 57
Signal #2 : C:\HPCHEM\1\DATA\GEF5564\EF153682.D\ECD2B.CH
Acq On    :  5 Feb 2016  12:56 pm                    Operator: curtisc
Sample    : jc13575-7                                Inst    : gcef
Misc      : op90954,gef5564,16.4,,,10,1              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E
Quant Time: Feb 16 17:33 2016  Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 13:37:50 2016
Response via : Initial Calibration
DataAcq Meth : PCB5560.M

Volume Inj.     : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1          Signal #2 Phase: RTX-CLP2
Signal #1 Info  : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
1) S	Tetrachloro-m-xy	2.89	4.04	525488	404040	57.294	28.997	#
Spiked Amount	40.000			Recovery	=	143.24%	72.49%	
51) S	Decachlorobiphen	14.29	17.45	1645635	2036035	144.834m	121.754m	
Spiked Amount	40.000			Recovery	=	362.08%	304.38%	
	Target Compounds							
17)	AR1248-A	4.10	5.95	6808078	7861122	31007.744	24501.388	
18)	AR1248-B	4.93	6.93	24678112	29293826	72258.717	46152.929	#
19)	AR1248-C	5.59	7.67	30068028	17727677	38047.609	41175.424	
20)	AR1248-D	5.98	8.28	30265151	24871268	65563.722	48641.083	#
21)	AR1248-E	6.15	8.55	17017607	32761904	83511.536	55559.401	#
22)	AR1248-F	6.87	9.22	36435472	38026189	83475.052	53802.787	#
23)	AR1248-G	7.28	9.75	25811046	36592323	61008.218	86442.592	#
48)	AR1260-C	9.69	12.44	9751632	12132937	12095.620	8897.329	#
49)	AR1260-D	11.17	13.89	5400659	9080025	5945.071	6348.188	
50)	AR1260-E	11.79	14.76	4604930	8582349	5574.978m	6076.734	

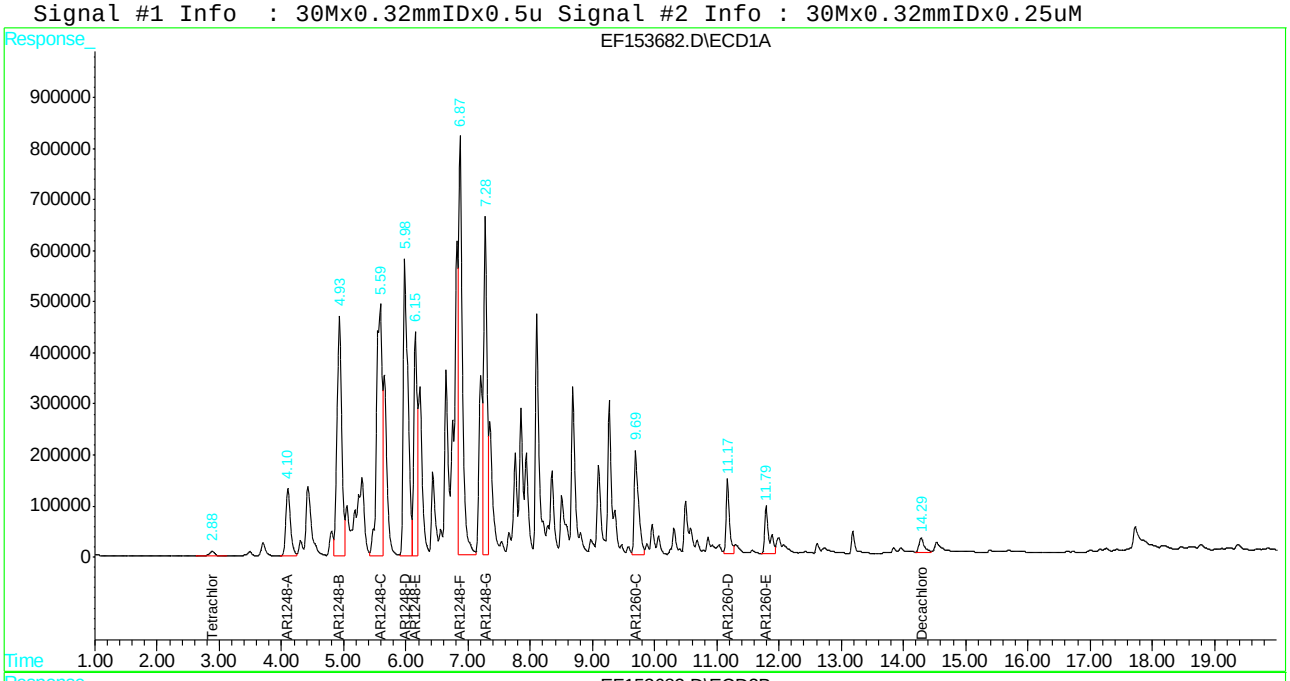
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

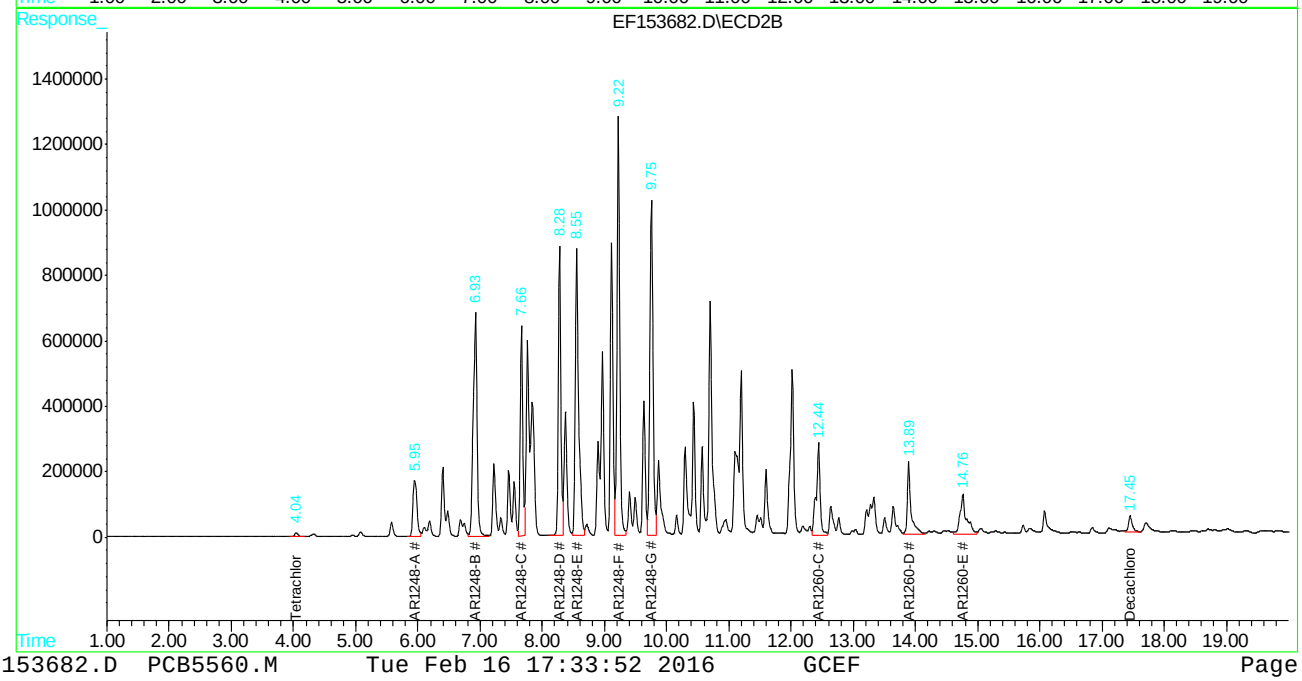
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\GEF5564\EF153682.D\ECD1A.CH Vial: 57
Signal #2 : C:\HPCHEM\1\DATA\GEF5564\EF153682.D\ECD2B.CH
Acq On : 5 Feb 2016 12:56 pm Operator: curtisc
Sample : jc13575-7 Inst : gcef
Misc : op90954,gef5564,16.4,,,10,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Feb 16 17:33 2016 Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Feb 02 13:37:50 2016
Response via : Multiple Level Calibration
DataAcq Meth : PCB5560.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM





Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna 02/16/16 17:39

Quantitation Report (QT Reviewed)

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5565\EF153691.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GEF5565\EF153691.D\ECD2B.CH
Acq On    :  5 Feb 2016   4:56 pm                    Operator: curtisc
Sample    : jc13575-7                                Inst    : gcef
Misc      : op90954,gef5565,16.4,,,10,100            Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E
Quant Time: Feb 16 17:37 2016  Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 13:37:50 2016
Response via : Initial Calibration
DataAcq Meth : PCB5560.M

Volume Inj.     : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1          Signal #2 Phase: RTX-CLP2
Signal #1 Info  : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
	Target Compounds						
17)	AR1248-A	4.10	5.95	109135	159774	497.061	497.982
18)	AR1248-B	4.93	6.93	268776	457972	786.991	721.543
19)	AR1248-C	5.59	7.66	561598	383700	710.637	891.205 #
20)	AR1248-D	5.98	8.28	473946	477923	1026.714	934.680
21)	AR1248-E	6.15	8.55	216189	568918	1060.917	964.801
48)	AR1260-C	9.70	12.45	113678	182844	141.002	134.084
49)	AR1260-D	11.17	13.90	67474	98933	74.276	69.168
50)	AR1260-E	11.80	14.76	43732	92489	52.944m	65.487

13.1.8 13

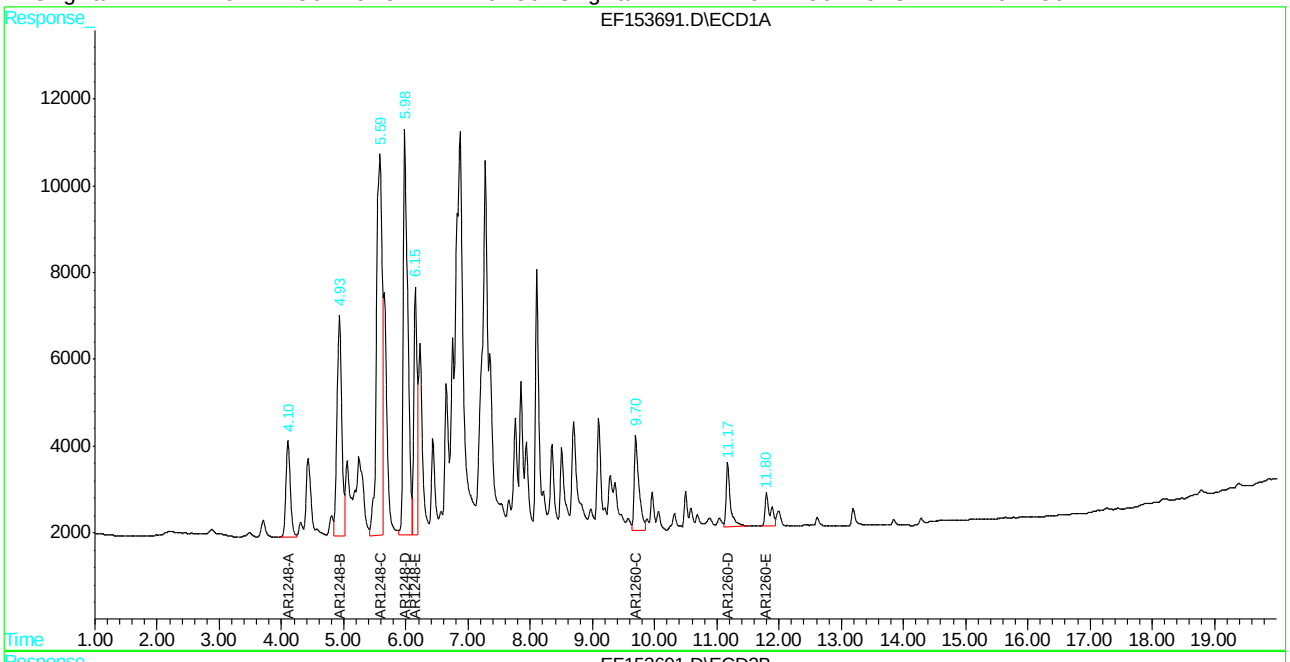
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
EF153691.D PCB5560.M Tue Feb 16 17:37:35 2016 GCEF

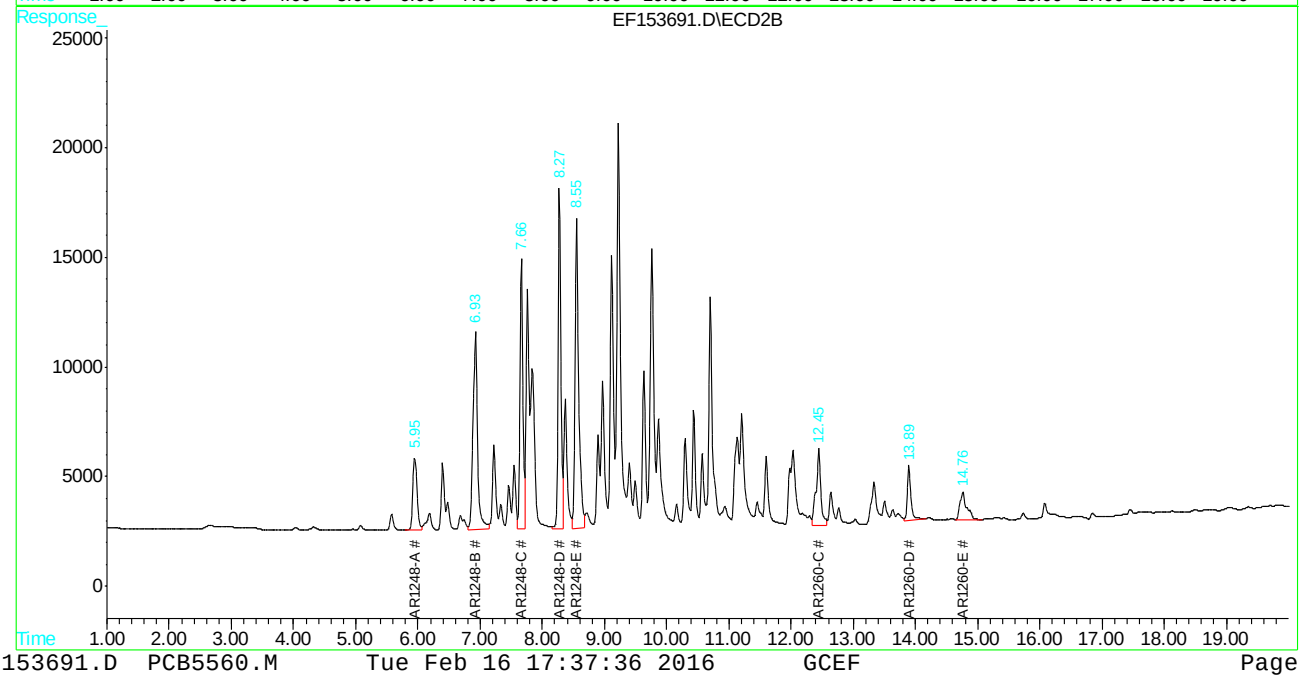
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\GEF5565\EF153691.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\GEF5565\EF153691.D\ECD2B.CH
Acq On : 5 Feb 2016 4:56 pm Operator: curtisc
Sample : jc13575-7 Inst : gcef
Misc : op90954,gef5565,16.4,,,10,100 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Feb 16 17:37 2016 Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Feb 02 13:37:50 2016
Response via : Multiple Level Calibration
DataAcq Meth : PCB5560.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 02/11/16 14:49

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Y2884\
Data File : 2Y74278.D
Signal(s) : FID1A.CH
Acq On : 04 Feb 2016 12:16 pm
Operator : thomasl
Sample : jc13575-2
Misc : op90971,g2y2884,10.0,,,1,1
ALS Vial : 28 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:09:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y2871.M
Quant Title :
QLast Update : Tue Jan 19 12:12:11 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	8.42	96821339	50.055	PPM	m
Spiked Amount 50.000		Recovery	= 100.11%		
10) S 5a-Androstane	9.09	92010977	53.038	PPM	m
Spiked Amount 50.000		Recovery	= 106.08%		
11) S Tetracosane-d50	10.40	79613841	52.912	PPM	m
Spiked Amount 50.000		Recovery	= 105.82%		
Target Compounds					
1) H TPH-DRO	7.34	891195420	563.682	PPM	
2) H TPH-DRO (C10-C44)	11.56	1294904783	819.029	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

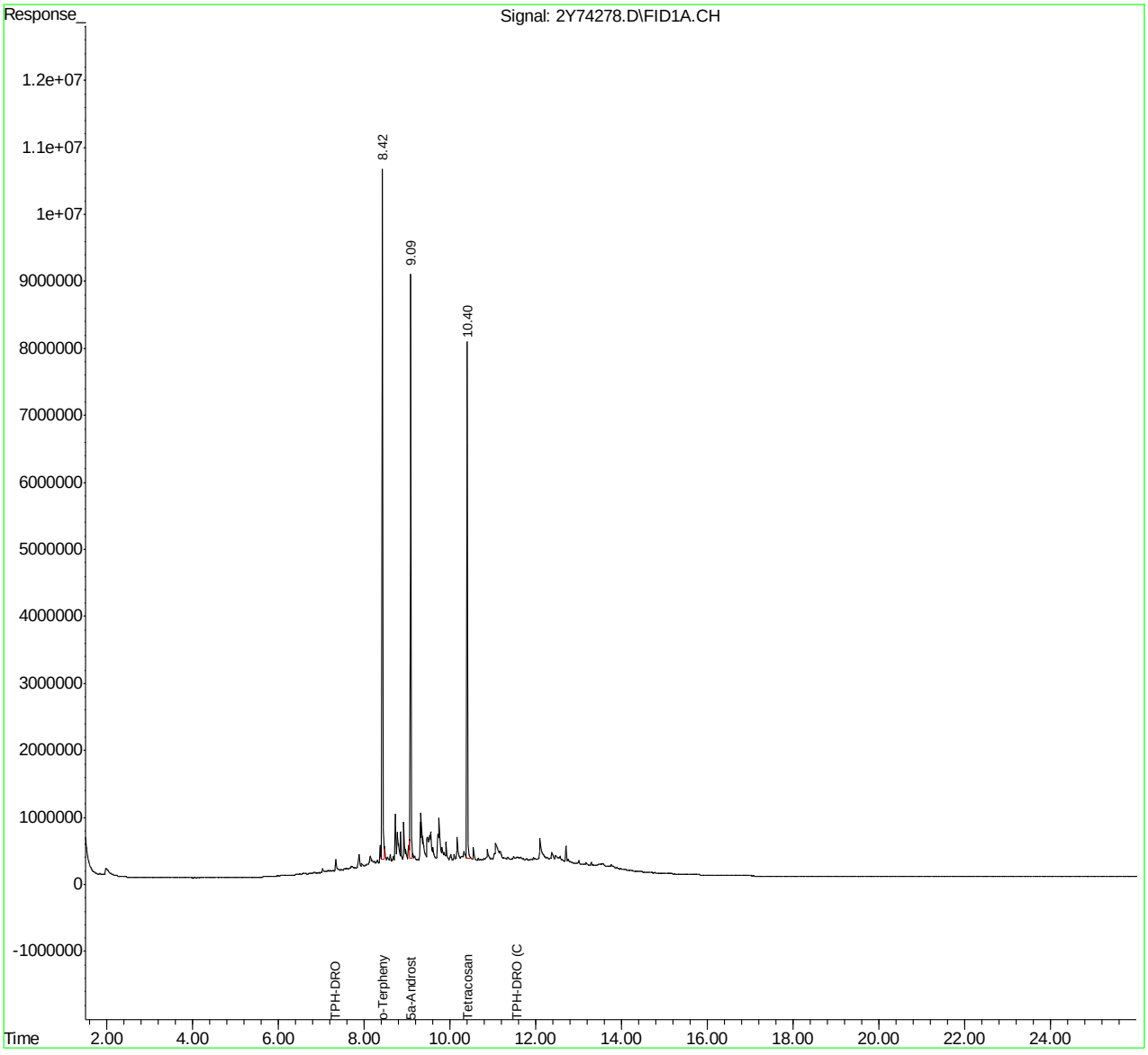
13.1.9 13

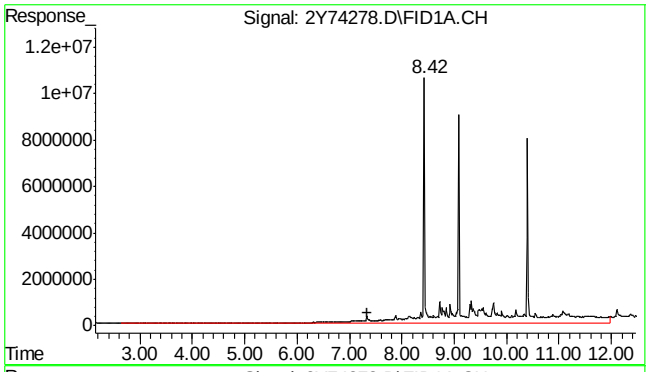
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Y2884\
Data File : 2Y74278.D
Signal(s) : FID1A.CH
Acq On : 04 Feb 2016 12:16 pm
Operator : thomasl
Sample : jc13575-2
Misc : op90971,g2y2884,10.0,,,1,1
ALS Vial : 28 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:09:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y2871.M
Quant Title :
QLast Update : Tue Jan 19 12:12:11 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

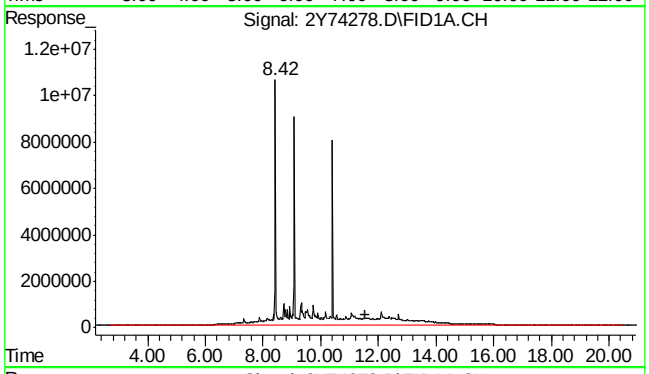
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





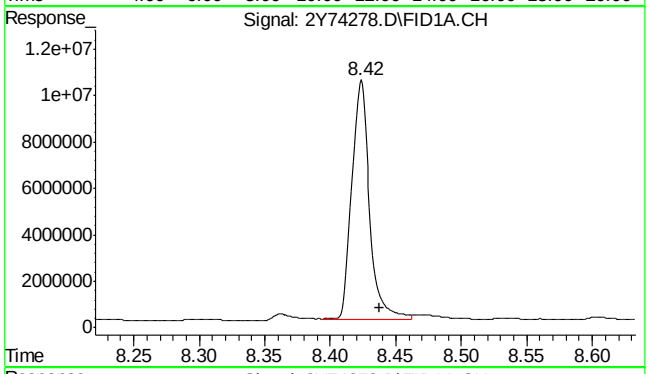
#1 TPH-DRO

R.T.: 7.340 min
Delta R.T.: 0.000 min
Response: 891195420
Conc: 563.68 PPM m



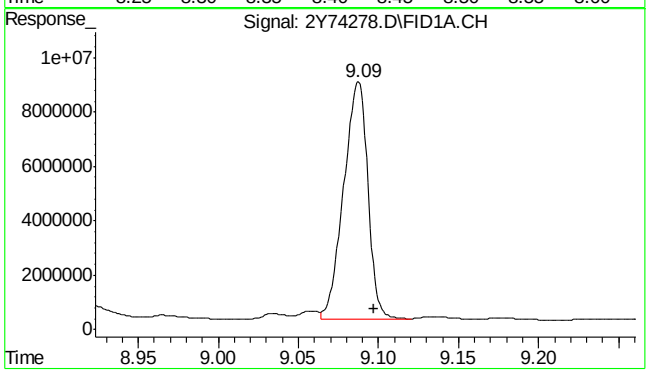
#2 TPH-DRO (C10-C44)

R.T.: 11.560 min
Delta R.T.: 0.000 min
Response: 1294904783
Conc: 819.03 PPM m



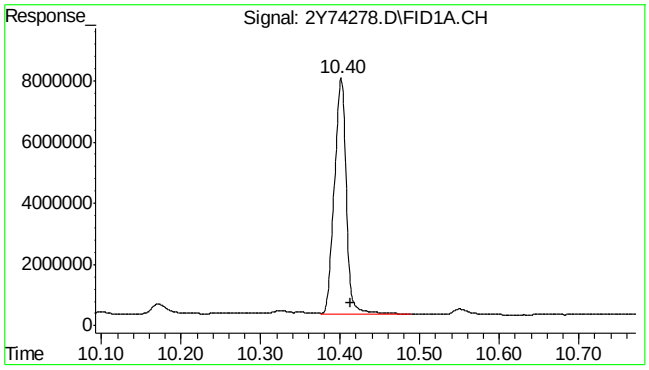
#9 o-Terphenyl

R.T.: 8.423 min
Delta R.T.: -0.015 min
Response: 96821339
Conc: 50.06 PPM m



#10 5a-Androstane

R.T.: 9.087 min
Delta R.T.: -0.010 min
Response: 92010977
Conc: 53.04 PPM m



#11 Tetracosane-d50

R.T.: 10.401 min
Delta R.T.: -0.012 min
Response: 79613841
Conc: 52.91 PPM m

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 02/11/16 14:49

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Y2884\
Data File : 2Y74279.D
Signal(s) : FID1A.CH
Acq On : 04 Feb 2016 12:52 pm
Operator : thomasl
Sample : jc13575-4
Misc : op90971,g2y2884,11.5,,,1,1
ALS Vial : 29 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:13:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y2871.M
Quant Title :
QLast Update : Tue Jan 19 12:12:11 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	8.43	101644169	52.549	PPM	m
Spiked Amount 50.000		Recovery	= 105.10%		
10) S 5a-Androstane	9.09	98066012	56.528	PPM	m
Spiked Amount 50.000		Recovery	= 113.06%		
11) S Tetracosane-d50	10.41	84586872	56.217	PPM	m
Spiked Amount 50.000		Recovery	= 112.43%		
Target Compounds					
1) H TPH-DRO	7.34	4343618505	2747.343	PPM	
2) H TPH-DRO (C10-C44)	11.56	6151940159	3891.108	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

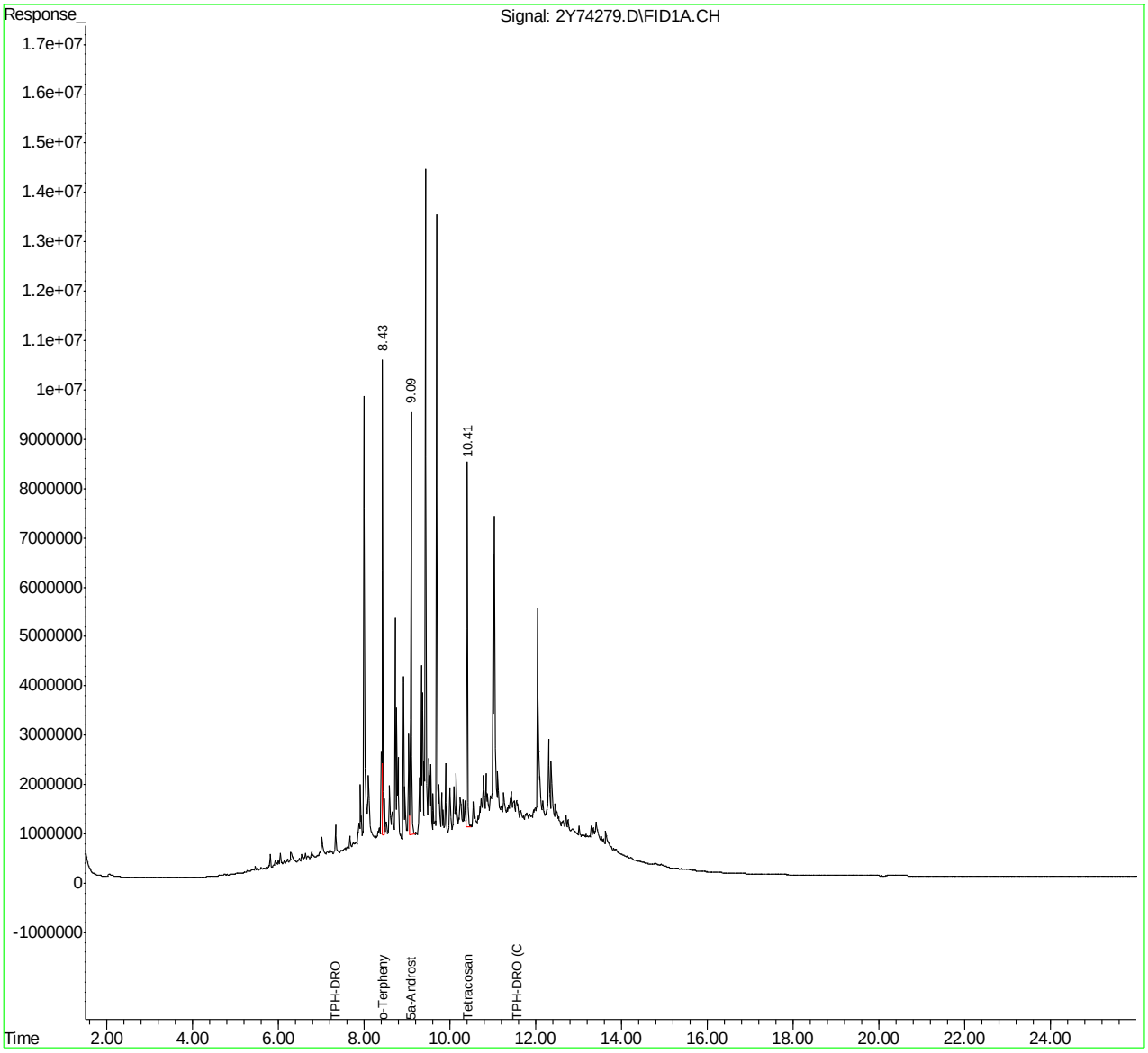
13.1.10 13

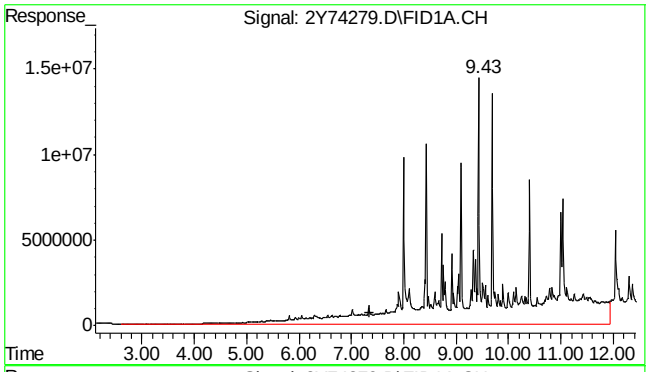
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Y2884\
Data File : 2Y74279.D
Signal(s) : FID1A.CH
Acq On : 04 Feb 2016 12:52 pm
Operator : thomasl
Sample : jc13575-4
Misc : op90971,g2y2884,11.5,,,1,1
ALS Vial : 29 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:13:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y2871.M
Quant Title :
QLast Update : Tue Jan 19 12:12:11 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

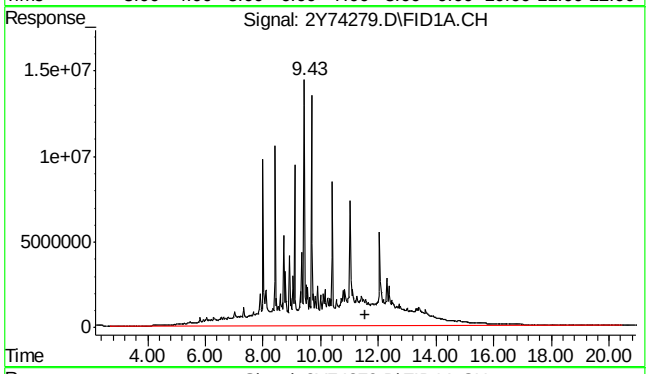
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





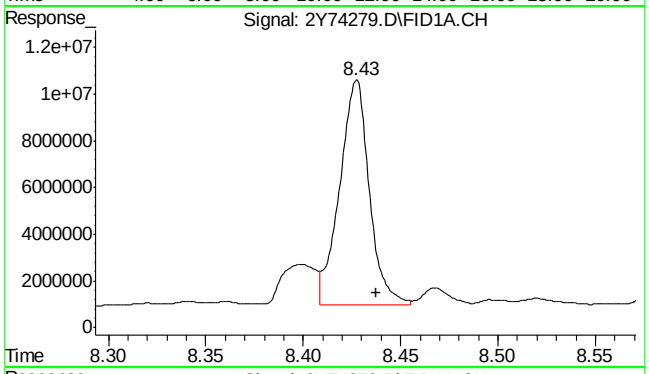
#1 TPH-DRO

R.T.: 7.340 min
Delta R.T.: 0.000 min
Response: 4343618505
Conc: 2747.34 PPM m



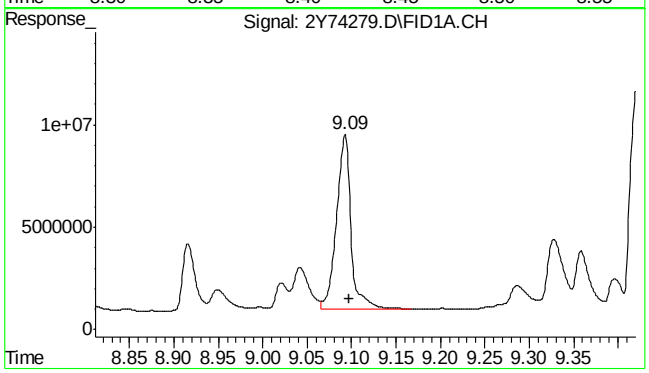
#2 TPH-DRO (C10-C44)

R.T.: 11.560 min
Delta R.T.: 0.000 min
Response: 6151940159
Conc: 3891.11 PPM m



#9 o-Terphenyl

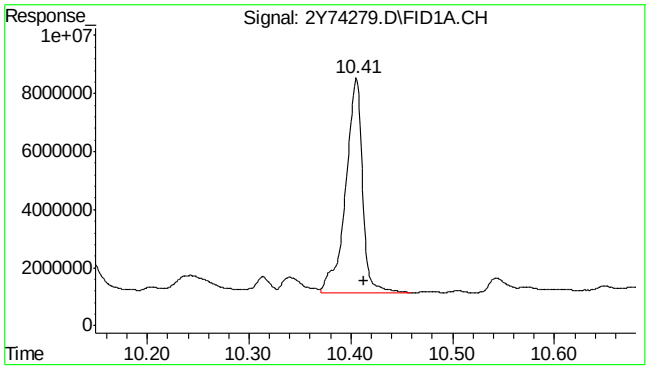
R.T.: 8.427 min
Delta R.T.: -0.011 min
Response: 101644169
Conc: 52.55 PPM m



#10 5a-Androstane

R.T.: 9.092 min
Delta R.T.: -0.005 min
Response: 98066012
Conc: 56.53 PPM m

SGS ACCUTEST JC13575



#11 Tetracosane-d50

R.T.: 10.405 min
Delta R.T.: -0.008 min
Response: 84586872
Conc: 56.22 PPM m

SGS ACCUTEST JC13575

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
02/11/16 14:49

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Y2884\
Data File : 2Y74280.D
Signal(s) : FID1A.CH
Acq On : 04 Feb 2016 1:27 pm
Operator : thomasl
Sample : jc13575-6
Misc : op90971,g2y2884,10.6,,,1,1
ALS Vial : 30 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:16:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y2871.M
Quant Title :
QLast Update : Tue Jan 19 12:12:11 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	8.43	97326583	50.317	PPM	m
Spiked Amount 50.000		Recovery	= 100.63%		
10) S 5a-Androstane	9.09	92275709	53.190	PPM	m
Spiked Amount 50.000		Recovery	= 106.38%		
11) S Tetracosane-d50	10.40	74202864	49.316	PPM	m
Spiked Amount 50.000		Recovery	= 98.63%		
Target Compounds					
1) H TPH-DRO	7.34	4536759813	2869.505	PPM	
2) H TPH-DRO (C10-C44)	11.56	6474312896	4095.009	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

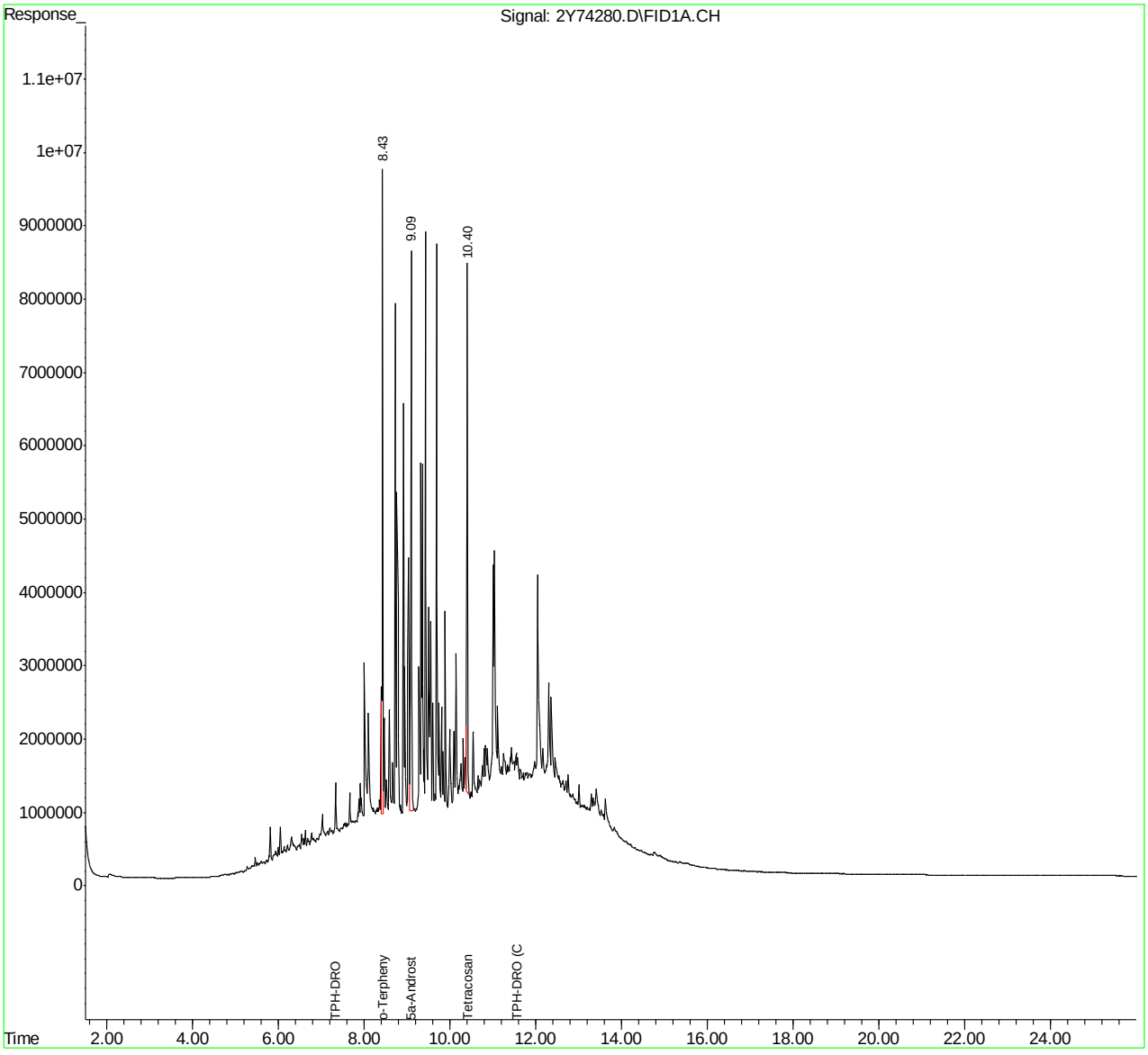
13.1.11
13

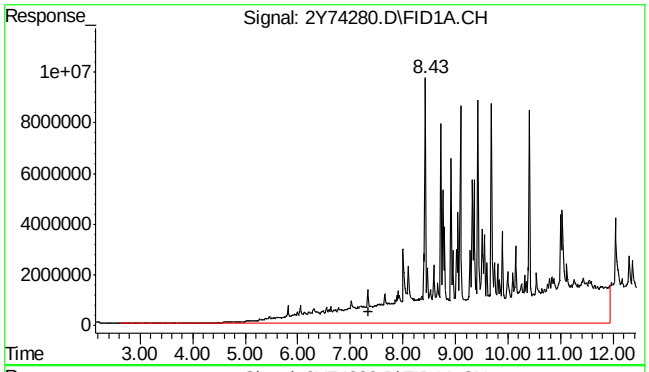
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Y2884\
Data File : 2Y74280.D
Signal(s) : FID1A.CH
Acq On : 04 Feb 2016 1:27 pm
Operator : thomasl
Sample : jc13575-6
Misc : op90971,g2y2884,10.6,,,1,1
ALS Vial : 30 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:16:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y2871.M
Quant Title :
QLast Update : Tue Jan 19 12:12:11 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

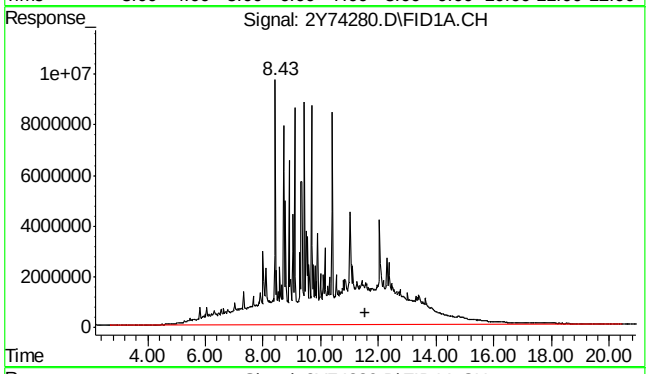
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





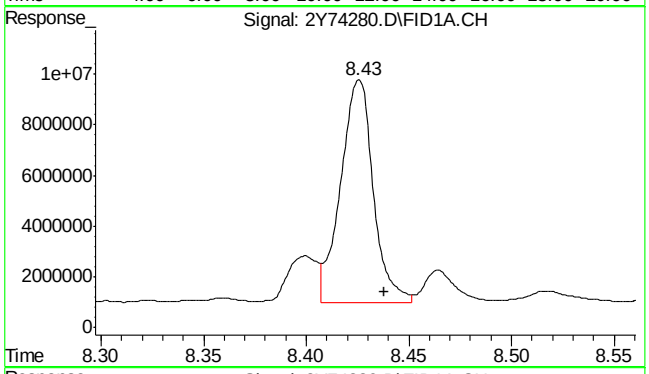
#1 TPH-DRO

R.T.: 7.340 min
Delta R.T.: 0.000 min
Response: 4536759813
Conc: 2869.51 PPM m



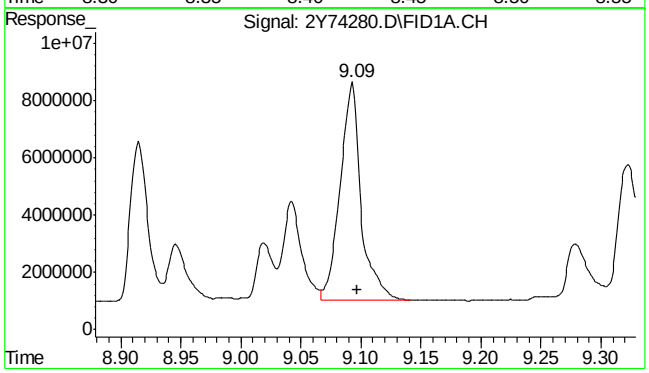
#2 TPH-DRO (C10-C44)

R.T.: 11.560 min
Delta R.T.: 0.000 min
Response: 6474312896
Conc: 4095.01 PPM m



#9 o-Terphenyl

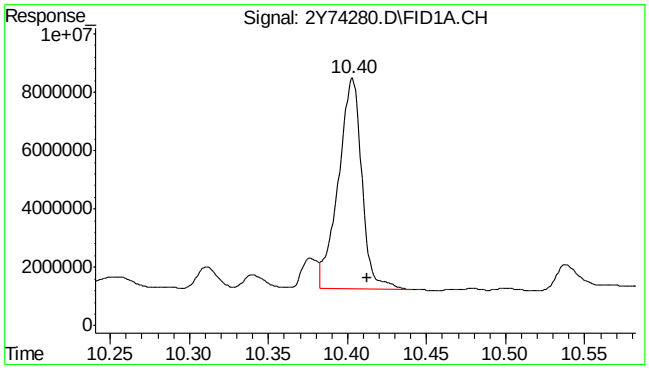
R.T.: 8.426 min
Delta R.T.: -0.012 min
Response: 97326583
Conc: 50.32 PPM m



#10 5a-Androstane

R.T.: 9.092 min
Delta R.T.: -0.005 min
Response: 92275709
Conc: 53.19 PPM m

SGS ACCUTEST JC13575



#11 Tetracosane-d50

R.T.: 10.403 min
Delta R.T.: -0.010 min
Response: 74202864
Conc: 49.32 PPM m

13.1.11

13

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
02/11/16 14:49

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Y2884\
Data File : 2Y74281.D
Signal(s) : FID1A.CH
Acq On : 04 Feb 2016 2:03 pm
Operator : thomasl
Sample : jc13575-8
Misc : op90971,g2y2884,10.5,,,1,1
ALS Vial : 31 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 16:33:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y2871.M
Quant Title :
QLast Update : Tue Jan 19 12:12:11 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
9) S o-Terphenyl	8.43	111829735	57.815	PPM	m
Spiked Amount 50.000		Recovery = 115.63%			
10) S 5a-Androstane	9.09	102667670	59.181	PPM	m
Spiked Amount 50.000		Recovery = 118.36%			
11) S Tetracosane-d50	10.41	87950882	58.453	PPM	m
Spiked Amount 50.000		Recovery = 116.91%			
Target Compounds					
1) H TPH-DRO	7.34	4538106907	2870.357	PPM	
2) H TPH-DRO (C10-C44)	11.56	6434067681	4069.554	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

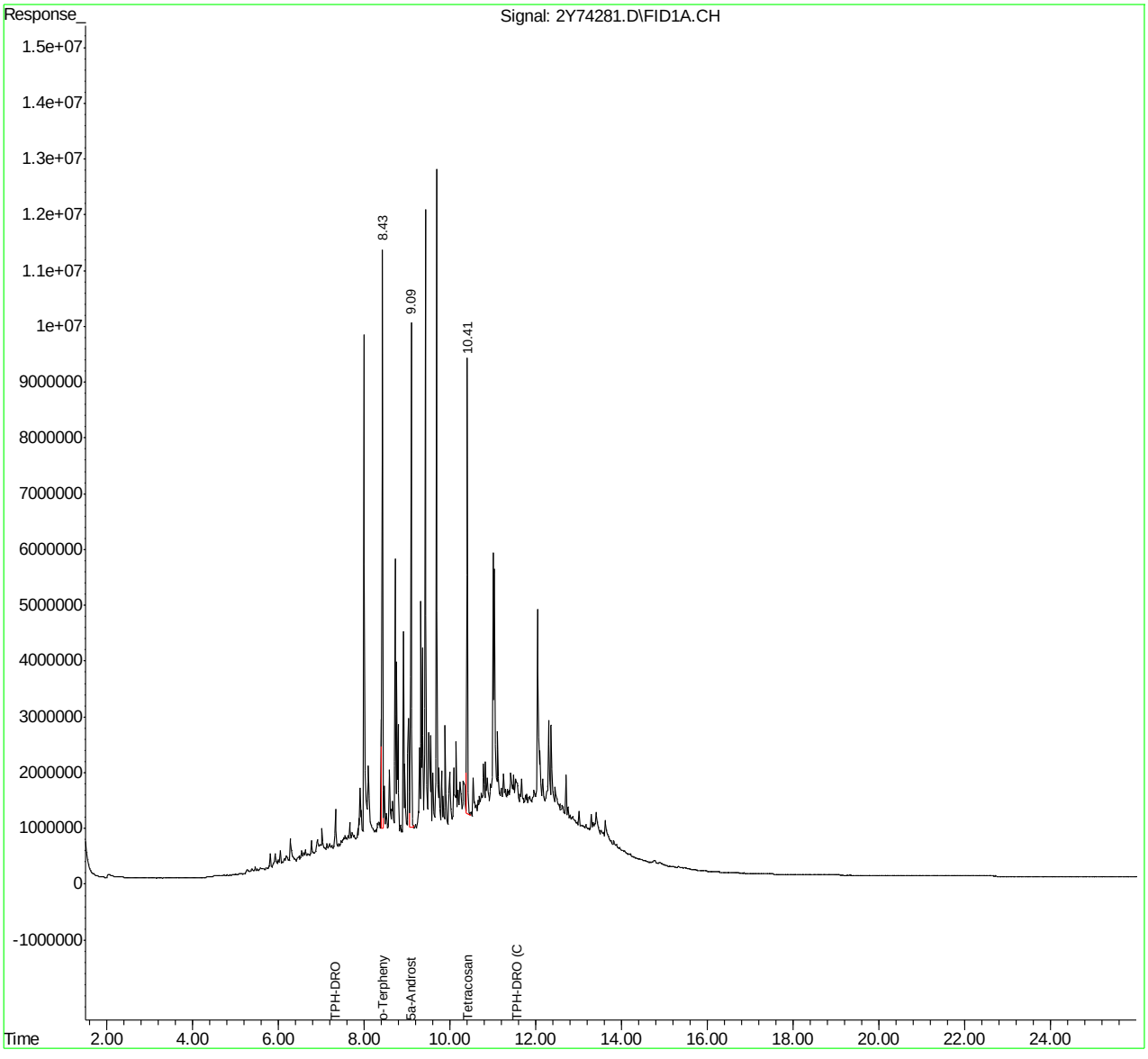
13.1.12
13

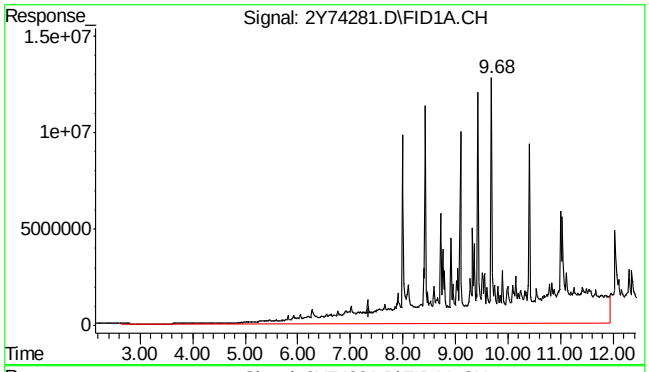
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Y2884\
Data File : 2Y74281.D
Signal(s) : FID1A.CH
Acq On : 04 Feb 2016 2:03 pm
Operator : thomasl
Sample : jc13575-8
Misc : op90971,g2y2884,10.5,,,1,1
ALS Vial : 31 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 16:33:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y2871.M
Quant Title :
QLast Update : Tue Jan 19 12:12:11 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

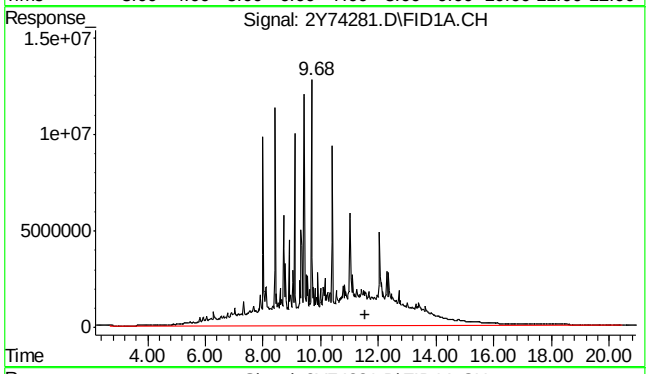
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





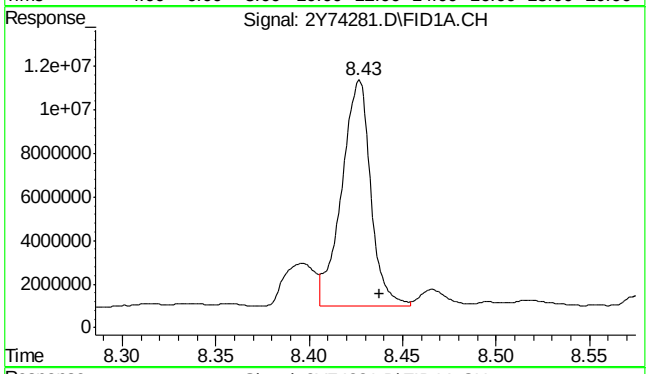
#1 TPH-DRO

R.T.: 7.340 min
Delta R.T.: 0.000 min
Response: 4538106907
Conc: 2870.36 PPM m



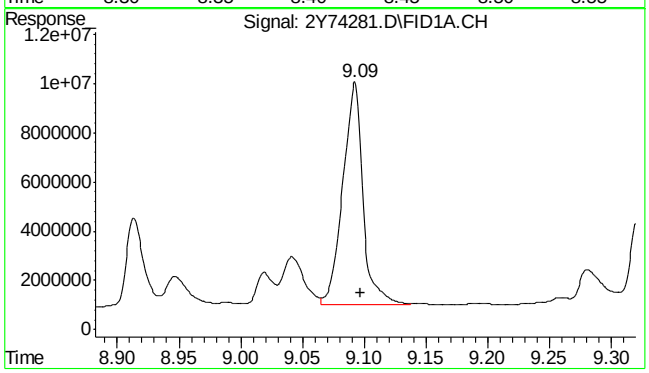
#2 TPH-DRO (C10-C44)

R.T.: 11.560 min
Delta R.T.: 0.000 min
Response: 6434067681
Conc: 4069.55 PPM m



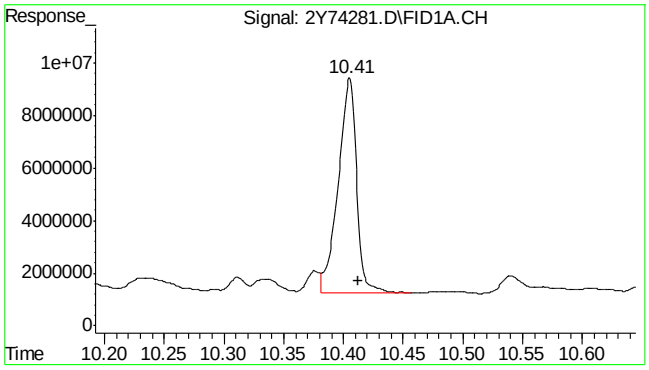
#9 o-Terphenyl

R.T.: 8.427 min
Delta R.T.: -0.011 min
Response: 111829735
Conc: 57.81 PPM m



#10 5a-Androstane

R.T.: 9.092 min
Delta R.T.: -0.005 min
Response: 102667670
Conc: 59.18 PPM m



#11 Tetracosane-d50

R.T.: 10.405 min
Delta R.T.: -0.008 min
Response: 87950882
Conc: 58.45 PPM m

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Y2884\
Data File : 2Y74277.D
Signal(s) : FID1A.CH
Acq On : 04 Feb 2016 11:41 am
Operator : thomasl
Sample : op90971-mb1
Misc : op90971,g2y2884,10.0,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:08:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y2871.M
Quant Title :
QLast Update : Tue Jan 19 12:12:11 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S o-Terphenyl	8.42f	87384794	45.177 PPM
Spiked Amount 50.000		Recovery	= 90.35%
10) S 5a-Androstane	9.09	81493203	46.975 PPM
Spiked Amount 50.000		Recovery	= 93.95%
11) S Tetracosane-d50	10.40	70706240	46.992 PPM
Spiked Amount 50.000		Recovery	= 93.98%
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

13.2.1

13

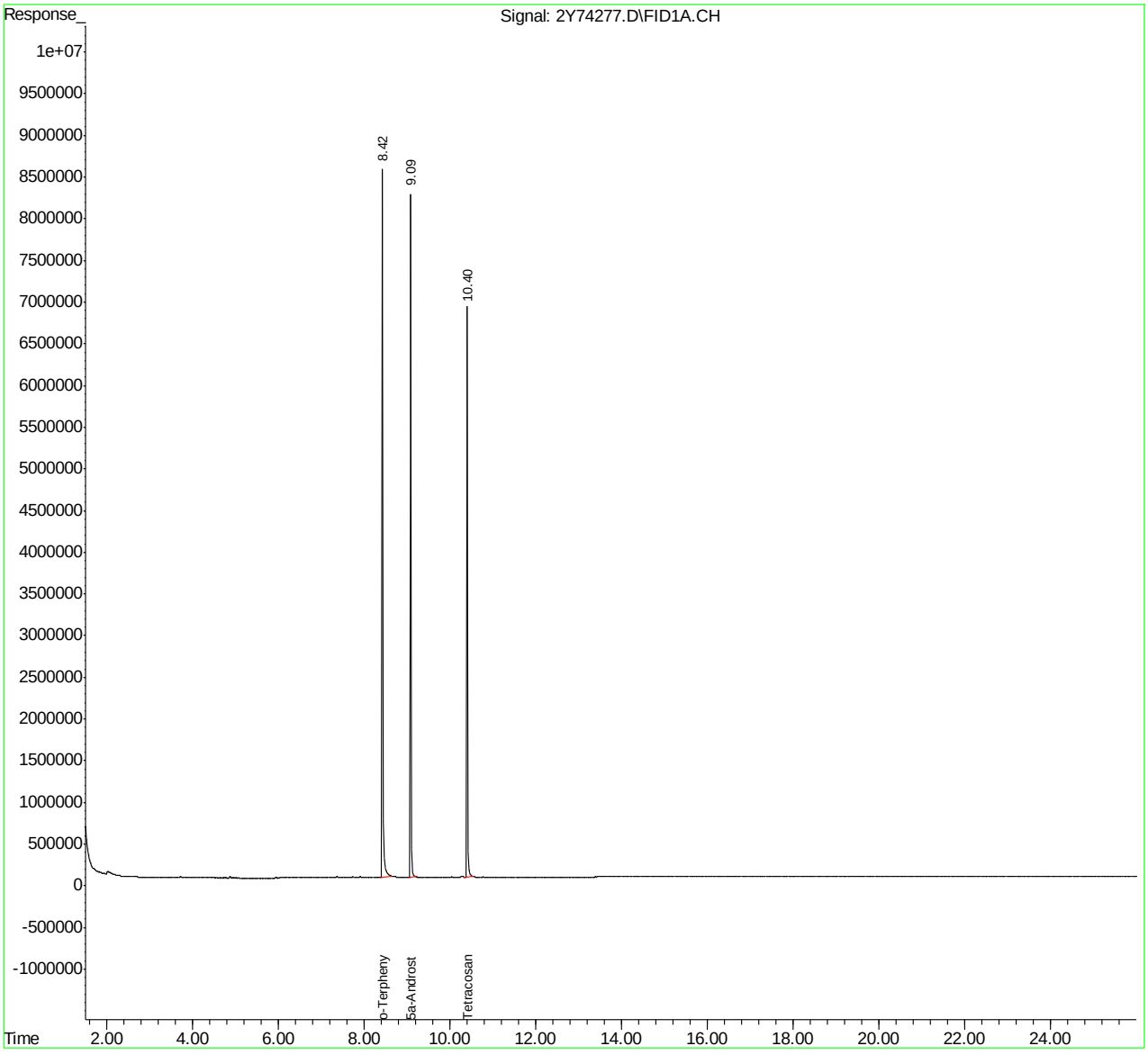
SGS ACCUTEST JC13575

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Y2884\
Data File : 2Y74277.D
Signal(s) : FID1A.CH
Acq On : 04 Feb 2016 11:41 am
Operator : thomasl
Sample : op90971-mb1
Misc : op90971,g2y2884,10.0,,,1,1
ALS Vial : 27 Sample Multiplier: 1

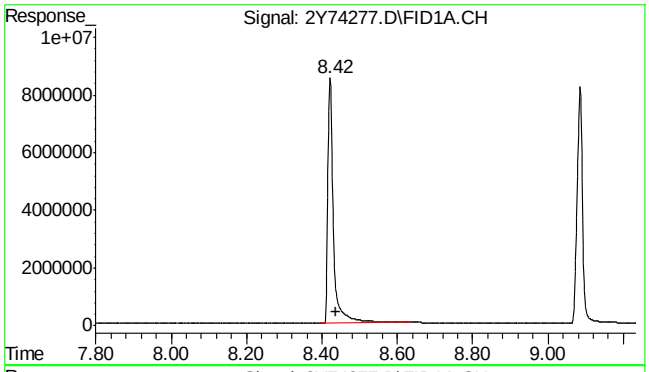
Integration File: autoint1.e
Quant Time: Feb 04 14:08:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Y2871.M
Quant Title :
QLast Update : Tue Jan 19 12:12:11 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um



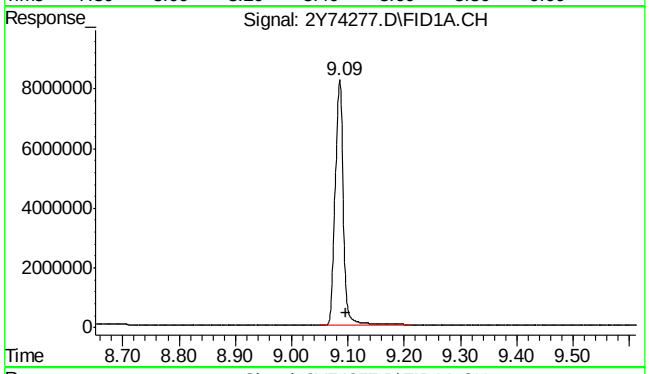
DRO2Y2871.M Thu Feb 04 14:08:52 2016 RPT1 Page: 2

SGS ACCUTEST JC13575



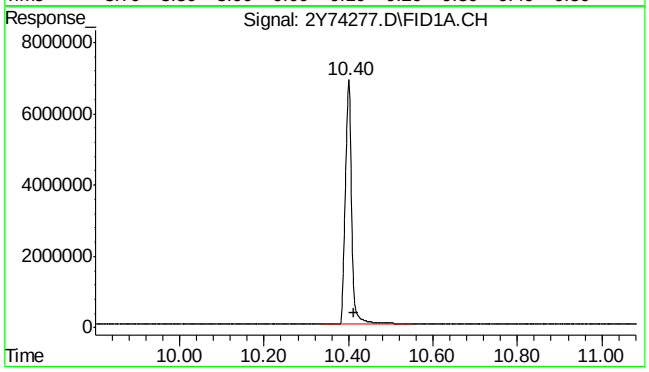
#9 o-Terphenyl

R.T.: 8.422 min
Delta R.T.: -0.016 min
Response: 87384794
Conc: 45.18 PPM



#10 5a-Androstane

R.T.: 9.086 min
Delta R.T.: -0.011 min
Response: 81493203
Conc: 46.98 PPM



#11 Tetracosane-d50

R.T.: 10.401 min
Delta R.T.: -0.012 min
Response: 70706240
Conc: 46.99 PPM

SGS ACCUTEST JC13575

Quantitation Report (QT Reviewed)

```
Data Path : C:\msdchem\1\DATA\G2Z1991\
Data File : 2Z52348.D
Signal(s) : FID2B.CH
Acq On    : 04 Feb 2016  11:06 am
Operator  : thomasl
Sample    : op90971-mb1
Misc      : op90971,g2z1991,10.0,,,1,1
ALS Vial  : 27   Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:30:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z1906.M
Quant Title  :
QLast Update : Tue Jan 19 12:14:39 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.  : 1UL
Signal Phase : RTX-1
Signal Info  : 30mX0.25mmX0.25um
```

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S o-Terphenyl	8.43	93725754	32.405 PPM
Spiked Amount 50.000		Recovery =	64.81%
10) S 5a-Androstane	9.13	85898753	40.038 PPM
Spiked Amount 50.000		Recovery =	80.08%
11) S Tetracosane-d50	10.47	80311603	45.114 PPM
Spiked Amount 50.000		Recovery =	90.23%
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

13.2.2

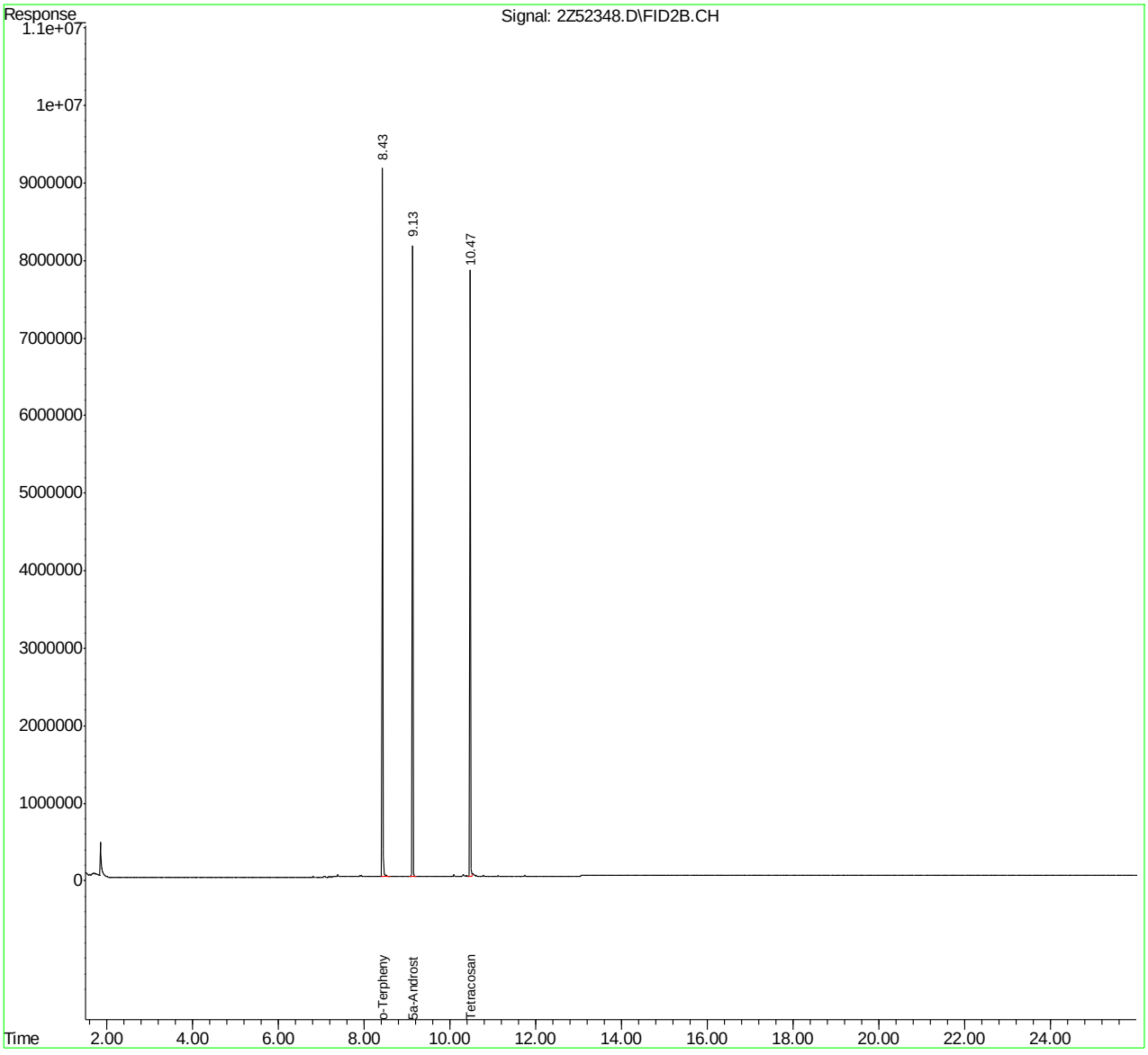
13

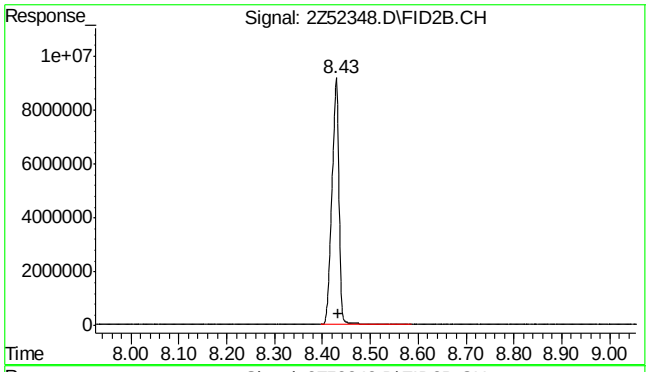
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G2Z1991\
Data File : 2Z52348.D
Signal(s) : FID2B.CH
Acq On : 04 Feb 2016 11:06 am
Operator : thomasl
Sample : op90971-mb1
Misc : op90971,g2z1991,10.0,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:30:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\DRO2Z1906.M
Quant Title :
QLast Update : Tue Jan 19 12:14:39 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

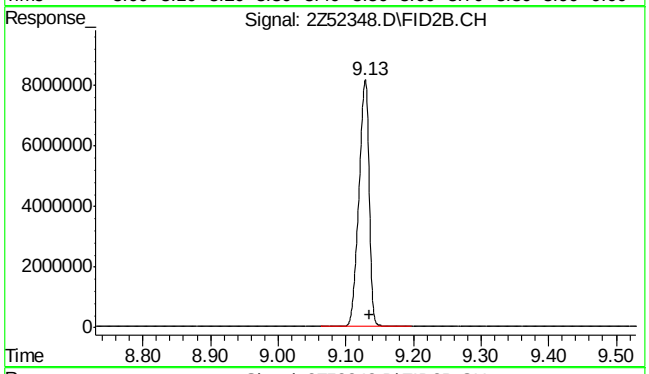
Volume Inj. : 1UL
Signal Phase : RTX-1
Signal Info : 30mX0.25mmX0.25um





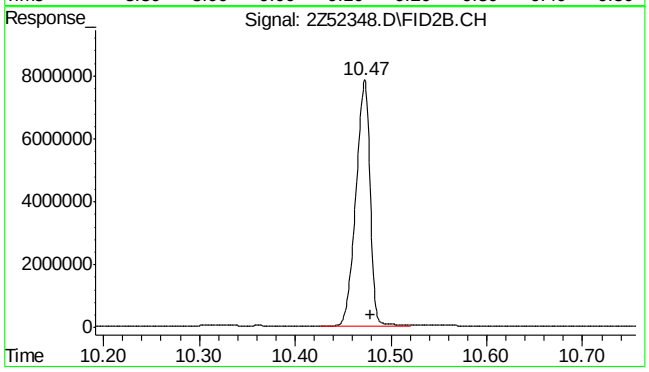
#9 o-Terphenyl

R.T.: 8.429 min
Delta R.T.: -0.004 min
Response: 93725754
Conc: 32.41 PPM



#10 5a-Androstane

R.T.: 9.129 min
Delta R.T.: -0.007 min
Response: 85898753
Conc: 40.04 PPM



#11 Tetracosane-d50

R.T.: 10.473 min
Delta R.T.: -0.006 min
Response: 80311603
Conc: 45.11 PPM

SGS ACCUTEST JC13575

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GEF5564\EF153618.D\ECD1A.CH Vial: 3
Acq On    :  4 Feb 2016  10:08 am                    Operator: curtisc
Sample    : op90954-mb1                              Inst    : gcef
Misc      : op90954,gef5564,15.0,,,10,1              Multiplr: 1.00
IntFile   : EVENTS.E

Data File : C:\HPCHEM\1\DATA\GEF5564\EF153618.D\ECD2B.CH Vial: 3
Acq On    :  4 Feb 2016  10:08 am                    Operator: curtisc
Sample    : op90954-mb1                              Inst    : gcef
Misc      : op908954,gef5564,15.0,,,10,1             Multiplr: 1.00
IntFile   : EVENTS2.E
Quant Time: Feb  4 11:24 2016  Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 13:37:50 2016
Response via : Initial Calibration
DataAcq Meth : PCB5560.M

Volume Inj.     : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1          Signal #2 Phase: RTX-CLP2
Signal #1 Info  : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	2.90	4.05	359700	557603	39.218	40.018
Spiked Amount 40.000			Recovery	=	98.05%	100.05%
51) S Decachlorobiphen	14.30	17.47	511931	668634	45.055	39.984
Spiked Amount 40.000			Recovery	=	112.64%	99.96%
Target Compounds						

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

SGS ACCUTEST JC13575

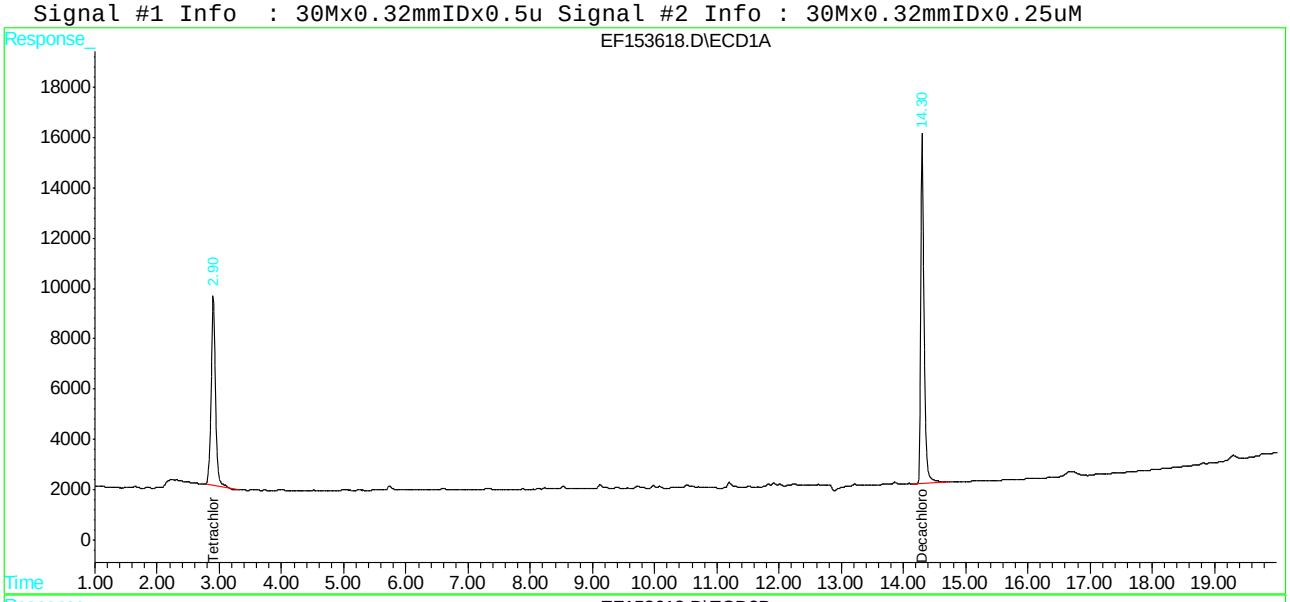
Quantitation Report

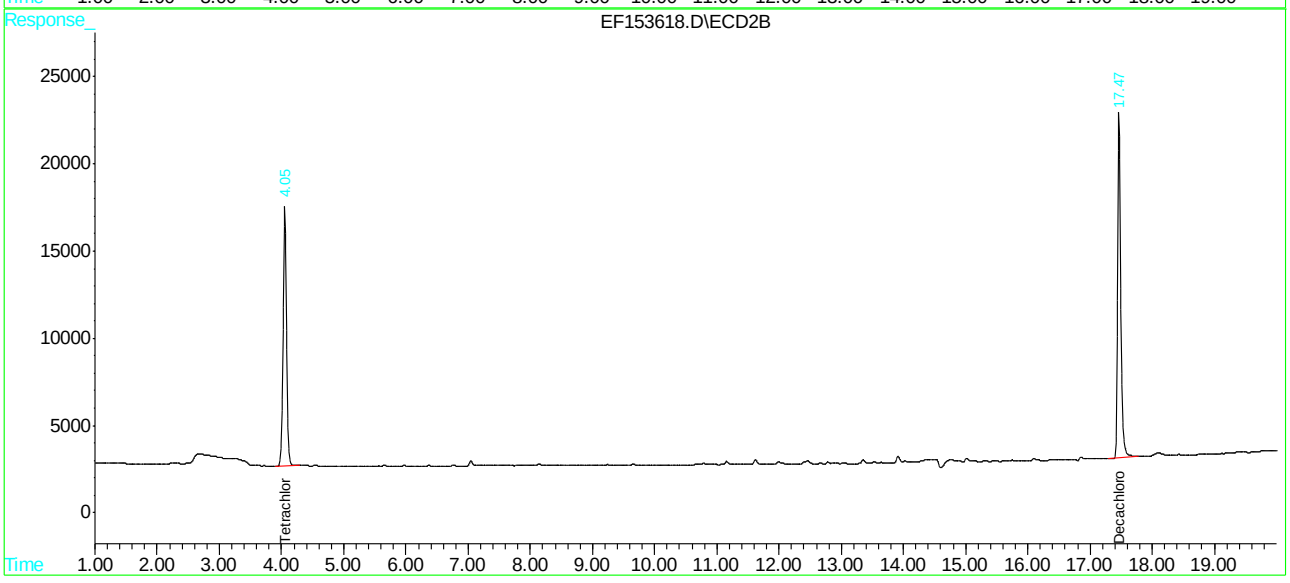
```
Data File : C:\HPCHEM\1\DATA\GEF5564\EF153618.D\ECD1A.CH Vial: 3
Acq On    :  4 Feb 2016  10:08 am                    Operator: curtisc
Sample    : op90954-mb1                              Inst    : gcef
Misc      : op90954,gef5564,15.0,,,10,1              Multiplr: 1.00
IntFile   : EVENTS.E

Data File : C:\HPCHEM\1\DATA\GEF5564\EF153618.D\ECD2B.CH Vial: 3
Acq On    :  4 Feb 2016  10:08 am                    Operator: curtisc
Sample    : op90954-mb1                              Inst    : gcef
Misc      : op908954,gef5564,15.0,,,10,1             Multiplr: 1.00
IntFile   : EVENTS2.E
Quant Time: Feb  4 11:24 2016  Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 13:37:50 2016
Response via : Multiple Level Calibration
DataAcq Meth : PCB5560.M

Volume Inj.     : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1          Signal #2 Phase: RTX-CLP2
Signal #1 Info  : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM
```





Manual Integrations
APPROVED
(compounds with "m" flag)
Joseph Ravino
02/02/16 13:48

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GEF5560\EF153478.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\GEF5560\EF153478.D\ECD2B.CH
Acq On : 1 Feb 2016 6:26 pm Operator: josephr
Sample : icc5560-1000 Inst : gcef
Misc : op90831,gef5560,1.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Feb 2 10:43 2016 Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Feb 02 10:36:39 2016
Response via : Initial Calibration
DataAcq Meth : PCB5560.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	2.89	4.04	372320	573571	36.116	37.285
Spiked Amount	40.000			Recovery	=	90.29%	93.21%
51) S	Decachlorobiphen	14.30	17.46	450508	669103	32.758	39.928
Spiked Amount	40.000			Recovery	=	81.90%	99.82%
	Target Compounds						
41)	AR1016-A	3.48	5.08	267322	338192	902.728	926.530
42)	AR1016-B	4.10	5.94	501363	714561	879.741	866.022
43)	AR1016-C	4.93	6.92	797944	1205154	834.537m	897.502
44)	AR1016-D	5.18	7.23	353298	519888	897.746	857.729
45)	AR1016-E	5.98	8.28	368582	399473	879.816	934.794
46)	AR1260-A	8.51	11.15	599263	905772	872.405	872.506
47)	AR1260-B	9.10	11.60	774162	1046788	784.960	923.456
48)	AR1260-C	9.71	12.45	861601	1386148	809.478	903.450
49)	AR1260-D	11.19	13.91	902869	1445690	777.809	947.171
50)	AR1260-E	11.90	14.78f	800953	1442862	1133.061m	972.820

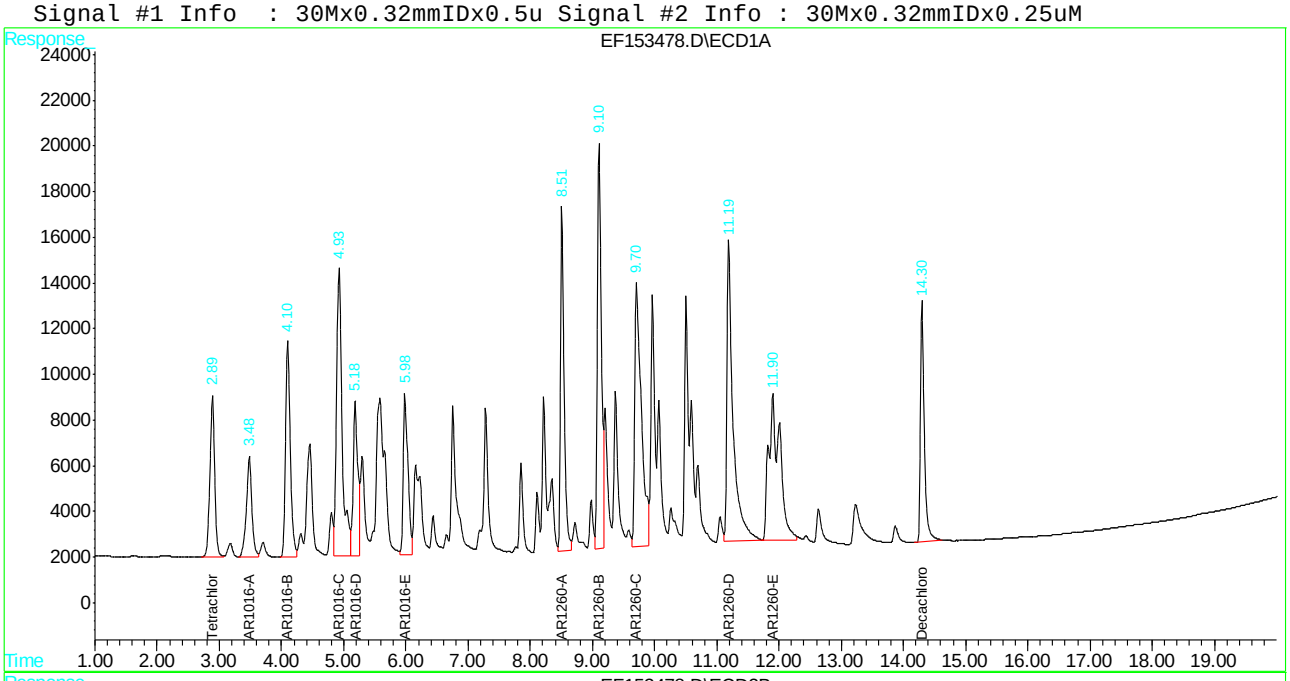
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
EF153478.D PCB5560.M Tue Feb 02 13:35:55 2016 GCEF

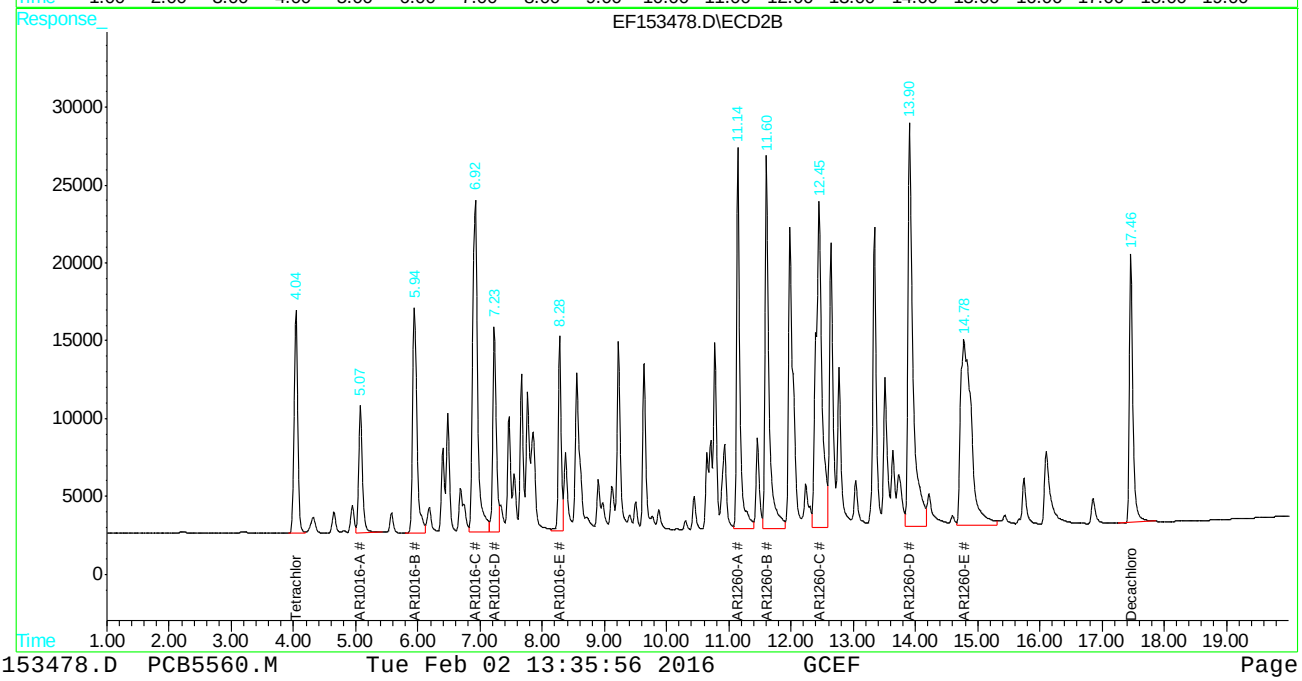
Quantitation Report

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5560\EF153478.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\GEF5560\EF153478.D\ECD2B.CH
Acq On    :  1 Feb 2016   6:26 pm                    Operator: josephr
Sample    : icc5560-1000                             Inst    : gcef
Misc      : op90831,gef5560,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E
Quant Time: Feb  2 10:43 2016  Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 10:36:39 2016
Response via : Multiple Level Calibration
DataAcq Meth : PCB5560.M

Volume Inj.     : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1          Signal #2 Phase: RTX-CLP2
Signal #1 Info  : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM
```





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GEF5560\EF153481.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\GEF5560\EF153481.D\ECD2B.CH
Acq On : 1 Feb 2016 7:41 pm Operator: josephr
Sample : ic5560-1000 Inst : gcef
Misc : op90831,gef5560,1.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Feb 2 11:54 2016 Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Tue Feb 02 10:36:39 2016
Response via : Initial Calibration
DataAcq Meth : PCB5560.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	2.89	4.04	395009	564074	38.317	36.668
Spiked Amount	40.000			Recovery	=	95.79%	91.67%
51) S	Decachlorobiphen	14.30	17.46	446677	656408	32.480	39.171
Spiked Amount	40.000			Recovery	=	81.20%	97.93%
	Target Compounds						
2)	AR1221-A	2.13	3.19	144279	179434	1007.872	978.022
3)	AR1221-B	3.17	4.65	107332	176870	892.490	935.879
4)	AR1221-C	3.48	5.08	401304	482083	895.626	942.779
5)	AR1221-D	4.10	5.94	40348	99841	888.124	909.563
6)	AR1221-E	4.31	6.06	42140	64540	655.187	645.836
24)	AR1254-A	6.75	9.23	707100	695098	819.007	938.369
25)	AR1254-B	7.28	9.64	749020	706091	834.694	883.443
26)	AR1254-C	7.85	10.44	359762	505838	822.131	905.465
27)	AR1254-D	8.11	10.71	704886	1205128	915.382	920.276
28)	AR1254-E	8.71	11.14	335621	564181	531.912	602.498
29)	AR1254-F	9.11	11.98	635790	597180	1056.225	722.830 #
30)	AR1254-G	9.71	12.46	578387	1018189	774.440	936.399

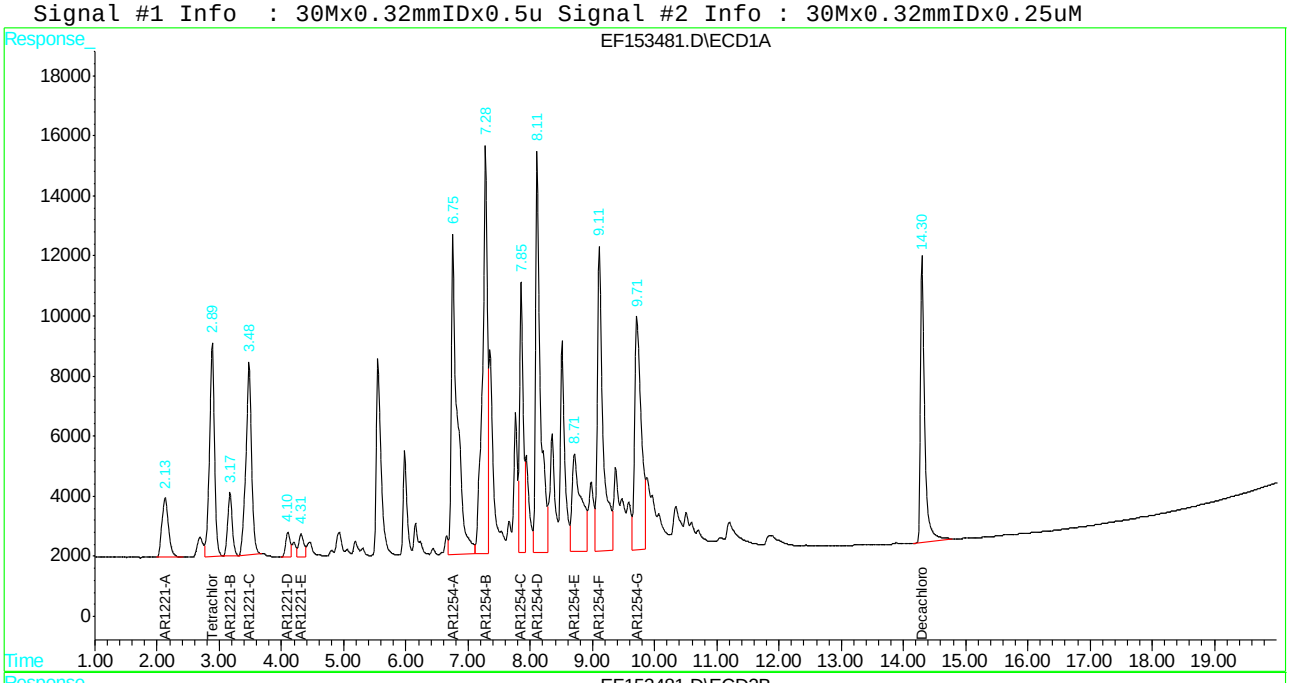
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
EF153481.D PCB5560.M Tue Feb 02 12:04:09 2016 GCEF

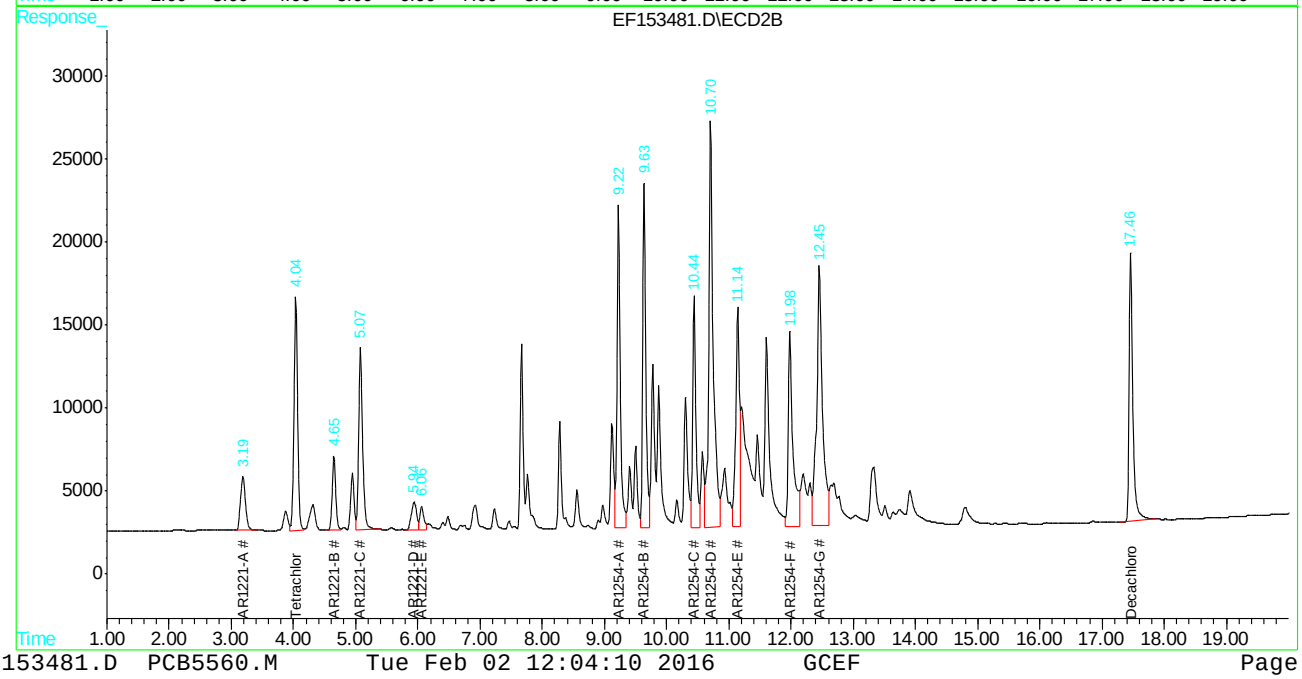
Quantitation Report

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5560\EF153481.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\GEF5560\EF153481.D\ECD2B.CH
Acq On    :  1 Feb 2016   7:41 pm                    Operator: josephr
Sample    : ic5560-1000                              Inst    : gcef
Misc      : op90831,gef5560,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E
Quant Time: Feb  2 11:54 2016  Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Tue Feb 02 10:36:39 2016
Response via : Multiple Level Calibration
DataAcq Meth : PCB5560.M

Volume Inj.     : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1          Signal #2 Phase: RTX-CLP2
Signal #1 Info  : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM
```





Manual Integrations
APPROVED
(compounds with "m" flag)
Joseph Ravino
02/02/16 12:24

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GEF5560\EF153482.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\GEF5560\EF153482.D\ECD2B.CH
Acq On : 1 Feb 2016 8:06 pm Operator: josephr
Sample : ic5560-1000 Inst : gcef
Misc : op90831,gef5560,1.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Feb 2 11:55 2016 Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Jan 25 12:43:26 2016
Response via : Initial Calibration
DataAcq Meth : PCB5560.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
1) S	Tetrachloro-m-xy	2.89	4.04	387576	562944	37.596	36.594	
Spiked Amount	40.000			Recovery	=	93.99%	91.48%	
51) S	Decachlorobiphen	14.29	17.46	448225	649820	32.592	38.778	
Spiked Amount	40.000			Recovery	=	81.48%	96.94%	
	Target Compounds							
7)	AR1232-A	3.48	5.08	343974	409228	866.232	902.487	
8)	AR1232-B	4.10	5.94	251178	356068	857.593	888.772	
9)	AR1232-C	4.93	6.93	307481	539031	705.115	855.512	
10)	AR1232-D	5.19	7.23	154476	269221	842.462	937.152	
11)	AR1232-E	5.98	8.28	145228	168229	818.199	894.239	
31)	AR1262-A	9.10	11.60	491639	778736	757.320	906.299	
32)	AR1262-B	9.97	12.64	722703	1034916	873.878	951.879	
33)	AR1262-C	10.50	13.34	616126	952312	862.689	934.641	
34)	AR1262-D	11.19	13.90	1282903	1771284	781.140	888.690	
35)	AR1262-E	11.90	14.73	1473408	1018830	1544.167m	863.909	#

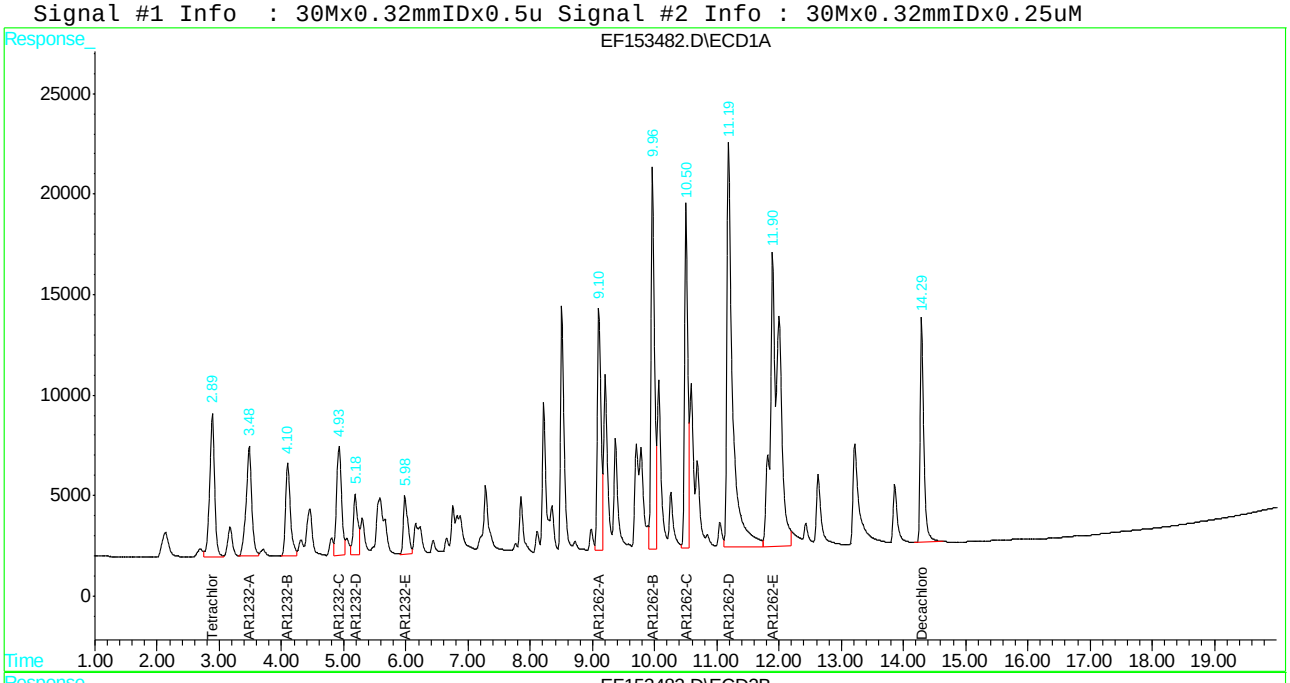
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
EF153482.D PCB5560.M Tue Feb 02 12:04:16 2016 GCEF

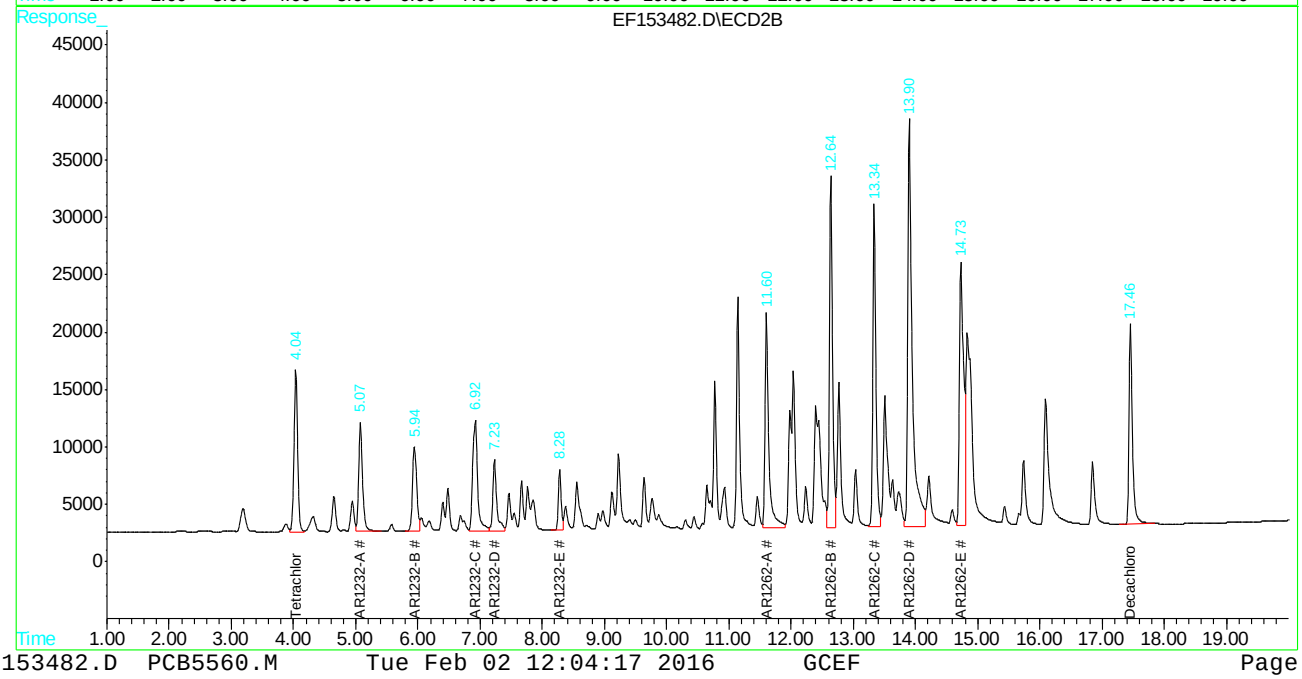
Quantitation Report

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5560\EF153482.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\GEF5560\EF153482.D\ECD2B.CH
Acq On    :  1 Feb 2016   8:06 pm                    Operator: josephr
Sample    : ic5560-1000                              Inst    : gcef
Misc      : op90831,gef5560,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E
Quant Time: Feb  2 11:55 2016  Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Mon Jan 25 12:43:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : PCB5560.M

Volume Inj.     : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1          Signal #2 Phase: RTX-CLP2
Signal #1 Info  : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM
```





SGS ACCUTEST JC13575

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\GEF5560\EF153483.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\GEF5560\EF153483.D\ECD2B.CH
Acq On : 1 Feb 2016 8:31 pm Operator: josephr
Sample : ic5560-1000 Inst : gcef
Misc : op90831,gef5560,1.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Feb 2 10:51 2016 Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Jan 25 12:43:26 2016
Response via : Initial Calibration
DataAcq Meth : PCB5560.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	2.89	4.04	369991	575271	35.890	37.396
Spiked Amount	40.000			Recovery	=	89.72%	93.49%
51) S	Decachlorobiphen	14.29	17.46	1536301	1917137	111.711	114.404
Spiked Amount	40.000			Recovery	=	279.28%	286.01%
	Target Compounds						
12)	AR1242-A	4.10	5.94	424947	608879	898.463	903.429
13)	AR1242-B	4.93	6.93	592394	1000604	797.561	897.471
14)	AR1242-C	5.18	7.23	292279	435208	896.010	871.226
15)	AR1242-D	5.98	8.28	306850	341080	867.755	945.055
16)	AR1242-E	6.87	9.23	267303	399306	777.569	908.795
36)	AR1268-A	11.90	14.73	1319943	1947183	884.724	958.420
37)	AR1268-B	11.98	14.84	1848737	2384825	854.450	951.845
38)	AR1268-C	12.43	15.43	1328250	1742020	889.356	968.980
39)	AR1268-D	13.21	16.10	390215	708314	697.831	971.541 #
40)	AR1268-E	13.86	16.85	4041546	5442046	852.351	1003.539

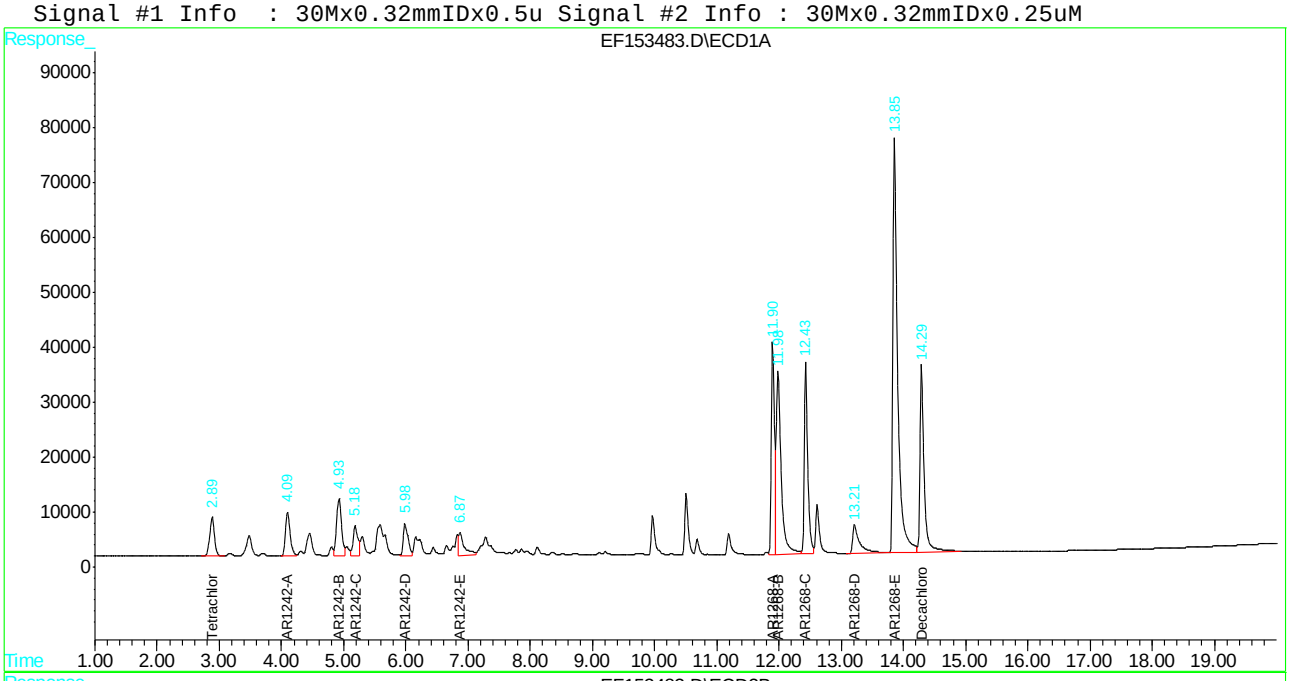
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
EF153483.D PCB5560.M Tue Feb 02 12:04:24 2016 GCEF

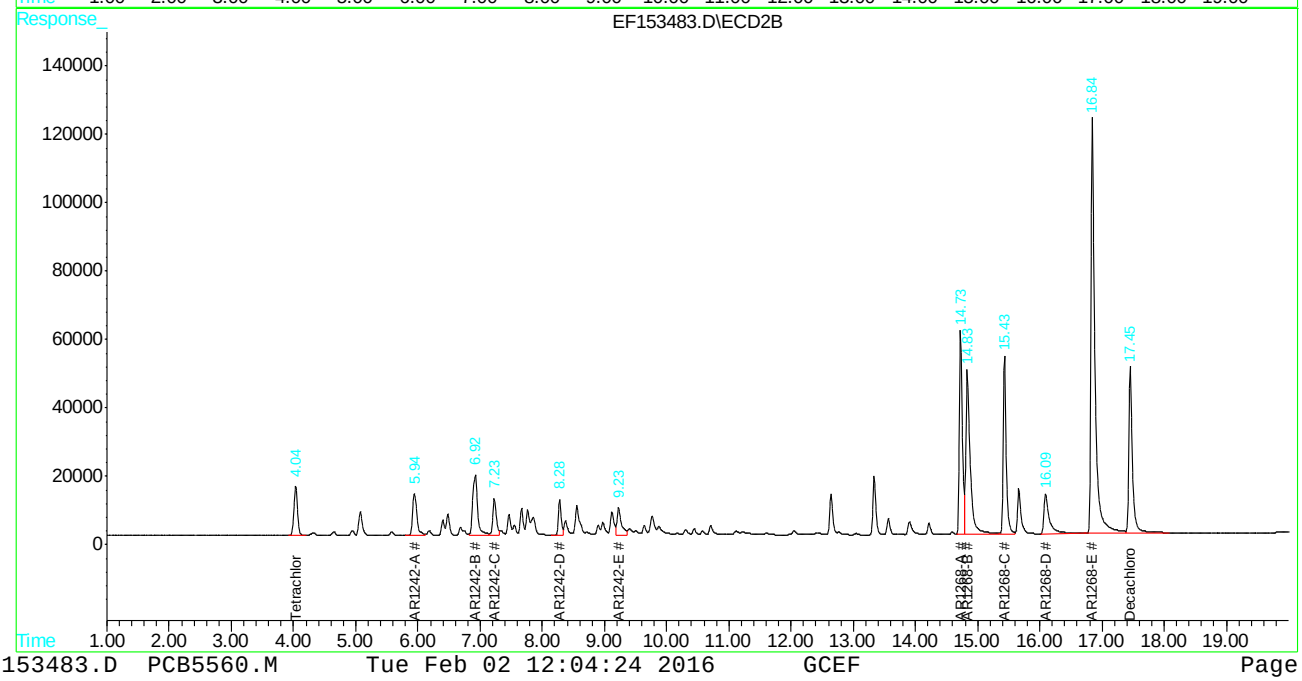
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\GEF5560\EF153483.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\GEF5560\EF153483.D\ECD2B.CH
Acq On : 1 Feb 2016 8:31 pm Operator: josephr
Sample : ic5560-1000 Inst : gcef
Misc : op90831,gef5560,1.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Feb 2 10:51 2016 Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Jan 25 12:43:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : PCB5560.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM





Quantitation Report (QT Reviewed)

```
Signal #1 : C:\HPCHEM\1\DATA\GEF5560\EF153484.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\GEF5560\EF153484.D\ECD2B.CH
Acq On    :  1 Feb 2016   8:56 pm                    Operator: josephr
Sample    : ic5560-1000                              Inst    : gcef
Misc      : op90831,gef5560,1.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E
Quant Time: Feb  2 10:53 2016  Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Mon Jan 25 12:43:26 2016
Response via : Initial Calibration
DataAcq Meth : PCB5560.M

Volume Inj.     : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1          Signal #2 Phase: RTX-CLP2
Signal #1 Info  : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	2.89	4.04	338183	564730	32.805	36.711
Spiked Amount	40.000			Recovery	=	82.01%	91.78%
51) S	Decachlorobiphen	14.30	17.46	441956	656725	32.136	39.190
Spiked Amount	40.000			Recovery	=	80.34%	97.97%
	Target Compounds						
17)	AR1248-A	4.10	5.94	219561	320844	861.940	889.120
18)	AR1248-B	4.92	6.92	341524	634712	731.459	867.333
19)	AR1248-C	5.58	7.67	790274	430540	857.764	892.833
20)	AR1248-D	5.98	8.28	461614	511322	822.660	885.173
21)	AR1248-E	6.15	8.56	203776	589673	740.938	924.889
22)	AR1248-F	6.87	9.23	436483	706770	736.335	901.787
23)	AR1248-G	7.28	9.77	423075	423314	711.242	684.257

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

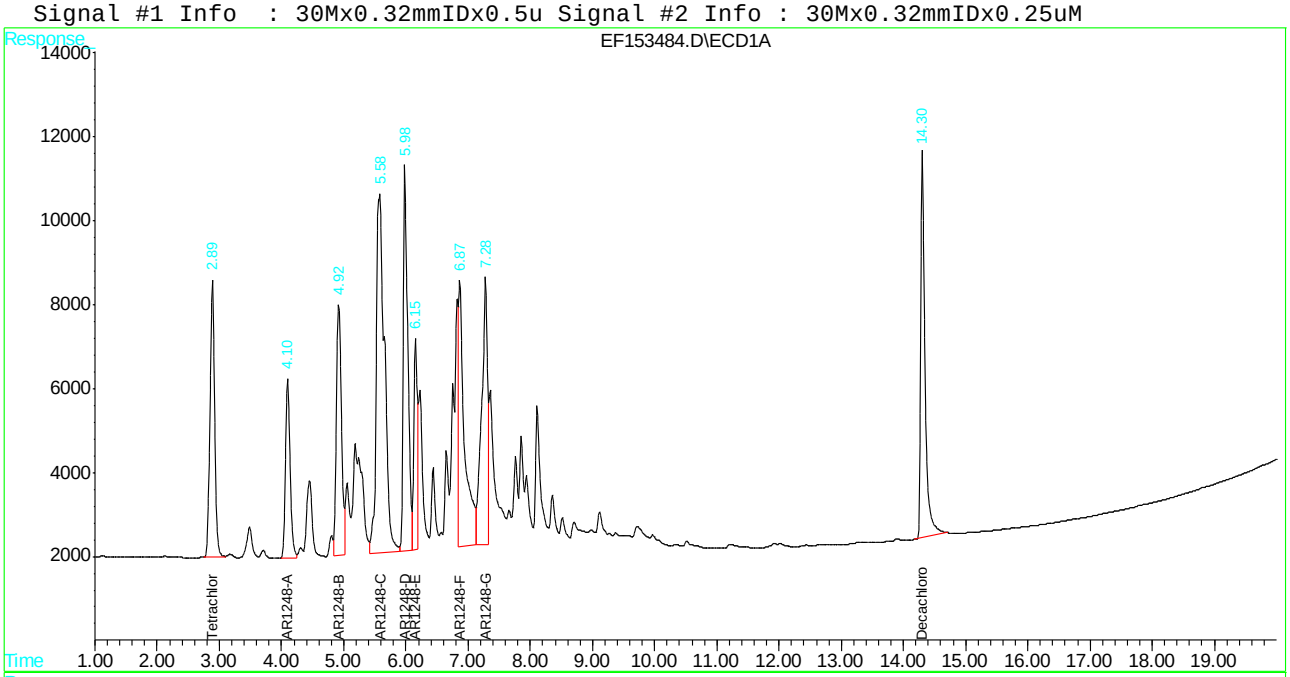
SGS ACCUTEST JC13575

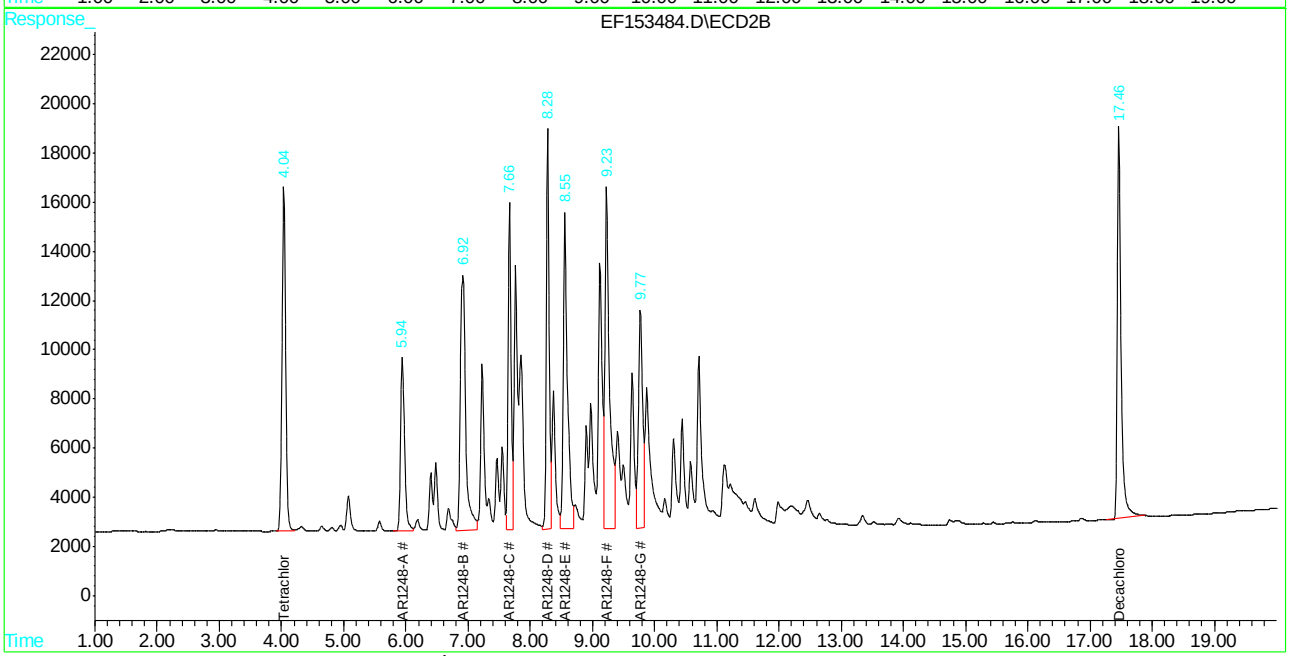
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\GEF5560\EF153484.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\GEF5560\EF153484.D\ECD2B.CH
Acq On : 1 Feb 2016 8:56 pm Operator: josephr
Sample : ic5560-1000 Inst : gcef
Misc : op90831,gef5560,1.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Feb 2 10:53 2016 Quant Results File: PCB5560.RES

Quant Method : C:\HPCHEM\1\METHODS\PCB5560.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Jan 25 12:43:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : PCB5560.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 30Mx0.32mmIDx0.5u Signal #2 Info : 30Mx0.32mmIDx0.25uM





Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: H5020316W1.CSV Date Analyzed: 02/03/16 Methods: SW846 7470A
Analyst: VM Run ID: MA38660
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:21	MA38660-STD1	1		B=2.2980e-004,C+-1.1389e-002,R=0.9998893
11:22	MA38660-STD2	1		STDB
11:24	MA38660-STD3	1		STDC
11:25	MA38660-STD4	1		STDD
11:27	MA38660-STD5	1		STDE
11:28	MA38660-STD6	1		STDF
11:31	MA38660-STD7	1		STDE
11:33	MA38660-STD8	1		STDE
11:38	MA38660-ICV1	1		
11:40	MA38660-ICB1	1		
11:42	MA38660-CCV1	1		
11:43	MA38660-CCB1	1		
11:53	MA38660-CRI1	1		
11:55	MP91865-MB1	1		
11:56	MP91865-LC1	1		
11:58	MP91865-S1	1		
11:59	MP91865-S2	1		
12:01	JC13378-9F	1		(sample used for QC only; not part of login JC13575)
12:03	MA38660-CCV2	1		
12:04	MA38660-CCB2	1		
12:06	ZZZZZZ	1		
12:07	ZZZZZZ	1		
12:08	ZZZZZZ	1		
12:10	ZZZZZZ	1		
12:11	ZZZZZZ	1		
12:12	ZZZZZZ	1		
12:14	ZZZZZZ	1		
12:15	ZZZZZZ	1		
12:16	ZZZZZZ	1		
12:18	ZZZZZZ	1		
12:19	MA38660-CCV3	1		
12:20	MA38660-CCB3	1		
12:22	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: H5020316W1.CSV Date Analyzed: 02/03/16 Methods: SW846 7470A
Analyst: VM Run ID: MA38660
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:23	ZZZZZZ	1		
12:25	ZZZZZZ	1		
12:26	ZZZZZZ	1		
12:27	ZZZZZZ	1		
12:29	ZZZZZZ	1		
12:30	ZZZZZZ	1		
12:31	ZZZZZZ	1		
12:33	ZZZZZZ	1		
12:35	MA38660-CRI2	1		
12:36	MA38660-CCV4	1		
12:38	MA38660-CCB4	1		
14:28	MA38660-CCV5	1		
14:30	MA38660-CCB5	1		
14:34	ZZZZZZ	1		
14:35	ZZZZZZ	1		
14:44	MP91876-B1	1		
14:46	MP91876-S1	1		
14:47	MP91876-S2	1		
14:49	JC13495-1	1		(sample used for QC only; not part of login JC13575)
14:51	ZZZZZZ	1		
14:52	ZZZZZZ	1		
14:53	MP91876-MB1	1		
14:55	MA38660-CCV6	1		
14:56	MA38660-CCB6	1		
14:58	MP91877-MB1	1		
14:59	MP91877-B1	1		
15:02	MP91877-S1	1		
15:04	JC13480-1A	1		(sample used for QC only; not part of login JC13575)
15:06	ZZZZZZ	1		
15:07	ZZZZZZ	1		
15:08	ZZZZZZ	1		
15:10	ZZZZZZ	1		
15:11	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: H5020316W1.CSV Date Analyzed: 02/03/16 Methods: SW846 7470A
Analyst: VM Run ID: MA38660
Parameters: Hg

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	15:15	MA38660-CCV7	1		
	15:16	MA38660-CCB7	1		
	15:40	MA38660-CCV8	1		
	15:41	MA38660-CCB8	1		
	15:43	MP91877-S2	1		
---------->	Last reportable sample/prep for job JC13575				
	15:46	ZZZZZZ	1		
	15:48	ZZZZZZ	1		
	15:49	ZZZZZZ	1		
	15:50	ZZZZZZ	1		
	15:52	ZZZZZZ	1		
	15:54	MA38660-CCV9	1		
	15:55	MA38660-CCB9	1		
---------->	Last reportable CCB for job JC13575				

Refer to raw data for calibration curve and standards.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: H5020316W1.CSV Date Analyzed: 02/03/16 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA38660 Units: ug/l

Time:			11:40		11:43		12:04		12:20	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.031	0.036	<0.20	-0.012	<0.20	0.013	<0.20	0.0010	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

14.1.1
14

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: H5020316W1.CSV Date Analyzed: 02/03/16 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA38660 Units: ug/l

Time:			12:38		14:30		14:56		15:16	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.031	0.015	<0.20	0.041	<0.20	0.047	<0.20	0.035	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: H5020316W1.CSV Date Analyzed: 02/03/16 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA38660 Units: ug/l

Time:			15:41		15:55	
Sample ID:			CCB8		CCB9	
Metal	RL	IDL	raw	final	raw	final
Mercury	0.20	.031	0.034	<0.20	0.034	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

14.1.1
14

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: H5020316W1.CSV Date Analyzed: 02/03/16 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA38660 Units: ug/l

Time:		11:38			11:42			12:03	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	3.1	103.3	2.5	2.4	96.0	2.5	2.5	100.0

(*) Outside of QC limits
(anr) Analyte not requested

14.1.2
14

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: H5020316W1.CSV Date Analyzed: 02/03/16 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA38660 Units: ug/l

Time:		12:19			12:36			14:28	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.4	96.0	2.5	2.4	96.0	2.5	2.4	96.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: H5020316W1.CSV Date Analyzed: 02/03/16 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA38660 Units: ug/l

Time:		14:55			15:15			15:40	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.4	96.0	2.5	2.3	92.0	2.5	2.3	92.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: H5020316W1.CSV Date Analyzed: 02/03/16 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA38660 Units: ug/l

Time:		15:54	
Sample ID:	CCV	CCV9	
Metal	True	Results	% Rec
Mercury	2.5	2.5	100.0

(*) Outside of QC limits
(anr) Analyte not requested

14.1.2
14

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: H5020316W1.CSV Date Analyzed: 02/03/16 Methods: SW846 7470A
QC Limits: 70 to 130 % Recovery Run ID: MA38660 Units: ug/l

Time:			11:53		12:35	
Sample ID:	CRI	CRIA	CRI1		CRI2	
Metal	True	True	Results	% Rec	Results	% Rec
Mercury	0.20		0.21	105.0	0.22	110.0

(*) Outside of QC limits
(anr) Analyte not requested

14.1.3

14

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
Analyst: BS Run ID: MA38668
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
21:43	MA38668-STD1	1		STDA
21:46	MA38668-STD2	1		STDB
21:49	ZZZZZZ	1		
21:51	ZZZZZZ	1		
21:54	MA38668-ICV1	1		
21:57	MA38668-ICB1	1		
22:00	MA38668-CCV1	1		
22:03	MA38668-CCB1	1		
22:06	MA38668-CRI1	1		
22:09	MA38668-CRID1	1		
22:12	MA38668-CRIA1	1		
22:15	MA38668-ICSA1	1		
22:18	MA38668-ICSAB1	1		
22:21	MA38668-HSTD1	1		
22:24	MA38668-HSTD2	1		
22:27	ZZZZZZ	1		
22:30	ZZZZZZ	1		
22:33	ZZZZZZ	1		
22:36	MA38668-CCV2	1		
22:39	MA38668-CCB2	1		
22:42	MP91866-MB1	1		
22:45	MP91866-B1	1		
22:47	MP91866-S1	1		FE high
22:50	MP91866-S2	1		FE high
22:53	JC13545-1A	1		(sample used for QC only; not part of login JC13575)
22:56	MP91866-SD1	5		FE high
22:59	ZZZZZZ	1		
23:02	ZZZZZZ	1		
23:05	ZZZZZZ	1		
23:08	MA38668-CCV3	1		
23:10	MA38668-CCB3	1		
23:13	ZZZZZZ	1		
23:16	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
Analyst: BS Run ID: MA38668
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
23:19	ZZZZZZ	1		
23:22	ZZZZZZ	1		
23:25	ZZZZZZ	1		
23:28	ZZZZZZ	1		
23:31	ZZZZZZ	1		
23:34	ZZZZZZ	1		
23:37	ZZZZZZ	1		
23:40	MA38668-CCV4	1		
23:42	MA38668-CCB4	1		
23:45	ZZZZZZ	1		
23:48	ZZZZZZ	1		
23:51	ZZZZZZ	1		
23:54	ZZZZZZ	1		
23:58	ZZZZZZ	1		
00:01	ZZZZZZ	1		
00:04	ZZZZZZ	1		
00:06	ZZZZZZ	1		
00:09	MP91873-B1	5		
00:12	MP91873-B2	5		
00:15	MA38668-CCV5	1		
00:18	MA38668-CCB5	1		
00:21	MP91873-MB1	5		
00:24	MP91873-MB2	5		
00:27	MP91873-MB3	5		
00:30	MP91873-B3	5		
00:33	MP91873-S1	5		
00:36	MP91873-S2	5		
00:39	JC13480-1A	5		(sample used for QC only; not part of login JC13575)
00:42	MP91873-SD1	25		
---------->	Last reportable sample/prep for job JC13575			
00:45	ZZZZZZ	5		
00:48	ZZZZZZ	5		
00:51	MA38668-CCV6	1		
00:53	MA38668-CCB6	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
Analyst: BS Run ID: MA38668
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
00:56	ZZZZZZ	5		
00:59	ZZZZZZ	5		
01:02	ZZZZZZ	5		
01:05	ZZZZZZ	5		
01:09	ZZZZZZ	5		
01:12	ZZZZZZ	5		
01:15	ZZZZZZ	5		
01:18	ZZZZZZ	5		
01:21	ZZZZZZ	5		
01:24	ZZZZZZ	5		
01:27	MA38668-CCV7	1		
01:29	MA38668-CCB7	1		
01:32	ZZZZZZ	1		
01:36	MA38668-CRI2	1		
01:39	MA38668-CRID2	1		
01:42	MA38668-CRIA2	1		
01:45	MA38668-CCV8	1		
01:47	MA38668-CCB8	1		
---------->	Last reportable CCB for job JC13575			
01:50	ZZZZZZ	1		
01:53	ZZZZZZ	1		
01:56	ZZZZZZ	1		
01:59	ZZZZZZ	1		
02:02	ZZZZZZ	1		
02:05	ZZZZZZ	1		
02:08	ZZZZZZ	1		
02:11	ZZZZZZ	1		
02:14	ZZZZZZ	1		
02:17	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
Analyst: BS Run ID: MA38668
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
21:43	MA38668-STD1	2535 R	69305 R	13692 R	6633 R
21:46	MA38668-STD2	2330	63038	13205	5512
21:49	ZZZZZZ	2421	65242	13504	5806
21:51	ZZZZZZ	2528	69385	13685	6619
21:54	MA38668-ICV1	2426	65335	13396	5813
21:57	MA38668-ICB1	2548	69592	13743	6636
22:00	MA38668-CCV1	2418	65469	13467	5812
22:03	MA38668-CCB1	2564	69512	13745	6643
22:06	MA38668-CRI1	2496	68125	13611	6410
22:09	MA38668-CRID1	2530	69269	13582	6594
22:12	MA38668-CRIA1	2527	69244	13733	6603
22:15	MA38668-ICSA1	2219	59455	12774	5033
22:18	MA38668-ICSAB1	2210	59295	12770	5030
22:21	MA38668-HSTD1	2482	67268	13586	6339
22:24	MA38668-HSTD2	2259	60612	12927	5139
22:27	ZZZZZZ	2468	67677	13571	6479
22:30	ZZZZZZ	2502	69202	13657	6607
22:33	ZZZZZZ	2544	69462	13768	6664
22:36	MA38668-CCV2	2426	65570	13442	5830
22:39	MA38668-CCB2	2570	69406	13601	6676
22:42	MP91866-MB1	2532	69026	13768	6595
22:45	MP91866-B1	2475	65965	13484	6078
22:47	MP91866-S1	2250	62475	13267	6141
22:50	MP91866-S2	2268	62389	13221	6142
22:53	JC13545-1A	2420	65286	13494	6294
22:56	MP91866-SD1	2521	67922	13619	6423
22:59	ZZZZZZ	2577	69560	13911	6094
23:02	ZZZZZZ	2572	69451	14124	6042
23:05	ZZZZZZ	2544	69082	13914	6064
23:08	MA38668-CCV3	2445	65675	13390	5874
23:10	MA38668-CCB3	2582	69656	13597	6688
23:13	ZZZZZZ	2571	69045	14030	5974
23:16	ZZZZZZ	2297	61906	13136	4975

INTERNAL STANDARD SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
Analyst: BS Run ID: MA38668
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
23:19	ZZZZZZ	2322	62734	13425	4933
23:22	ZZZZZZ	No results reported for the elements associated with this internal standard.			
23:25	ZZZZZZ	2656	71585	14357	6206
23:28	ZZZZZZ	2545	69298	13589	6538
23:31	ZZZZZZ	2571	69518	14084	6083
23:34	ZZZZZZ	2592	69933	14132	6044
23:37	ZZZZZZ	No results reported for the elements associated with this internal standard.			
23:40	MA38668-CCV4	2439	65618	13262	5882
23:42	MA38668-CCB4	2564	69327	13532	6724
23:45	ZZZZZZ	No results reported for the elements associated with this internal standard.			
23:48	ZZZZZZ	No results reported for the elements associated with this internal standard.			
23:51	ZZZZZZ	No results reported for the elements associated with this internal standard.			
23:54	ZZZZZZ	No results reported for the elements associated with this internal standard.			
23:58	ZZZZZZ	No results reported for the elements associated with this internal standard.			
00:01	ZZZZZZ	No results reported for the elements associated with this internal standard.			
00:04	ZZZZZZ	No results reported for the elements associated with this internal standard.			
00:06	ZZZZZZ	2510	68195	13476	6363
00:09	MP91873-B1	2543	68696	13374	6489
00:12	MP91873-B2	2381	63603	13163	5638
00:15	MA38668-CCV5	2441	65410	13160	5863
00:18	MA38668-CCB5	2585	69707	13418	6690
00:21	MP91873-MB1	2536	69485	13496	6675
00:24	MP91873-MB2	2357	63049	13155	5661
00:27	MP91873-MB3	2360	62965	13143	5676
00:30	MP91873-B3	2375	63249	13191	5624
00:33	MP91873-S1	2353	63305	13020	5659
00:36	MP91873-S2	2338	63148	12924	5647
00:39	JC13480-1A	2328	63138	13030	5712
00:42	MP91873-SD1	2495	67380	13287	6295
00:45	ZZZZZZ	2376	62592	13060	5541
00:48	ZZZZZZ	2295	61989	12936	5476
00:51	MA38668-CCV6	2440	65305	13168	5859
00:53	MA38668-CCB6	2551	69421	13441	6695

INTERNAL STANDARD SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
Analyst: BS Run ID: MA38668
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
00:56	ZZZZZZ	2335	62501	13129	5559
00:59	ZZZZZZ	2337	62722	13016	5570
01:02	ZZZZZZ	2375	63096	13137	5655
01:05	ZZZZZZ	2370	62835	13008	5633
01:09	ZZZZZZ	2367	62855	13075	5606
01:12	ZZZZZZ	2346	63125	13063	5568
01:15	ZZZZZZ	2289	61615	12859	5417
01:18	ZZZZZZ	2354	61590	12994	5439
01:21	ZZZZZZ	2494	67759	13357	6332
01:24	ZZZZZZ	2328	63019	12994	5688
01:27	MA38668-CCV7	2438	65422	13136	5859
01:29	MA38668-CCB7	2582	69534	13402	6699
01:32	ZZZZZZ	2553	69051	13426	6617
01:36	MA38668-CRI2	2563	68391	13302	6475
01:39	MA38668-CRID2	2573	69317	13408	6651
01:42	MA38668-CRIA2	2559	69370	13378	6635
01:45	MA38668-CCV8	2449	60817	13967	5883
01:47	MA38668-CCB8	2594	69625	13367	6705
01:50	ZZZZZZ	2556	69247	13456	6654
01:53	ZZZZZZ	2594	69482	13425	6714
01:56	ZZZZZZ	2572	69231	13343	6649
01:59	ZZZZZZ	2614	69904	13396	6700
02:02	ZZZZZZ	2559	69284	13377	6654
02:05	ZZZZZZ	2608	69686	13462	6728
02:08	ZZZZZZ	2625	66466	13503	5829
02:11	ZZZZZZ	2313	62448	12899	5620
02:14	ZZZZZZ	2333	62384	12895	5597
02:17	ZZZZZZ	2551	69309	13376	6677

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	70-130 %
Istd#2	Yttrium (3600)	70-130 %
Istd#3	Yttrium (3710)	70-130 %
Istd#4	Indium	70-130 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA38668 Units: ug/l

Time:			21:57		22:03		22:39		23:10	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	500	10	anr							
Antimony	20	1.5	anr							
Arsenic	20	1.2	-0.30	<20	-1.0	<20	-0.60	<20	0.0	<20
Barium	200	.2	0.10	<200	0.20	<200	0.20	<200	0.20	<200
Beryllium	2.0	.1	anr							
Bismuth	20	1.6								
Boron	100	1.3								
Cadmium	5.0	.3	0.10	<5.0	0.40	<5.0	0.30	<5.0	0.50	<5.0
Calcium	5000	7.7	anr							
Chromium	10	.6	0.10	<10	0.40	<10	1.1	<10	0.50	<10
Cobalt	50	.3	anr							
Copper	25	1.3	anr							
Iron	500	2.9	anr							
Lead	20	1.5	0.70	<20	0.30	<20	0.50	<20	0.30	<20
Lithium	20	.8								
Magnesium	5000	19	anr							
Manganese	15	.1	anr							
Molybdenum	20	.4								
Nickel	40	.6	anr							
Palladium	50	2.2								
Potassium	10000	35	anr							
Selenium	20	2.7	0.20	<20	1.8	<20	1.0	<20	0.80	<20
Silicon	200	2.3								
Silver	5.0	.7	0.0	<5.0	0.0	<5.0	-0.20	<5.0	-0.40	<5.0
Sodium	10000	9	anr							
Strontium	10	.1								
Sulfur	50	3.5								
Thallium	10	1.5	anr							
Tin	50	1.1								
Titanium	10	.7								
Tungsten	50	1.4								
Vanadium	50	.4	anr							
Zinc	50	.3	anr							

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA38668 Units: ug/l

Time:			21:57		22:03		22:39		23:10	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Zirconium	20	.3								

(*) Outside of QC limits
(anr) Analyte not requested

14.2.2 14

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA38668 Units: ug/l

Time:			23:42		00:18		00:53		01:29	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	500	10	anr							
Antimony	20	1.5	anr							
Arsenic	20	1.2	-0.90	<20	-0.60	<20	0.20	<20	-1.3	<20
Barium	200	.2	0.10	<200	0.20	<200	0.10	<200	0.30	<200
Beryllium	2.0	.1	anr							
Bismuth	20	1.6								
Boron	100	1.3								
Cadmium	5.0	.3	0.20	<5.0	0.30	<5.0	0.10	<5.0	0.30	<5.0
Calcium	5000	7.7	anr							
Chromium	10	.6	0.60	<10	0.0	<10	0.20	<10	0.0	<10
Cobalt	50	.3	anr							
Copper	25	1.3	anr							
Iron	500	2.9	anr							
Lead	20	1.5	0.10	<20	1.4	<20	0.20	<20	1.1	<20
Lithium	20	.8								
Magnesium	5000	19	anr							
Manganese	15	.1	anr							
Molybdenum	20	.4								
Nickel	40	.6	anr							
Palladium	50	2.2								
Potassium	10000	35	anr							
Selenium	20	2.7	0.40	<20	-0.10	<20	1.2	<20	1.1	<20
Silicon	200	2.3								
Silver	5.0	.7	0.10	<5.0	-0.30	<5.0	-0.20	<5.0	-0.30	<5.0
Sodium	10000	9	anr							
Strontium	10	.1								
Sulfur	50	3.5								
Thallium	10	1.5	anr							
Tin	50	1.1								
Titanium	10	.7								
Tungsten	50	1.4								
Vanadium	50	.4	anr							
Zinc	50	.3	anr							

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA38668 Units: ug/l

Time:			23:42		00:18		00:53		01:29	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Zirconium	20	.3								

(*) Outside of QC limits
(anr) Analyte not requested

14.2.2 14

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA38668 Units: ug/l

Time:			01:47	
Sample ID:			CCB8	
Metal	RL	IDL	raw	final
Aluminum	500	10	anr	
Antimony	20	1.5	anr	
Arsenic	20	1.2	-0.70	<20
Barium	200	.2	0.20	<200
Beryllium	2.0	.1	anr	
Bismuth	20	1.6		
Boron	100	1.3		
Cadmium	5.0	.3	0.10	<5.0
Calcium	5000	7.7	anr	
Chromium	10	.6	0.30	<10
Cobalt	50	.3	anr	
Copper	25	1.3	anr	
Iron	500	2.9	anr	
Lead	20	1.5	0.40	<20
Lithium	20	.8		
Magnesium	5000	19	anr	
Manganese	15	.1	anr	
Molybdenum	20	.4		
Nickel	40	.6	anr	
Palladium	50	2.2		
Potassium	10000	35	anr	
Selenium	20	2.7	0.60	<20
Silicon	200	2.3		
Silver	5.0	.7	-0.60	<5.0
Sodium	10000	9	anr	
Strontium	10	.1		
Sulfur	50	3.5		
Thallium	10	1.5	anr	
Tin	50	1.1		
Titanium	10	.7		
Tungsten	50	1.4		
Vanadium	50	.4	anr	
Zinc	50	.3	anr	

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA38668 Units: ug/l

Time:			01:47	
Sample ID:			CCB8	
Metal	RL	IDL	raw	final
Zirconium	20	.3		

(*) Outside of QC limits
(anr) Analyte not requested

14.2.2 14

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA38668 Units: ug/l

Time:		21:54			22:00			22:36	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	2000	100.0	2000	2000	100.0	2000	2000	100.0
Barium	2000	1990	99.5	2000	1980	99.0	2000	1980	99.0
Beryllium	anr								
Bismuth									
Boron									
Cadmium	2000	2000	100.0	2000	2000	100.0	2000	1990	99.5
Calcium	anr								
Chromium	2000	2030	101.5	2000	2030	101.5	2000	2030	101.5
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	2050	102.5	2000	2050	102.5	2000	2040	102.0
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Palladium									
Potassium	anr								
Selenium	2000	1990	99.5	2000	1990	99.5	2000	1990	99.5
Silicon									
Silver	250	248	99.2	250	247	98.8	250	247	98.8
Sodium	anr								
Strontium									
Sulfur									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								
Zinc	anr								

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA38668 Units: ug/l

Time:		21:54			22:00			22:36	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

14.2.3 14

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA38668 Units: ug/l

Time:		23:08			23:40			00:15	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1990	99.5	2000	2010	100.5	2000	1990	99.5
Barium	2000	1980	99.0	2000	1980	99.0	2000	1980	99.0
Beryllium	anr								
Bismuth									
Boron									
Cadmium	2000	1990	99.5	2000	1990	99.5	2000	1980	99.0
Calcium	anr								
Chromium	2000	2050	102.5	2000	2050	102.5	2000	2040	102.0
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	2040	102.0	2000	2040	102.0	2000	2040	102.0
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Palladium									
Potassium	anr								
Selenium	2000	1980	99.0	2000	1990	99.5	2000	1970	98.5
Silicon									
Silver	250	245	98.0	250	245	98.0	250	244	97.6
Sodium	anr								
Strontium									
Sulfur									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								
Zinc	anr								

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA38668 Units: ug/l

Time:		23:08			23:40			00:15	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

14.2.3 14

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA38668 Units: ug/l

Time:		00:51			01:27			01:45	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1990	99.5	2000	1990	99.5	2000	1970	98.5
Barium	2000	1990	99.5	2000	1990	99.5	2000	1840	92.0
Beryllium	anr								
Bismuth									
Boron									
Cadmium	2000	1980	99.0	2000	1980	99.0	2000	1970	98.5
Calcium	anr								
Chromium	2000	2040	102.0	2000	2040	102.0	2000	2240	112.0*(a
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	2040	102.0	2000	2030	101.5	2000	2030	101.5
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Palladium									
Potassium	anr								
Selenium	2000	1980	99.0	2000	1970	98.5	2000	1970	98.5
Silicon									
Silver	250	245	98.0	250	245	98.0	250	264	105.6
Sodium	anr								
Strontium									
Sulfur									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								
Zinc	anr								

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA38668 Units: ug/l

Time:		00:51			01:27			01:45	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

HIGH STANDARD CHECK SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA38668 Units: ug/l

Time:		22:21			22:24	
Sample ID:	HSTD	HSTD1		HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum						
Antimony	anr					
Arsenic	5000	4950	99.0			
Barium	5000	4980	99.6			
Beryllium	anr					
Bismuth						
Boron						
Cadmium	5000	4900	98.0			
Calcium						
Chromium	5000	5190	103.8			
Cobalt	anr					
Copper	anr					
Iron						
Lead	5000	5010	100.2			
Lithium						
Magnesium						
Manganese	anr					
Molybdenum						
Nickel	anr					
Palladium						
Potassium						
Selenium	5000	4960	99.2			
Silicon						
Silver	625	617	98.7			
Sodium						
Strontium						
Sulfur						
Thallium	anr					
Tin						
Titanium						
Tungsten						
Vanadium	anr					
Zinc	anr					

HIGH STANDARD CHECK SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA38668 Units: ug/l

Time:		22:21			22:24	
Sample ID:	HSTD	HSTD1		HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results	% Rec
Zirconium						

(*) Outside of QC limits
(anr) Analyte not requested

14.2.4

14

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA38668 Units: ug/l

Time:				22:06		22:09		22:12	
Sample ID:	CRI	CRIA	CRID	CRI1		CRID1		CRIA1	
Metal	True	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	200	500	100	anr					
Antimony	6.0	20	3.0	anr					
Arsenic	8.0	20	3.0	7.8	97.5	2.6	86.7	20.0	100.0
Barium	200		4.0	202	101.0	3.9	97.5		
Beryllium	2.0		1.0	anr					
Bismuth	20								
Boron	100		10						
Cadmium	3.0		1.0	3.4	113.3	1.2	120.0		
Calcium	5000	2000	1000	anr					
Chromium	10		2.0	10.7	107.0	2.4	120.0		
Cobalt	50		3.0	anr					
Copper	10		2.0	anr					
Iron	100	500		anr					
Lead	3.0	20	2.5	2.4	80.0	2.8	112.0	22.0	110.0
Lithium	20								
Magnesium	5000	2000	100	anr					
Manganese	15		3.0	anr					
Molybdenum	20								
Nickel	10		4.0	anr					
Palladium	50								
Potassium	5000		2000	anr					
Selenium	10	20	5.0	13.0	130.0			22.4	112.0
Silicon	200								
Silver	5.0		2.0	5.1	102.0				
Sodium	5000		1000	anr					
Strontium	10								
Sulfur	50								
Thallium	10		2.0	anr					
Tin	10								
Titanium	10								
Tungsten	50								
Vanadium	50		2.0	anr					
Zinc	20		10	anr					

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA38668 Units: ug/l

Time:				22:06		22:09		22:12	
Sample ID:	CRI	CRIA	CRID	CRI1		CRID1		CRIA1	
Metal	True	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Zirconium	10								

(*) Outside of QC limits
(anr) Analyte not requested

14.2.5

14

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA38668 Units: ug/l

Time:				01:36		01:39		01:42	
Sample ID:	CRI	CRIA	CRID	CRI2		CRID2		CRIA2	
Metal	True	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	200	500	100	anr					
Antimony	6.0	20	3.0	anr					
Arsenic	8.0	20	3.0	7.5	93.8	2.8	93.3	21.3	106.5
Barium	200		4.0	202	101.0	4.0	100.0		
Beryllium	2.0		1.0	anr					
Bismuth	20								
Boron	100		10						
Cadmium	3.0		1.0	3.2	106.7	1.1	110.0		
Calcium	5000	2000	1000	anr					
Chromium	10		2.0	10.7	107.0	2.6	130.0		
Cobalt	50		3.0	anr					
Copper	10		2.0	anr					
Iron	100	500		anr					
Lead	3.0	20	2.5	2.8	93.3	2.8	112.0	23.5	117.5
Lithium	20								
Magnesium	5000	2000	100	anr					
Manganese	15		3.0	anr					
Molybdenum	20								
Nickel	10		4.0	anr					
Palladium	50								
Potassium	5000		2000	anr					
Selenium	10	20	5.0	11.9	119.0	5.6	112.0	22.9	114.5
Silicon	200								
Silver	5.0		2.0	4.8	96.0				
Sodium	5000		1000	anr					
Strontium	10								
Sulfur	50								
Thallium	10		2.0	anr					
Tin	10								
Titanium	10								
Tungsten	50								
Vanadium	50		2.0	anr					
Zinc	20		10	anr					

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA38668 Units: ug/l

Time:				01:36		01:39		01:42	
Sample ID:	CRI	CRIA	CRID	CRI2		CRID2		CRIA2	
Metal	True	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Zirconium	10								

(*) Outside of QC limits
(anr) Analyte not requested

14.2.5

14

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA38668 Units: ug/l

Time:			22:15		22:18	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	500000	500000	511000	102.2	508000	101.6
Antimony		1000	1.2		1010	101.0
Arsenic		1000	0.80		1020	102.0
Barium		500	-0.60		495	99.0
Beryllium		500	0.0		485	97.0
Bismuth		500	19.1		512	102.4
Boron			-2.3		-1.0	
Cadmium		1000	1.6		1010	101.0
Calcium	400000	400000	392000	98.0	405000	101.3
Chromium		500	2.1		494	98.8
Cobalt		500	0.90		485	97.0
Copper		500	1.5		501	100.2
Iron	200000	200000	202000	101.0	204000	102.0
Lead		1000	2.4		960	96.0
Lithium		500	9.2		497	99.4
Magnesium	500000	500000	482000	96.4	485000	97.0
Manganese		500	0.70		485	97.0
Molybdenum		500	-1.5		487	97.4
Nickel		1000	1.6		973	97.3
Palladium		500	61.1		581	116.2
Potassium			169		203	
Selenium		1000	1.0		1060	106.0
Silicon			-6.9		5.5	
Silver		1000	4.4		984	98.4
Sodium			-6.1		0.30	
Strontium			5.0		5.0	
Sulfur		500	3.7		548	109.6
Thallium		1000	-1.0		967	96.7
Tin			-6.0		-6.6	
Titanium			1.0		1.8	
Tungsten		500	0.0		477	95.4
Vanadium		500	-3.1		476	95.2
Zinc		1000	5.5		956	95.6

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SE020316M2.ICP Date Analyzed: 02/03/16 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA38668 Units: ug/l

Time:			22:15		22:18	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Zirconium		500	9.4		469	93.8

(*) Outside of QC limits
(anr) Analyte not requested

14.2.6

14

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: H5020416W1.CSV Date Analyzed: 02/04/16 Methods: SW846 7470A
Analyst: VM Run ID: MA38670
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:17	MA38670-STD1	1		B=2.3418e-004,C=-1.6303e-002,R=0.9998456
12:18	MA38670-STD2	1		STDB
12:19	MA38670-STD3	1		STDC
12:21	MA38670-STD4	1		STDD
12:22	MA38670-STD5	1		STDE
12:24	MA38670-STD6	1		STDF
12:26	MA38670-STD7	1		STDE
12:32	MA38670-ICV1	1		
12:33	MA38670-ICB1	1		
12:35	MA38670-CCV1	1		
12:36	MA38670-CCB1	1		
12:38	MA38670-CRI1	1		
12:42	MP91892-MB1	1		
12:43	MP91892-LC1	1		
12:45	MP91892-S1	1		
12:46	MP91892-S2	1		
12:48	JC13486-1	1		(sample used for QC only; not part of login JC13575)
12:50	ZZZZZZ	1		
12:51	ZZZZZZ	1		
12:52	ZZZZZZ	1		
12:54	ZZZZZZ	1		
12:55	MA38670-CCV2	1		
12:56	MA38670-CCB2	1		
12:58	ZZZZZZ	1		
12:59	ZZZZZZ	1		
13:01	ZZZZZZ	1		
13:02	ZZZZZZ	1		
13:03	ZZZZZZ	1		
13:05	ZZZZZZ	1		
13:06	ZZZZZZ	1		
13:07	ZZZZZZ	1		
13:09	ZZZZZZ	1		
13:10	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: H5020416W1.CSV Date Analyzed: 02/04/16 Methods: SW846 7470A
Analyst: VM Run ID: MA38670
Parameters: Hg

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	13:11	MA38670-CCV3	1		
	13:13	MA38670-CCB3	1		
	13:14	MP91877-MB2	1		
	13:16	MP91877-LC1	1		
	13:17	ZZZZZZ	1		
	13:19	ZZZZZZ	1		
	13:20	ZZZZZZ	1		
	13:21	JC13575-1	1		
	13:23	JC13575-3	1		
---------->	Last reportable sample/prep for job JC13575				
	13:26	MA38670-CCV4	1		
	13:28	MA38670-CCB4	1		
---------->	Last reportable CCB for job JC13575				
	15:22	MA38670-CCV5	1		
	15:23	MA38670-CCB5	1		
	15:31	MP91899-MB1	1		
	15:32	MP91899-B1	1		
	15:35	MP91899-S1	1		
	15:38	MP91899-S2	1		
	15:39	JC13518-2	1		(sample used for QC only; not part of login JC13575)
	15:45	MA38670-CCV6	1		
	15:46	MA38670-CCB6	1		
	15:56	MA38670-CCV7	1		
	15:57	MA38670-CCB7	1		
	16:00	MP91900-MB1	1		
	16:03	MP91900-S1	1		Brown, decolorization
	16:04	MP91900-S2	1		Brown, decolorization
	16:06	JC13621-1A	1		(sample used for QC only; not part of login JC13575)
	16:07	MP91900-B1	1		
	16:09	MA38670-CCV8	1		
	16:10	MA38670-CCB8	1		

Refer to raw data for calibration curve and standards.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: H5020416W1.CSV Date Analyzed: 02/04/16 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA38670 Units: ug/l

Time:			12:33		12:36		12:56		13:13	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.031	-0.00060	<0.20	-0.0079	<0.20	-0.0051	<0.20	0.0022	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: H5020416W1.CSV Date Analyzed: 02/04/16 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA38670 Units: ug/l

Time:			13:28	
Sample ID:			CCB4	
Metal	RL	IDL	raw	final
Mercury	0.20	.031	-0.010	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

14.3.1
14

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: H5020416W1.CSV Date Analyzed: 02/04/16 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA38670 Units: ug/l

Time:		12:32			12:35			12:55	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	2.9	96.7	2.5	2.5	100.0	2.5	2.4	96.0

(*) Outside of QC limits
(anr) Analyte not requested

14.3.2

14

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: H5020416W1.CSV Date Analyzed: 02/04/16 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA38670 Units: ug/l

Time:		13:11			13:26	
Sample ID:	CCV	CCV3		CCV	CCV4	
Metal	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.7	108.0	2.5	2.5	100.0

(*) Outside of QC limits
(anr) Analyte not requested

14.3.2 14

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: H5020416W1.CSV Date Analyzed: 02/04/16 Methods: SW846 7470A
QC Limits: 70 to 130 % Recovery Run ID: MA38670 Units: ug/l

Time:			12:38	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Mercury	0.20		0.19	95.0

(*) Outside of QC limits
(anr) Analyte not requested

14.3.3 14

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
Analyst: MS Run ID: MA38672
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:37	MA38672-STD1	1		STDA
09:44	MA38672-STD2	1		STDB
09:49	ZZZZZZ	1		
09:55	ZZZZZZ	1		
10:02	MA38672-ICV1	1		
10:12	MA38672-ICB1	1		
10:16	MA38672-ICCV1	1		
10:29	MA38672-CCB1	1		
10:35	MA38672-CRI1	1		
10:41	ZZZZZZ	1		
10:48	MA38672-CRID1	1		
10:54	MA38672-CRIA1	1		
11:00	MA38672-ICSA1	1		
11:06	MA38672-ICSAB1	1		
11:12	ZZZZZZ	1		
11:18	MA38672-HSTD1	1		Minerals.
11:25	MA38672-HSTD2	1		
11:31	ZZZZZZ	1		
11:37	ZZZZZZ	1		
11:43	ZZZZZZ	1		
11:49	MA38672-CCV1	1		
11:55	MA38672-CCB2	1		
12:01	MA38672-CRID2	1		
12:07	ZZZZZZ	1		
12:13	MP91826-S1	5		
12:19	MP91826-S2	5		
12:25	JC13433-31	5		(sample used for QC only; not part of login JC13575)
12:31	MP91826-SD1	25		
12:37	ZZZZZZ	1		
12:43	ZZZZZZ	3		
12:49	ZZZZZZ	1		
12:55	MA38672-CCV2	1		
13:01	MA38672-CCB3	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
Analyst: MS Run ID: MA38672
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:07	ZZZZZZ	1		
13:14	ZZZZZZ	3		
13:20	ZZZZZZ	10		
13:26	ZZZZZZ	5		
13:32	ZZZZZZ	10		
13:38	ZZZZZZ	5		
13:44	ZZZZZZ	20		
13:50	ZZZZZZ	3		
13:56	ZZZZZZ	1		
14:02	MA38672-CCV3	1		
14:08	MA38672-CCB4	1		
14:14	ZZZZZZ	5		
14:20	ZZZZZZ	10		
14:26	ZZZZZZ	2		
14:32	ZZZZZZ	3		
14:38	ZZZZZZ	20		
14:44	ZZZZZZ	5		
14:50	ZZZZZZ	10		
14:56	ZZZZZZ	20		
15:02	ZZZZZZ	20		
15:08	MA38672-CCV4	1		
15:14	MA38672-CCB5	1		
15:20	MP91869-MB1	1		
15:26	MP91869-B1	1		
15:32	MP91869-S1	1		Cr=10ppm
15:38	MP91869-S2	1		
15:45	JC13544-5A	1		(sample used for QC only; not part of login JC13575)
15:51	MP91869-SD1	5		
15:57	ZZZZZZ	1		
16:03	ZZZZZZ	1		
16:09	ZZZZZZ	1		
16:15	MA38672-CCV5	1		
16:21	MA38672-CCB6	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
Analyst: MS Run ID: MA38672
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:27	ZZZZZZ	1		
16:33	ZZZZZZ	1		
16:39	ZZZZZZ	1		
16:45	ZZZZZZ	1		
16:52	ZZZZZZ	1		
16:58	ZZZZZZ	1		
17:04	ZZZZZZ	1		
17:10	ZZZZZZ	1		
17:16	ZZZZZZ	1		
17:22	MA38672-CCV6	1		
17:28	MA38672-CCB7	1		
17:34	MP91869-S1	10		FE=4500ppm, needs higher dilution
17:40	MP91869-S2	10		FE=4500ppm, needs higher dilution
17:46	JC13544-5A	10		(sample used for QC only; not part of login JC13575)
17:52	MP91869-SD1	50		FE=4500ppm, needs higher dilution
17:58	ZZZZZZ	10		
18:04	ZZZZZZ	20		
18:10	ZZZZZZ	5		
18:16	ZZZZZZ	1		
18:22	ZZZZZZ	1		
18:28	MA38672-CCV7	1		
18:34	MA38672-CCB8	1		
18:40	MA38672-CRI2	1		
18:46	MA38672-CRID3	1		
18:52	MA38672-CRIA2	1		
18:59	MA38672-ICSA2	1		
19:05	MA38672-ICSAB2	1		
19:11	MA38672-CCV8	1		
19:17	MA38672-CCB9	1		
19:23	MP91875-MB1	1		
19:29	MP91875-B1	1		
19:35	MP91875-S1	1		
19:41	MP91875-S2	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
Analyst: MS Run ID: MA38672
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:47	JC13572-3	1		(sample used for QC only; not part of login JC13575)
19:53	MP91875-SD1	5		
19:59	ZZZZZZ	1		
20:05	ZZZZZZ	1		
20:11	ZZZZZZ	1		
20:18	MA38672-CCV9	1		
20:23	MA38672-CCB10	1		
20:30	ZZZZZZ	1		
20:36	ZZZZZZ	1		
20:42	ZZZZZZ	1		
20:48	ZZZZZZ	1		
20:54	ZZZZZZ	1		
21:00	ZZZZZZ	1		
21:06	MP91884-B1	1		
21:12	MP91884-MB1	1		
21:18	MP91884-MB2	1		
21:24	MA38672-CCV10	1		
21:30	MA38672-CCB11	1		
21:36	MP91884-B2	1		
21:42	MP91884-S1	1		
21:48	MP91884-S2	1		
21:54	JC13583-1F	1		(sample used for QC only; not part of login JC13575)
22:00	MP91884-SD1	5		
22:06	ZZZZZZ	1		
22:13	ZZZZZZ	1		
22:19	ZZZZZZ	1		
22:25	ZZZZZZ	1		
22:31	MA38672-CCV11	1		
22:37	MA38672-CCB12	1		
22:43	ZZZZZZ	1		
22:49	ZZZZZZ	1		
22:55	ZZZZZZ	1		
23:01	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
Analyst: MS Run ID: MA38672
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
23:08	ZZZZZZ	1		
23:14	MP91897-B1	5		
23:20	MP91897-MB1	5		
23:26	MP91897-S1	5		To reanalysis without dilution. Reduced volume digestion.
23:32	MP91897-S2	5		To reanalysis without dilution. Reduced volume digestion.
23:38	MA38672-CCV12	1		
23:44	MA38672-CCB13	1		
23:50	JC13621-1A	5		(sample used for QC only; not part of login JC13575)
23:56	MP91897-SD1	25		To reanalysis without dilution. Reduced volume digestion.
00:02	MP91872-MB2	1		
00:08	MP91872-B2	1		
00:14	ZZZZZZ	1		
00:20	ZZZZZZ	1		
00:26	ZZZZZZ	1		
00:32	ZZZZZZ	1		
00:38	MP91873-B4	5		
00:45	MA38672-CCV13	1		
00:50	MA38672-CCB14	1		
00:57	MP91873-MB4	5		
01:03	ZZZZZZ	5		
01:09	ZZZZZZ	5		
01:15	ZZZZZZ	5		
01:21	JC13575-1	5		
01:28	JC13575-3	5		
---------->	Last reportable sample/prep for job JC13575			
01:34	ZZZZZZ	5		
01:40	MA38672-CCV14	1		
01:46	MA38672-CCB15	1		
01:52	MA38672-CRI3	1		
01:58	MA38672-CRID4	1		
02:04	MA38672-CRIA3	1		
02:10	MA38672-ICSA3	1		
02:16	MA38672-ICSAB3	1		
02:23	MA38672-CCV15	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
Analyst: MS Run ID: MA38672
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
02:29	MA38672-CCB16	1		
----------> Last reportable CCB for job JC13575				
02:35	ZZZZZZ	1		
02:41	ZZZZZZ	1		
02:47	ZZZZZZ	1		
02:53	ZZZZZZ	1		
02:59	ZZZZZZ	1		
03:05	ZZZZZZ	1		
03:11	ZZZZZZ	1		
03:18	ZZZZZZ	1		
03:24	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
Analyst: MS Run ID: MA38672
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:37	MA38672-STD1	2098 R	88576 R	12730 R	4956 R
09:44	MA38672-STD2	1978	82858	12569	4305
09:49	ZZZZZZ	2031	84406	12589	4489
09:55	ZZZZZZ	2118	85495	12810	5003
10:02	MA38672-ICV1	2027	86135	12756	4492
10:12	MA38672-ICB1	2095	89746	12517	4950
10:16	MA38672-ICCV1	2035	85486	12687	4500
10:29	MA38672-CCB1	2100	90500	12698	4975
10:35	MA38672-CRI1	2086	88161	12542	4866
10:41	ZZZZZZ	2099	999999 !	13303	4942
10:48	MA38672-CRID1	2096	89063	12567	4957
10:54	MA38672-CRIA1	2093	88696	12607	4952
11:00	MA38672-ICSA1	1878	78505	12278	4021
11:06	MA38672-ICSAB1	1865	78437	12270	3999
11:12	ZZZZZZ	2065	86219	13014	4857
11:18	MA38672-HSTD1	1925	79745	12372	4054
11:25	MA38672-HSTD2	2072	88276	12658	4855
11:31	ZZZZZZ	2070	87881	12532	4917
11:37	ZZZZZZ	2058	89514	12491	4969
11:43	ZZZZZZ	2109	89643	12582	4995
11:49	MA38672-CCV1	2070	86237	12433	4571
11:55	MA38672-CCB2	2132	90027	12465	5029
12:01	MA38672-CRID2	2108	90776	12426	4958
12:07	ZZZZZZ	2102	89421	12688	4972
12:13	MP91826-S1	2483	104290	14997	4709
12:19	MP91826-S2	2498	105140	15109	4706
12:25	JC13433-31	2451	103050	14683	4770
12:31	MP91826-SD1	2198	92297	13221	4895
12:37	ZZZZZZ	2114	90703	12772	4988
12:43	ZZZZZZ	2148	90413	13159	4773
12:49	ZZZZZZ	2263	94758	14170	4631
12:55	MA38672-CCV2	2051	86994	12590	4528
13:01	MA38672-CCB3	2112	89057	12593	4981

INTERNAL STANDARD SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
Analyst: MS Run ID: MA38672
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
13:07	ZZZZZZ	2082	90371	12529	4913
13:14	ZZZZZZ	2162	92613	13200	4751
13:20	ZZZZZZ	2122	89957	12759	4885
13:26	ZZZZZZ	1927	84168	12262	4244
13:32	ZZZZZZ	1988	84358	12366	4465
13:38	ZZZZZZ	1918	82469	12112	4185
13:44	ZZZZZZ	2017	85817	12431	4581
13:50	ZZZZZZ	2159	91818	13266	4795
13:56	ZZZZZZ	2198	92841	13595	4732
14:02	MA38672-CCV3	2050	85959	12594	4523
14:08	MA38672-CCB4	2109	89608	12548	4964
14:14	ZZZZZZ	2124	90450	12759	4873
14:20	ZZZZZZ	2101	88654	12610	4900
14:26	ZZZZZZ	2262	95476	13718	4750
14:32	ZZZZZZ	2135	89400	12808	4853
14:38	ZZZZZZ	2090	88849	12550	4930
14:44	ZZZZZZ	2089	86763	12703	4824
14:50	ZZZZZZ	2073	88589	12511	4921
14:56	ZZZZZZ	2139	90537	12417	4939
15:02	ZZZZZZ	2104	88832	12520	4922
15:08	MA38672-CCV4	2056	87307	12456	4524
15:14	MA38672-CCB5	2108	89866	12653	4955
15:20	MP91869-MB1	2133	90795	12628	4999
15:26	MP91869-B1	2075	88367	12557	4645
15:32	MP91869-S1	1713	76240	11834	5605
15:38	MP91869-S2	1731	78680	11792	5613
15:45	JC13544-5A	1756	79299	11863	5728
15:51	MP91869-SD1	2030	86773	12270	5104
15:57	ZZZZZZ	2131	89622	12911	4595
16:03	ZZZZZZ	2156	90601	13124	4613
16:09	ZZZZZZ	1751	75009	11695	3586
16:15	MA38672-CCV5	2071	87329	12392	4540
16:21	MA38672-CCB6	2133	90451	12422	5031

INTERNAL STANDARD SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
Analyst: MS Run ID: MA38672
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:27	ZZZZZZ	1720	78655	11761	5722
16:33	ZZZZZZ	2039	88111	13007	5059
16:39	ZZZZZZ	1701	78185	11667	5768
16:45	ZZZZZZ	1605	74978	11233	5976
16:52	ZZZZZZ	1626	75979	11290	5964
16:58	ZZZZZZ	1712	79295	11512	5802
17:04	ZZZZZZ	2184	92168	13163	4877
17:10	ZZZZZZ	2150	91224	13000	4969
17:16	ZZZZZZ	1806	81317	11953	5639
17:22	MA38672-CCV6	2081	86749	12239	4615
17:28	MA38672-CCB7	2137	90682	12342	5067
17:34	MP91869-S1	No results reported for the elements associated with this internal standard.			
17:40	MP91869-S2	No results reported for the elements associated with this internal standard.			
17:46	JC13544-5A	No results reported for the elements associated with this internal standard.			
17:52	MP91869-SD1	No results reported for the elements associated with this internal standard.			
17:58	ZZZZZZ	1985	85065	11959	4433
18:04	ZZZZZZ	2093	90279	12273	4971
18:10	ZZZZZZ	2118	89265	12339	4941
18:16	ZZZZZZ	2144	91359	12363	5101
18:22	ZZZZZZ	2048	86225	12142	4660
18:28	MA38672-CCV7	2076	86642	12230	4603
18:34	MA38672-CCB8	2128	90545	12270	5071
18:40	MA38672-CRI2	2110	89592	12125	4968
18:46	MA38672-CRID3	2134	90870	12233	5052
18:52	MA38672-CRIA2	2143	90482	12169	5062
18:59	MA38672-ICSA2	1917	79605	12038	4083
19:05	MA38672-ICSAB2	1923	80119	11958	4078
19:11	MA38672-CCV8	2080	87639	12145	4598
19:17	MA38672-CCB9	2150	91428	12154	5063
19:23	MP91875-MB1	2157	90984	12377	5147
19:29	MP91875-B1	2107	88516	12363	4755
19:35	MP91875-S1	2069	86841	12324	4547
19:41	MP91875-S2	2070	86489	12374	4545

INTERNAL STANDARD SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
Analyst: MS Run ID: MA38672
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
19:47	JC13572-3	2098	87334	12259	4718
19:53	MP91875-SD1	2117	89194	12087	4888
19:59	ZZZZZZ	1971	83581	11976	4249
20:05	ZZZZZZ	1919	79145	11836	4008
20:11	ZZZZZZ	1907	79302	11737	3988
20:18	MA38672-CCV9	2084	87290	12130	4573
20:23	MA38672-CCB10	2154	90750	12103	5039
20:30	ZZZZZZ	2107	87979	12148	4739
20:36	ZZZZZZ	2139	90180	12315	4973
20:42	ZZZZZZ	2103	88186	12152	4709
20:48	ZZZZZZ	2168	90881	12307	5061
20:54	ZZZZZZ	2168	90775	12334	5051
21:00	ZZZZZZ	2161	90875	12184	5046
21:06	MP91884-B1	2126	88481	12199	4755
21:12	MP91884-MB1	2174	91311	12301	5116
21:18	MP91884-MB2	2171	91068	12360	5094
21:24	MA38672-CCV10	2102	87952	11979	4580
21:30	MA38672-CCB11	2176	90855	11955	5055
21:36	MP91884-B2	2137	88859	12199	4767
21:42	MP91884-S1	2053	85112	12028	4421
21:48	MP91884-S2	2051	85929	12017	4409
21:54	JC13583-1F	2067	86223	11951	4518
22:00	MP91884-SD1	2141	89098	11983	4851
22:06	ZZZZZZ	2079	86456	12009	4545
22:13	ZZZZZZ	2069	86198	11971	4520
22:19	ZZZZZZ	2042	83461	11831	4299
22:25	ZZZZZZ	2038	84003	11829	4291
22:31	MA38672-CCV11	2129	87948	11837	4578
22:37	MA38672-CCB12	2207	91174	11827	5045
22:43	ZZZZZZ	2089	85656	11872	4406
22:49	ZZZZZZ	2142	88379	11950	4697
22:55	ZZZZZZ	2147	88932	11929	4737
23:01	ZZZZZZ	2225	91845	12143	5130

INTERNAL STANDARD SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
Analyst: MS Run ID: MA38672
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
23:08	ZZZZZZ	2151	88799	12000	4744
23:14	MP91897-B1	No results reported for the elements associated with this internal standard.			
23:20	MP91897-MB1	No results reported for the elements associated with this internal standard.			
23:26	MP91897-S1	No results reported for the elements associated with this internal standard.			
23:32	MP91897-S2	No results reported for the elements associated with this internal standard.			
23:38	MA38672-CCV12	2153	87951	11925	4595
23:44	MA38672-CCB13	2224	91761	11969	5073
23:50	JC13621-1A	No results reported for the elements associated with this internal standard.			
23:56	MP91897-SD1	No results reported for the elements associated with this internal standard.			
00:02	MP91872-MB2	2227	91901	12091	5093
00:08	MP91872-B2	2184	89296	12060	4730
00:14	ZZZZZZ	2229	91144	12229	5006
00:20	ZZZZZZ	2233	91651	12218	4921
00:26	ZZZZZZ	2230	91927	12079	5033
00:32	ZZZZZZ	2082	86549	11847	4459
00:38	MP91873-B4	2131	87061	11729	4415
00:45	MA38672-CCV13	2170	88771	11656	4601
00:50	MA38672-CCB14	2228	90860	11658	5074
00:57	MP91873-MB4	2123	85706	11830	4436
01:03	ZZZZZZ	2110	85583	11811	4367
01:09	ZZZZZZ	2095	85233	11712	4311
01:15	ZZZZZZ	2127	85764	11825	4425
01:21	JC13575-1	2098	84983	11757	4306
01:28	JC13575-3	2104	84906	11799	4303
01:34	ZZZZZZ	2099	84927	11987	4353
01:40	MA38672-CCV14	2185	88317	11897	4609
01:46	MA38672-CCB15	2249	91737	11846	5082
01:52	MA38672-CRI3	2228	90841	11837	4983
01:58	MA38672-CRID4	2247	91756	11990	5062
02:04	MA38672-CRIA3	2249	91572	11913	5067
02:10	MA38672-ICSA3	2010	80956	11661	4093
02:16	MA38672-ICSAB3	2011	81279	11596	4095
02:23	MA38672-CCV15	2188	88851	11784	4617

INTERNAL STANDARD SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
Analyst: MS Run ID: MA38672
Parameters: As,Ba,Cd,Cr,Pb,Se,Ag

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
02:29	MA38672-CCB16	2246	91884	11793	5089
02:35	ZZZZZZ	2252	92442	11751	5106
02:41	ZZZZZZ	2257	92613	11888	5134
02:47	ZZZZZZ	2248	93339	11853	5093
02:53	ZZZZZZ	2246	92113	11734	5074
02:59	ZZZZZZ	2248	91990	11895	5130
03:05	ZZZZZZ	2246	92511	11983	5087
03:11	ZZZZZZ	2273	87321	12238	4607
03:18	ZZZZZZ	2072	85603	11617	4398
03:24	ZZZZZZ	2100	85699	11459	4382

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	70-130 %
Istd#2	Yttrium (3600)	70-130 %
Istd#3	Yttrium (3710)	70-130 %
Istd#4	Indium	70-130 %

14.4.1

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BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA38672 Units: ug/l

Time:			10:12		10:29		11:55		13:01	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	15	anr							
Antimony	6.0	1.7	anr							
Arsenic	3.0	2.3	0.50	<3.0	0.90	<3.0	0.10	<3.0	-0.70	<3.0
Barium	200	.4	0.20	<200	0.0	<200	0.30	<200	0.10	<200
Beryllium	1.0	.2	anr							
Bismuth	20	2.2								
Boron	100	1.9	anr							
Cadmium	3.0	.3	0.20	<3.0	0.20	<3.0	0.10	<3.0	0.30	<3.0
Calcium	5000	63	anr							
Chromium	10	.5	0.20	<10	-0.10	<10	0.10	<10	0.30	<10
Cobalt	50	.4	anr							
Copper	10	.8	anr							
Iron	100	13	anr							
Lead	3.0	1.5	-0.40	<3.0	0.10	<3.0	-0.10	<3.0	-0.20	<3.0
Lithium	20	2.8								
Magnesium	5000	44	anr							
Manganese	15	.2	anr							
Molybdenum	20	.6	anr							
Nickel	10	.5	anr							
Palladium	50	3.1								
Potassium	10000	84	anr							
Selenium	10	3.5	0.90	<10	1.2	<10	1.9	<10	1.2	<10
Silicon	200	9.5								
Silver	10	.8	-0.20	<10	-0.10	<10	0.0	<10	-0.10	<10
Sodium	10000	19	anr							
Sulfur	50	6.4								
Strontium	10	.1								
Thallium	2.0	1.8	anr							
Tin	10	1.2	anr							
Titanium	10	.9								
Tungsten	50	1.9								
Vanadium	50	.7	anr							
Zinc	20	5.1	anr							

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA38672 Units: ug/l

Time:			10:12		10:29		11:55		13:01	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Zirconium	10	.5								

(*) Outside of QC limits
(anr) Analyte not requested

14.4.2 14

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA38672 Units: ug/l

Time:			14:08		15:14		16:21		17:28	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	15	anr							
Antimony	6.0	1.7	anr							
Arsenic	3.0	2.3	0.40	<3.0	0.70	<3.0	0.50	<3.0	-0.40	<3.0
Barium	200	.4	0.30	<200	0.20	<200	0.50	<200	0.30	<200
Beryllium	1.0	.2	anr							
Bismuth	20	2.2								
Boron	100	1.9	anr							
Cadmium	3.0	.3	0.0	<3.0	0.30	<3.0	0.20	<3.0	0.20	<3.0
Calcium	5000	63	anr							
Chromium	10	.5	0.10	<10	-0.20	<10	0.10	<10	-0.20	<10
Cobalt	50	.4	anr							
Copper	10	.8	anr							
Iron	100	13	anr							
Lead	3.0	1.5	-0.30	<3.0	-0.10	<3.0	-0.50	<3.0	0.80	<3.0
Lithium	20	2.8								
Magnesium	5000	44	anr							
Manganese	15	.2	anr							
Molybdenum	20	.6	anr							
Nickel	10	.5	anr							
Palladium	50	3.1								
Potassium	10000	84	anr							
Selenium	10	3.5	1.2	<10	1.3	<10	1.6	<10	1.3	<10
Silicon	200	9.5								
Silver	10	.8	-0.30	<10	0.10	<10	-0.30	<10	-0.50	<10
Sodium	10000	19	anr							
Sulfur	50	6.4								
Strontium	10	.1								
Thallium	2.0	1.8	anr							
Tin	10	1.2	anr							
Titanium	10	.9								
Tungsten	50	1.9								
Vanadium	50	.7	anr							
Zinc	20	5.1	anr							

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA38672 Units: ug/l

Time:			14:08		15:14		16:21		17:28	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Zirconium	10	.5								

(*) Outside of QC limits
(anr) Analyte not requested

14.4.2 14

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA38672 Units: ug/l

Time:			18:34		19:17		20:23		21:30	
Sample ID:			CCB8		CCB9		CCB10		CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	15	anr							
Antimony	6.0	1.7	anr							
Arsenic	3.0	2.3	-0.70	<3.0	1.1	<3.0	-0.30	<3.0	-0.60	<3.0
Barium	200	.4	0.0	<200	0.30	<200	0.20	<200	0.40	<200
Beryllium	1.0	.2	anr							
Bismuth	20	2.2								
Boron	100	1.9	anr							
Cadmium	3.0	.3	0.20	<3.0	0.40	<3.0	0.0	<3.0	0.10	<3.0
Calcium	5000	63	anr							
Chromium	10	.5	0.20	<10	0.20	<10	-0.40	<10	-0.10	<10
Cobalt	50	.4	anr							
Copper	10	.8	anr							
Iron	100	13	anr							
Lead	3.0	1.5	1.0	<3.0	-0.30	<3.0	0.40	<3.0	0.10	<3.0
Lithium	20	2.8								
Magnesium	5000	44	anr							
Manganese	15	.2	anr							
Molybdenum	20	.6	anr							
Nickel	10	.5	anr							
Palladium	50	3.1								
Potassium	10000	84	anr							
Selenium	10	3.5	2.2	<10	1.0	<10	0.40	<10	1.6	<10
Silicon	200	9.5								
Silver	10	.8	0.10	<10	0.20	<10	-0.10	<10	0.10	<10
Sodium	10000	19	anr							
Sulfur	50	6.4								
Strontium	10	.1								
Thallium	2.0	1.8	anr							
Tin	10	1.2	anr							
Titanium	10	.9								
Tungsten	50	1.9								
Vanadium	50	.7	anr							
Zinc	20	5.1	anr							

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA38672 Units: ug/l

Time:			18:34		19:17		20:23		21:30	
Sample ID:			CCB8		CCB9		CCB10		CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Zirconium	10	.5								

(*) Outside of QC limits
(anr) Analyte not requested

14.4.2 14

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA38672 Units: ug/l

Time:			22:37		23:44		00:50		01:46	
Sample ID:			CCB12		CCB13		CCB14		CCB15	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	15	anr							
Antimony	6.0	1.7	anr							
Arsenic	3.0	2.3	-0.20	<3.0	0.20	<3.0	0.60	<3.0	0.40	<3.0
Barium	200	.4	0.60	<200	0.60	<200	0.40	<200	0.60	<200
Beryllium	1.0	.2	anr							
Bismuth	20	2.2								
Boron	100	1.9	anr							
Cadmium	3.0	.3	0.0	<3.0	0.0	<3.0	0.0	<3.0	0.10	<3.0
Calcium	5000	63	anr							
Chromium	10	.5	0.50	<10	0.60	<10	0.30	<10	0.20	<10
Cobalt	50	.4	anr							
Copper	10	.8	anr							
Iron	100	13	anr							
Lead	3.0	1.5	0.50	<3.0	1.7	<3.0	0.40	<3.0	0.10	<3.0
Lithium	20	2.8								
Magnesium	5000	44	anr							
Manganese	15	.2	anr							
Molybdenum	20	.6	anr							
Nickel	10	.5	anr							
Palladium	50	3.1								
Potassium	10000	84	anr							
Selenium	10	3.5	-1.1	<10	0.50	<10	2.0	<10	1.4	<10
Silicon	200	9.5								
Silver	10	.8	-0.10	<10	-0.50	<10	-0.30	<10	0.0	<10
Sodium	10000	19	anr							
Sulfur	50	6.4								
Strontium	10	.1								
Thallium	2.0	1.8	anr							
Tin	10	1.2	anr							
Titanium	10	.9								
Tungsten	50	1.9								
Vanadium	50	.7	anr							
Zinc	20	5.1	anr							

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA38672 Units: ug/l

Time:			22:37		23:44		00:50		01:46	
Sample ID:			CCB12		CCB13		CCB14		CCB15	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Zirconium	10	.5								

(*) Outside of QC limits
(anr) Analyte not requested

14.4.2 14

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA38672 Units: ug/l

Time:			02:29	
Sample ID:			CCB16	
Metal	RL	IDL	raw	final
Aluminum	200	15	anr	
Antimony	6.0	1.7	anr	
Arsenic	3.0	2.3	0.10	<3.0
Barium	200	.4	0.60	<200
Beryllium	1.0	.2	anr	
Bismuth	20	2.2		
Boron	100	1.9	anr	
Cadmium	3.0	.3	0.10	<3.0
Calcium	5000	63	anr	
Chromium	10	.5	0.40	<10
Cobalt	50	.4	anr	
Copper	10	.8	anr	
Iron	100	13	anr	
Lead	3.0	1.5	1.1	<3.0
Lithium	20	2.8		
Magnesium	5000	44	anr	
Manganese	15	.2	anr	
Molybdenum	20	.6	anr	
Nickel	10	.5	anr	
Palladium	50	3.1		
Potassium	10000	84	anr	
Selenium	10	3.5	0.10	<10
Silicon	200	9.5		
Silver	10	.8	-0.10	<10
Sodium	10000	19	anr	
Sulfur	50	6.4		
Strontium	10	.1		
Thallium	2.0	1.8	anr	
Tin	10	1.2	anr	
Titanium	10	.9		
Tungsten	50	1.9		
Vanadium	50	.7	anr	
Zinc	20	5.1	anr	

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL Run ID: MA38672 Units: ug/l

Time:			02:29	
Sample ID:			CCB16	
Metal	RL	IDL	raw	final
Zirconium	10	.5		

(*) Outside of QC limits
(anr) Analyte not requested

14.4.2
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CALIBRATION CHECK STANDARDS SUMMARY
Initial Continuing Calibration Check

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA38672 Units: ug/l

Time:		10:16	
Sample ID:	ICCV	ICCV1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	2000	1980	99.0
Barium	2000	2000	100.0
Beryllium	anr		
Bismuth			
Boron	anr		
Cadmium	2000	2000	100.0
Calcium	anr		
Chromium	2000	2020	101.0
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	2000	2010	100.5
Lithium			
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Palladium			
Potassium	anr		
Selenium	2000	1970	98.5
Silicon			
Silver	250	249	99.6
Sodium	anr		
Sulfur			
Strontium			
Thallium	anr		
Tin	anr		
Titanium			
Tungsten			
Vanadium	anr		
Zinc	anr		

CALIBRATION CHECK STANDARDS SUMMARY
Initial Continuing Calibration Check

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA38672 Units: ug/l

Time:		10:16	
Sample ID:	ICCV	ICCV1	
Metal	True	Results	% Rec
Zirconium			

(*) Outside of QC limits
(anr) Analyte not requested

14.4.3 14

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA38672 Units: ug/l

Time:		10:02			11:49			12:55	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1990	99.5	2000	1930	96.5	2000	1970	98.5
Barium	2000	2000	100.0	2000	2000	100.0	2000	2000	100.0
Beryllium	anr								
Bismuth									
Boron	anr								
Cadmium	2000	2010	100.5	2000	1960	98.0	2000	1990	99.5
Calcium	anr								
Chromium	2000	2000	100.0	2000	2000	100.0	2000	1990	99.5
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	2020	101.0	2000	1980	99.0	2000	2010	100.5
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Palladium									
Potassium	anr								
Selenium	2000	1990	99.5	2000	1920	96.0	2000	1970	98.5
Silicon									
Silver	250	247	98.8	250	246	98.4	250	245	98.0
Sodium	anr								
Sulfur									
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Tungsten									
Vanadium	anr								
Zinc	anr								

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA38672 Units: ug/l

Time:		10:02			11:49			12:55	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

14.4.4

14

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA38672 Units: ug/l

Time:		14:02			15:08			16:15	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1970	98.5	2000	1980	99.0	2000	1970	98.5
Barium	2000	1990	99.5	2000	2000	100.0	2000	2010	100.5
Beryllium	anr								
Bismuth									
Boron	anr								
Cadmium	2000	1990	99.5	2000	1990	99.5	2000	1980	99.0
Calcium	anr								
Chromium	2000	2020	101.0	2000	1990	99.5	2000	2000	100.0
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	2010	100.5	2000	2020	101.0	2000	2020	101.0
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Palladium									
Potassium	anr								
Selenium	2000	1970	98.5	2000	1960	98.0	2000	1960	98.0
Silicon									
Silver	250	248	99.2	250	245	98.0	250	246	98.4
Sodium	anr								
Sulfur									
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Tungsten									
Vanadium	anr								
Zinc	anr								

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA38672 Units: ug/l

Time:		14:02			15:08			16:15	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

14.4.4

14

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA38672 Units: ug/l

Time:		17:22			18:28			19:11	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1960	98.0	2000	1970	98.5	2000	1960	98.0
Barium	2000	2010	100.5	2000	2010	100.5	2000	2020	101.0
Beryllium	anr								
Bismuth									
Boron	anr								
Cadmium	2000	2000	100.0	2000	1990	99.5	2000	1990	99.5
Calcium	anr								
Chromium	2000	2020	101.0	2000	2010	100.5	2000	2000	100.0
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	2010	100.5	2000	2000	100.0	2000	2000	100.0
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Palladium									
Potassium	anr								
Selenium	2000	1960	98.0	2000	1960	98.0	2000	1960	98.0
Silicon									
Silver	250	248	99.2	250	248	99.2	250	246	98.4
Sodium	anr								
Sulfur									
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Tungsten									
Vanadium	anr								
Zinc	anr								

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA38672 Units: ug/l

Time:		17:22			18:28			19:11	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

14.4.4

14

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA38672 Units: ug/l

Time:		20:18			21:24			22:31	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1960	98.0	2000	1940	97.0	2000	1910	95.5
Barium	2000	2020	101.0	2000	2030	101.5	2000	2000	100.0
Beryllium	anr								
Bismuth									
Boron	anr								
Cadmium	2000	1980	99.0	2000	1960	98.0	2000	1920	96.0
Calcium	anr								
Chromium	2000	2000	100.0	2000	2000	100.0	2000	1990	99.5
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	2010	100.5	2000	2010	100.5	2000	2010	100.5
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Palladium									
Potassium	anr								
Selenium	2000	1950	97.5	2000	1930	96.5	2000	1900	95.0
Silicon									
Silver	250	246	98.4	250	246	98.4	250	244	97.6
Sodium	anr								
Sulfur									
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Tungsten									
Vanadium	anr								
Zinc	anr								

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA38672 Units: ug/l

Time:		20:18			21:24			22:31	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

14.4.4

14

SGS ACCUTEST JC13575

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA38672 Units: ug/l

Time:		23:38			00:45			01:40	
Sample ID:	CCV	CCV12		CCV	CCV13		CCV	CCV14	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1890	94.5	2000	1890	94.5	2000	1870	93.5
Barium	2000	1990	99.5	2000	2010	100.5	2000	1970	98.5
Beryllium	anr								
Bismuth									
Boron	anr								
Cadmium	2000	1890	94.5	2000	1890	94.5	2000	1860	93.0
Calcium	anr								
Chromium	2000	2010	100.5	2000	2010	100.5	2000	2020	101.0
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	2010	100.5	2000	2020	101.0	2000	2010	100.5
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Palladium									
Potassium	anr								
Selenium	2000	1880	94.0	2000	1870	93.5	2000	1860	93.0
Silicon									
Silver	250	244	97.6	250	244	97.6	250	244	97.6
Sodium	anr								
Sulfur									
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Tungsten									
Vanadium	anr								
Zinc	anr								

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA38672 Units: ug/l

Time:		23:38			00:45			01:40	
Sample ID:	CCV	CCV12		CCV	CCV13		CCV	CCV14	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

14.4.4

14

SGS ACCUTEST JC13575

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA38672 Units: ug/l

Time:		02:23	
Sample ID:	CCV	CCV15	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	2000	1870	93.5
Barium	2000	1980	99.0
Beryllium	anr		
Bismuth			
Boron	anr		
Cadmium	2000	1860	93.0
Calcium	anr		
Chromium	2000	2010	100.5
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	2000	2010	100.5
Lithium			
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Palladium			
Potassium	anr		
Selenium	2000	1850	92.5
Silicon			
Silver	250	244	97.6
Sodium	anr		
Sulfur			
Strontium			
Thallium	anr		
Tin	anr		
Titanium			
Tungsten			
Vanadium	anr		
Zinc	anr		

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA38672 Units: ug/l

Time:		02:23	
Sample ID:	CCV	CCV15	
Metal	True	Results	% Rec
Zirconium			

(*) Outside of QC limits
(anr) Analyte not requested

14.4.4

14

HIGH STANDARD CHECK SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA38672 Units: ug/l

Time:		11:18			11:25	
Sample ID:	HSTD	HSTD1		HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	anr					
Antimony						
Arsenic				5000	4910	98.2
Barium				5000	5020	100.4
Beryllium						
Bismuth						
Boron						
Cadmium				5000	4930	98.6
Calcium	anr					
Chromium				5000	5070	101.4
Cobalt						
Copper						
Iron	anr					
Lead				5000	4990	99.8
Lithium						
Magnesium	anr					
Manganese						
Molybdenum						
Nickel						
Palladium						
Potassium	anr					
Selenium				5000	4880	97.6
Silicon						
Silver				625	612	97.9
Sodium	anr					
Sulfur						
Strontium						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium						
Zinc						

HIGH STANDARD CHECK SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA38672 Units: ug/l

Time:		11:18			11:25	
Sample ID:	HSTD	HSTD1		HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results	% Rec
Zirconium						

(*) Outside of QC limits
(anr) Analyte not requested

14.4.5 14

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA38672 Units: ug/l

Time:				10:35		10:48		10:54	
Sample ID:	CRI	CRIA	CRID	CRI1		CRID1		CRIA1	
Metal	True	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	200	500	100	anr					
Antimony	6.0	20	3.0	anr					
Arsenic	8.0	20	3.0	7.4	92.5	2.2	73.3	20.2	101.0
Barium	200		4.0	206	103.0	3.8	95.0		
Beryllium	2.0		1.0	anr					
Bismuth	20								
Boron	100		10	anr					
Cadmium	3.0		1.0	3.1	103.3	0.90	90.0		
Calcium	5000	2000	1000	anr					
Chromium	10		2.0	10.2	102.0	1.8	90.0		
Cobalt	50		3.0	anr					
Copper	10		2.0	anr					
Iron	100	500		anr					
Lead	3.0	20	2.5	2.6	86.7	2.4	96.0	21.6	108.0
Lithium	20								
Magnesium	5000	2000	100	anr					
Manganese	15		3.0	anr					
Molybdenum	20			anr					
Nickel	10		4.0	anr					
Palladium	50								
Potassium	5000		2000	anr					
Selenium	10	20	5.0	9.9	99.0	5.7	114.0	23.4	117.0
Silicon	200								
Silver	5.0		2.0	4.6	92.0	1.4	70.0		
Sodium	5000		1000	anr					
Sulfur	50								
Strontium	10								
Thallium	10		2.0	anr					
Tin	10			anr					
Titanium	10								
Tungsten	50								
Vanadium	50		2.0	anr					
Zinc	20		10	anr					

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA38672 Units: ug/l

Time:				10:35		10:48		10:54	
Sample ID:	CRI	CRIA	CRID	CRI1		CRID1		CRIA1	
Metal	True	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Zirconium	10								

(*) Outside of QC limits
(anr) Analyte not requested

14.4.6

14

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA38672 Units: ug/l

Time:				12:01		18:40		18:46	
Sample ID:	CRI	CRIA	CRID	CRID2		CRI2		CRID3	
Metal	True	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	200	500	100	anr					
Antimony	6.0	20	3.0	anr					
Arsenic	8.0	20	3.0	3.7	123.3	7.2	90.0	3.2	106.7
Barium	200		4.0	4.1	102.5	208	104.0	3.9	97.5
Beryllium	2.0		1.0	anr					
Bismuth	20								
Boron	100		10	anr					
Cadmium	3.0		1.0	1.1	110.0	3.2	106.7	1.0	100.0
Calcium	5000	2000	1000	anr					
Chromium	10		2.0	2.1	105.0	10.0	100.0	1.8	90.0
Cobalt	50		3.0	anr					
Copper	10		2.0	anr					
Iron	100	500							
Lead	3.0	20	2.5	3.1	124.0	2.4	80.0	1.9	76.0
Lithium	20								
Magnesium	5000	2000	100	anr					
Manganese	15		3.0	anr					
Molybdenum	20								
Nickel	10		4.0	anr					
Palladium	50								
Potassium	5000		2000	anr					
Selenium	10	20	5.0	6.5	130.0	12.8	128.0	5.0	100.0
Silicon	200								
Silver	5.0		2.0	1.4	70.0	5.1	102.0	1.3	65.0*(a)
Sodium	5000		1000	anr					
Sulfur	50								
Strontium	10								
Thallium	10		2.0	anr					
Tin	10								
Titanium	10								
Tungsten	50								
Vanadium	50		2.0	anr					
Zinc	20		10	anr					

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA38672 Units: ug/l

Time:				12:01		18:40		18:46	
Sample ID:	CRI	CRIA	CRID	CRID2		CRI2		CRID3	
Metal	True	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Zirconium	10								

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element at this RL in the area bracketed by this QC.

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA38672 Units: ug/l

Time:				18:52		01:52		01:58	
Sample ID:	CRI	CRIA	CRID	CRIA2		CRI3		CRID4	
Metal	True	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	200	500	100	anr					
Antimony	6.0	20	3.0	anr					
Arsenic	8.0	20	3.0	20.0	100.0	6.8	85.0	2.3	76.7
Barium	200		4.0			202	101.0	4.1	102.5
Beryllium	2.0		1.0						
Bismuth	20								
Boron	100		10						
Cadmium	3.0		1.0			2.7	90.0	0.90	90.0
Calcium	5000	2000	1000	anr					
Chromium	10		2.0			10.1	101.0	1.6	80.0
Cobalt	50		3.0						
Copper	10		2.0						
Iron	100	500		anr					
Lead	3.0	20	2.5	21.5	107.5	3.1	103.3	3.5	140.0*(a
Lithium	20								
Magnesium	5000	2000	100	anr					
Manganese	15		3.0						
Molybdenum	20								
Nickel	10		4.0						
Palladium	50								
Potassium	5000		2000						
Selenium	10	20	5.0	23.4	117.0	9.3	93.0	6.4	128.0
Silicon	200								
Silver	5.0		2.0			4.6	92.0	1.0	50.0*(a)
Sodium	5000		1000						
Sulfur	50								
Strontium	10								
Thallium	10		2.0						
Tin	10								
Titanium	10								
Tungsten	50								
Vanadium	50		2.0						
Zinc	20		10						

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA38672 Units: ug/l

Time:				18:52		01:52		01:58	
Sample ID:	CRI	CRIA	CRID	CRIA2		CRI3		CRID4	
Metal	True	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Zirconium	10								

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element at this RL in the area bracketed by this QC.

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA38672 Units: ug/l

Time:				02:04	
Sample ID:	CRI	CRIA	CRID	CRIA3	
Metal	True	True	True	Results	% Rec
Aluminum	200	500	100	anr	
Antimony	6.0	20	3.0	anr	
Arsenic	8.0	20	3.0	20.1	100.5
Barium	200		4.0		
Beryllium	2.0		1.0		
Bismuth	20				
Boron	100		10		
Cadmium	3.0		1.0		
Calcium	5000	2000	1000	anr	
Chromium	10		2.0		
Cobalt	50		3.0		
Copper	10		2.0		
Iron	100	500		anr	
Lead	3.0	20	2.5	21.3	106.5
Lithium	20				
Magnesium	5000	2000	100	anr	
Manganese	15		3.0		
Molybdenum	20				
Nickel	10		4.0		
Palladium	50				
Potassium	5000		2000		
Selenium	10	20	5.0	21.5	107.5
Silicon	200				
Silver	5.0		2.0		
Sodium	5000		1000		
Sulfur	50				
Strontium	10				
Thallium	10		2.0		
Tin	10				
Titanium	10				
Tungsten	50				
Vanadium	50		2.0		
Zinc	20		10		

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 70 to 130 % Recovery Run ID: MA38672 Units: ug/l

Time:				02:04	
Sample ID:	CRI	CRIA	CRID	CRIA3	
Metal	True	True	True	Results	% Rec
Zirconium	10				

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA38672 Units: ug/l

Time:			11:00		11:06		18:59		19:05	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	507000	101.4	505000	101.0	497000	99.4	505000	101.0
Antimony		1000	-4.4		1020	102.0	-6.1		997	99.7
Arsenic		1000	3.8		1010	101.0	2.7		1000	100.0
Barium		500	-0.70		487	97.4	-0.90		487	97.4
Beryllium		500	0.0		475	95.0	0.0		462	92.4
Bismuth		500	-2.6		497	99.4	-0.30		487	97.4
Boron			2.7		0.70		3.1		-0.40	
Cadmium		1000	0.20		1020	102.0	0.10		1000	100.0
Calcium	400000	400000	390000	97.5	401000	100.3	382000	95.5	398000	99.5
Chromium		500	-1.0		488	97.6	-1.3		482	96.4
Cobalt		500	1.2		464	92.8	1.4		461	92.2
Copper		500	0.10		494	98.8	-0.30		486	97.2
Iron	200000	200000	200000	100.0	202000	101.0	195000	97.5	196000	98.0
Lead		1000	1.2		943	94.3	-0.40		943	94.3
Lithium		500	6.3		482	96.4	7.9		484	96.8
Magnesium	500000	500000	481000	96.2	486000	97.2	471000	94.2	477000	95.4
Manganese		500	1.7		476	95.2	1.4		466	93.2
Molybdenum		500	-2.3		486	97.2	-2.2		479	95.8
Nickel		1000	2.2		955	95.5	2.4		948	94.8
Palladium		500	-18		510	102.0	-16		508	101.6
Potassium			120		118		165		174	
Selenium		1000	8.7		1050	105.0	1.0		1040	104.0
Silicon			-9.8		-5.2		-14		-5.8	
Silver		1000	7.9		1050	105.0	3.7		1030	103.0
Sodium			-22		-17		-17		-8.6	
Sulfur		500	-22		516	103.2	-25		521	104.2
Strontium			-0.70		-0.40		0.0		-0.10	
Thallium		1000	-2.1		928	92.8	-2.9		937	93.7
Tin			-4.1		-4.3		-3.6		-4.1	
Titanium			1.5		1.4		1.4		1.4	
Tungsten		500	3.2		479	95.8	2.7		469	93.8
Vanadium		500	1.6		478	95.6	2.1		471	94.2
Zinc		1000	1.3		933	93.3	1.8		925	92.5

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA38672 Units: ug/l

Time:			11:00		11:06		18:59		19:05	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Zirconium		500	8.4		471	94.2	8.2		450	90.0

(*) Outside of QC limits
(anr) Analyte not requested

14.4.7
14

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA38672 Units: ug/l

Time:			02:10		02:16	
Sample ID:	ICSA	ICSAB	ICSA3		ICSAB3	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	500000	500000	516000	103.2	521000	104.2
Antimony		1000	-3.3		949	94.9
Arsenic		1000	2.5		963	96.3
Barium		500	-0.80		479	95.8
Beryllium		500	0.0		454	90.8
Bismuth		500	-4.6		469	93.8
Boron			1.6		1.7	
Cadmium		1000	0.0		947	94.7
Calcium	400000	400000	386000	96.5	397000	99.3
Chromium		500	-0.70		487	97.4
Cobalt		500	1.4		469	93.8
Copper		500	-0.50		491	98.2
Iron	200000	200000	192000	96.0	194000	97.0
Lead		1000	3.3		946	94.6
Lithium		500	7.4		501	100.2
Magnesium	500000	500000	482000	96.4	486000	97.2
Manganese		500	-0.20		459	91.8
Molybdenum		500	-1.7		465	93.0
Nickel		1000	2.1		935	93.5
Palladium		500	-13		516	103.2
Potassium			170		226	
Selenium		1000	-4.0		981	98.1
Silicon			-11		-1.3	
Silver		1000	-7.4		1030	103.0
Sodium			65.8		81.8	
Sulfur		500	-20		496	99.2
Strontium			0.10		1.0	
Thallium		1000	-1.6		920	92.0
Tin			-4.2		-4.7	
Titanium			1.5		2.6	
Tungsten		500	2.9		460	92.0
Vanadium		500	2.1		471	94.2
Zinc		1000	0.70		915	91.5

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: SD020416M1.ICP Date Analyzed: 02/04/16 Methods: EPA 200.7, SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA38672 Units: ug/l

Time:			02:10		02:16	
Sample ID:	ICSA	ICSAB	ICSA3		ICSAB3	
Metal	True	True	Results	% Rec	Results	% Rec
Zirconium		500	6.5		445	89.0

(*) Outside of QC limits
(anr) Analyte not requested

14.4.7

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BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

QC Batch ID: MP91873
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 02/04/16

Metal	RL	IDL	MDL	MB raw	final
Aluminum	1.0	.05	.16		
Antimony	0.50	.0075	.015		
Arsenic	0.50	.006	.0099	0.00070	<0.50
Barium	1.0	.001	.004	0.0042	<1.0
Beryllium	0.025	.0005	.0018		
Bismuth	0.10	.008	.021		
Boron	0.50	.0065	.022		
Cadmium	0.025	.0015	.0014	0.00020	<0.025
Calcium	10	.039	.11		
Chromium	0.050	.0025	.0039	0.00060	<0.050
Cobalt	0.25	.0015	.0027		
Copper	0.050	.004	.0093		
Iron	0.50	.015	.1		
Lead	0.50	.0075	.012	0.0056	<0.50
Lithium	0.10	.004	.019		
Magnesium	10	.097	.25		
Manganese	0.075	.0005	.0009		
Molybdenum	0.10	.002	.0043		
Nickel	0.050	.0025	.004		
Palladium	0.25	.011	.022		
Potassium	10	.18	.33		
Selenium	0.50	.014	.016	0.0073	<0.50
Silicon	1.0	.012	.11		
Silver	0.050	.0035	.0066	0.00060	<0.050
Sodium	10	.045	.18		
Strontium	0.050	.0005	.0018		
Sulfur	0.25	.018	.036		
Thallium	0.50	.0075	.0087		
Tin	0.050	.0055	.0096		
Titanium	0.050	.0035	.0043		
Tungsten	0.25	.007	.028		
Vanadium	0.25	.002	.0035		
Zinc	0.10	.0015	.024		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

QC Batch ID: MP91873
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 02/04/16

Metal	RL	IDL	MDL	MB raw	final
Zirconium	0.050	.0015	.0036		

Associated samples MP91873: JC13575-1, JC13575-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

QC Batch ID: MP91873
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 02/03/16

Metal	JC13480-1A Original	MS	Spikelot MPSPK1	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	0.0	2.0	2.0	100.0	75-125
Barium	0.48	2.4	2.0	96.0	75-125
Beryllium					
Bismuth					
Boron					
Cadmium	0.0	2.0	2.0	100.0	75-125
Chromium	0.063	2.1	2.0	101.9	75-125
Cobalt					
Copper	anr				
Iron					
Lead	0.0	2.0	2.0	100.0	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum					
Nickel	anr				
Palladium					
Potassium					
Selenium	0.0	2.0	2.0	100.0	75-125
Silicon					
Silver	0.0	0.25	0.25	100.0	75-125
Sodium					
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium					
Zinc	anr				
Zirconium					

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

QC Batch ID: MP91873 | Methods: SW846 6010C
Matrix Type: LEACHATE | Units: mg/l

Prep Date: 02/03/16

Metal	JC13480-1A Original MS	Spikelot MPSPK1	% Rec	QC Limits

Associated samples MP91873: JC13575-1, JC13575-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

14.5.2 14

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

QC Batch ID: MP91873
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 02/03/16

Metal	JC13480-1A Original	MSD	Spikelot MPSPK1	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	0.0	2.0	2.0	100.0	0.0	20
Barium	0.48	2.4	2.0	96.0	0.0	20
Beryllium						
Bismuth						
Boron						
Cadmium	0.0	2.0	2.0	100.0	0.0	20
Chromium	0.063	2.1	2.0	101.9	0.0	20
Cobalt						
Copper	anr					
Iron						
Lead	0.0	2.0	2.0	100.0	0.0	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel	anr					
Palladium						
Potassium						
Selenium	0.0	2.0	2.0	100.0	0.0	20
Silicon						
Silver	0.0	0.25	0.25	100.0	0.0	20
Sodium						
Strontium						
Sulfur						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium						
Zinc	anr					
Zirconium						

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

QC Batch ID: MP91873
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 02/03/16

Metal	JC13480-1A Original MSD	Spikelot MPSPK1	% Rec	MSD RPD	QC Limit

Associated samples MP91873: JC13575-1, JC13575-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

14.5.2

14

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

QC Batch ID: MP91873
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 02/04/16

Metal	BSP Result	Spikelot MPSPK1	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	1.9	2.0	95.0	80-120
Barium	1.9	2.0	95.0	80-120
Beryllium				
Bismuth				
Boron				
Cadmium	1.9	2.0	95.0	80-120
Calcium				
Chromium	2.0	2.0	100.0	80-120
Cobalt				
Copper				
Iron				
Lead	2.0	2.0	100.0	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Palladium				
Potassium				
Selenium	1.9	2.0	95.0	80-120
Silicon				
Silver	0.24	0.25	96.0	80-120
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc				

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

QC Batch ID: MP91873
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 02/04/16

Metal	BSP Result	Spikelot MPSPK1	% Rec	QC Limits
Zirconium				

Associated samples MP91873: JC13575-1, JC13575-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

QC Batch ID: MP91873
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: ug/l

Prep Date: 02/03/16

Metal	JC13480-1A Original	SDL 5:25	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	0.00	0.00	NC	0-10
Barium	479	472	1.4	0-10
Beryllium				
Bismuth				
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	63.4	62.6	1.3	0-10
Cobalt				
Copper	anr			
Iron				
Lead	0.00	0.00	NC	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Palladium				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc	anr			

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

QC Batch ID: MP91873
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: ug/l

Prep Date: 02/03/16

Metal	JC13480-1A Original SDL 5:25 %DIF	QC Limits
Zirconium		

Associated samples MP91873: JC13575-1, JC13575-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

QC Batch ID: MP91877
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 02/04/16

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.00020	.000031	.000069	0.000014	<0.00020

Associated samples MP91877: JC13575-1, JC13575-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

QC Batch ID: MP91877
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 02/03/16

Metal	JC13480-1A Original MS		Spikelot HGPW3	% Rec	QC Limits
Mercury	0.00030	0.0020	0.0020	85.0	75-125

Associated samples MP91877: JC13575-1, JC13575-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

QC Batch ID: MP91877
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 02/03/16

Metal	JC13480-1A Original	MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.00030	0.0019	0.0020	80.0	5.1	20

Associated samples MP91877: JC13575-1, JC13575-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

14.6.2

14

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

QC Batch ID: MP91877
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date:		02/03/16				02/04/16		
Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits	LCS Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0017	0.0020	85.0	80-120	0.0018	0.0020	90.0	80-120

Associated samples MP91877: JC13575-1, JC13575-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC
- Percent Solids Raw Data Summary

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Cyanide Reactivity	GP95434/GN40383	10	0.0	mg/kg	100	19.2	19.2	.5-25%
Sulfide Reactivity	GP95435/GN40375	100	0.0	mg/kg	408	378	92.6	42-112%

Associated Samples:
Batch GP95434: JC13575-1, JC13575-3, JC13575-5, JC13575-7
Batch GP95435: JC13575-1, JC13575-3, JC13575-5, JC13575-7
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Corrosivity as pH	GN40503	JC13885-5A	su	8.04	7.63		0-6%
Cyanide Reactivity	GP95434/GN40383	JC13621-1A	mg/kg	0.0	0.0	0.0	0-20%
Ignitability (Flashpoint)	GN40495	JC13575-7	Deg. F	>200	>200	0.0	0-20%
Sulfide Reactivity	GP95435/GN40375	JC13621-1A	mg/kg	0.00	0.00	0.0	0-20%

Associated Samples:
Batch GN40495: JC13575-1, JC13575-3, JC13575-5, JC13575-7
Batch GN40503: JC13575-1, JC13575-3, JC13575-5, JC13575-7
Batch GP95434: JC13575-1, JC13575-3, JC13575-5, JC13575-7
Batch GP95435: JC13575-1, JC13575-3, JC13575-5, JC13575-7
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Sulfide Reactivity	GP95435/GN40375	JC13621-1A	mg/kg	0.00	483	140	29.0	.5-76%

Associated Samples:
Batch GP95435: JC13575-1, JC13575-3, JC13575-5, JC13575-7
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: D020816W1.CN Date Analyzed: 02/08/16 Methods: EPA 335.4/LACHAT, SW846 9012B/LACHAT, SW846 CHAP
Analyst: BM Run ID: GN40383
Parameters: Cyanide Reactivity

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:16	GN40383-STD1	1		STDA
11:17	GN40383-STD2	1		STDB
11:18	GN40383-STD3	1		STDC
11:19	GN40383-STD4	1		STDD
11:20	GN40383-STD5	1		STDE
11:21	GN40383-STD6	1		STDF
11:22	GN40383-STD7	1		STDG
11:23	GN40383-ICV1	1		
11:24	GN40383-ICB1	1		
11:25	GN40383-CCV1	1		
11:26	GN40383-CCB1	1		
11:27	GP95416-MB1	1		
11:28	GP95416-B1	1		
11:29	GP95416-S1	1		
11:30	GP95416-S2	1		
11:31	GP95416-D1	1		
11:32	ZZZZZZ	1		
11:33	JC13446-38A	1		(sample used for QC only; not part of login JC13575)
11:34	ZZZZZZ	1		
11:35	ZZZZZZ	1		
11:36	ZZZZZZ	1		
11:37	GN40383-CCV2	1		
11:38	GN40383-CCB2	1		
11:39	ZZZZZZ	1		
11:40	ZZZZZZ	1		
11:41	ZZZZZZ	1		
11:42	ZZZZZZ	1		
11:43	ZZZZZZ	1		
11:44	ZZZZZZ	1		
11:45	JC13446-49A	1		(sample used for QC only; not part of login JC13575)
11:46	ZZZZZZ	1		
11:47	ZZZZZZ	1		
11:48	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: D020816W1.CN Date Analyzed: 02/08/16 Methods: EPA 335.4/LACHAT, SW846 9012B/LACHAT, SW846 CHAP
Analyst: BM Run ID: GN40383
Parameters: Cyanide Reactivity

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:49	GN40383-CCV3	1		
11:50	GN40383-CCB3	1		
11:51	ZZZZZZ	1		
11:52	ZZZZZZ	1		
11:53	GP95417-MB1	1		BSP failed low. back to need.
11:54	GP95417-B1	1		BSP failed low. back to need.
11:55	GP95417-S1	1		BSP failed low. back to need.
11:56	GP95417-S2	1		BSP failed low. back to need.
11:57	GP95417-D1	1		BSP failed low. back to need.
11:59	ZZZZZZ	1		
12:00	ZZZZZZ	1		
12:01	JC13446-19A	1		(sample used for QC only; not part of login JC13575)
12:02	GN40383-CCV4	1		
12:03	GN40383-CCB4	1		
12:04	ZZZZZZ	1		
12:05	ZZZZZZ	1		
12:06	JC13446-22A	1		(sample used for QC only; not part of login JC13575)
12:07	ZZZZZZ	1		
12:08	ZZZZZZ	1		
12:09	ZZZZZZ	1		
12:10	ZZZZZZ	1		
12:11	ZZZZZZ	1		
12:12	ZZZZZZ	1		
12:13	ZZZZZZ	1		
12:14	GN40383-CCV5	1		
12:15	GN40383-CCB5	1		
12:16	ZZZZZZ	1		
12:17	ZZZZZZ	1		
12:18	ZZZZZZ	1		
12:19	ZZZZZZ	1		
12:20	ZZZZZZ	1		
12:21	ZZZZZZ	1		
12:22	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: D020816W1.CN Date Analyzed: 02/08/16 Methods: EPA 335.4/LACHAT, SW846 9012B/LACHAT, SW846 CHAP
Analyst: BM Run ID: GN40383
Parameters: Cyanide Reactivity

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:23	GP95433-MB1	1		
12:24	GP95433-B1	1		
12:25	GP95433-S1	1		
12:26	GN40383-CCV6	1		
12:27	GN40383-CCB6	1		
12:28	GP95433-S2	1		%sol
12:29	GP95433-D1	1		
12:30	JC13739-1	1		(sample used for QC only; not part of login JC13575)
12:31	ZZZZZZ	1		
12:32	ZZZZZZ	1		
12:33	ZZZZZZ	1		
12:34	ZZZZZZ	1		
12:35	JC13866-1	1		(sample used for QC only; not part of login JC13575)
12:36	ZZZZZZ	1		
12:37	ZZZZZZ	1		
12:38	GN40383-CCV7	1		
12:39	GN40383-CCB7	1		
12:40	ZZZZZZ	1		
12:41	ZZZZZZ	1		
12:42	ZZZZZZ	1		
12:43	ZZZZZZ	1		
12:44	ZZZZZZ	1		
12:45	ZZZZZZ	1		
12:46	ZZZZZZ	1		
12:47	ZZZZZZ	1		
12:48	ZZZZZZ	1		
12:49	ZZZZZZ	1		
12:50	GN40383-CCV8	1		
12:51	GN40383-CCB8	1		
12:52	GP95415-MB2	1		
12:53	GP95415-B2	1		
12:54	ZZZZZZ	1		
12:55	JC13848-5A	1		(sample used for QC only; not part of login JC13575)

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: D020816W1.CN Date Analyzed: 02/08/16 Methods: EPA 335.4/LACHAT, SW846 9012B/LACHAT, SW846 CHAP
Analyst: BM Run ID: GN40383
Parameters: Cyanide Reactivity

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:56	ZZZZZZ	1		
12:57	JC12475-33	1		(sample used for QC only; not part of login JC13575)
12:58	ZZZZZZ	1		
12:59	GP95432-MB1	1		
13:01	GP95432-B1	1		
13:02	GP95432-S1	1		
13:03	GN40383-CCV9	1		
13:04	GN40383-CCB9	1		
13:05	GP95432-S2	1		
13:06	GP95432-D1	1		
13:07	ZZZZZZ	1		
13:08	JC13863-1A	1		(sample used for QC only; not part of login JC13575)
13:09	ZZZZZZ	1		
13:10	ZZZZZZ	1		
13:11	GP95415-MB1	1		BSP failed low. back to need.
13:12	GP95415-B1	1		BSP failed low. back to need.
13:13	GP95415-S1	1		BSP failed low. back to need.
13:14	GP95415-S2	1		BSP failed low. back to need.
13:15	GN40383-CCV10	1		
13:16	GN40383-CCB10	1		
13:17	GP95415-D1	1		BSP failed low. back to need.
13:18	ZZZZZZ	1		
13:19	JC13639-2	1		(sample used for QC only; not part of login JC13575)
13:20	JC13639-3	1		(sample used for QC only; not part of login JC13575)
13:21	ZZZZZZ	1		
13:22	ZZZZZZ	1		
13:23	ZZZZZZ	1		
13:24	ZZZZZZ	1		
13:25	ZZZZZZ	1		
13:26	ZZZZZZ	1		
13:27	GN40383-CCV11	1		
13:28	GN40383-CCB11	1		
13:29	GP95434-MB1	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: D020816W1.CN Date Analyzed: 02/08/16 Methods: EPA 335.4/LACHAT, SW846 9012B/LACHAT, SW846 CHAP
Analyst: BM Run ID: GN40383
Parameters: Cyanide Reactivity

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:30	GP95434-B1	1		
13:31	GP95434-D1	1		
13:32	JC13621-1A	1		(sample used for QC only; not part of login JC13575)
13:33	ZZZZZZ	1		
13:34	ZZZZZZ	1		
13:35	ZZZZZZ	1		
13:36	ZZZZZZ	1		
13:37	JC13575-1	1		
13:38	JC13575-3	1		
13:39	GN40383-CCV12	1		
13:40	GN40383-CCB12	1		
13:41	JC13575-5	1		
13:42	JC13575-7	1		
13:43	ZZZZZZ	1		
13:44	ZZZZZZ	1		
13:45	ZZZZZZ	1		
13:46	ZZZZZZ	1		
13:47	ZZZZZZ	1		
13:48	ZZZZZZ	1		
13:49	ZZZZZZ	1		
13:50	ZZZZZZ	1		
13:51	GN40383-CCV13	1		
13:52	GN40383-CCB13	1		
13:53	ZZZZZZ	1		
13:54	GP95164-MB5	1		
13:55	GP95164-B5	1		
13:56	ZZZZZZ	1		
13:59	GN40383-CCV14	1		
14:00	GN40383-CCB14	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: JC13575
Account: LSRPNJL - LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

File ID: D020816W1.CN Date Analyzed: 02/08/16 Methods: EPA 335.4/LACHAT, SW846 9012B/LACHAT, SW846 CHAP
Run ID: GN40383 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN40383-ICV1	Cyanide	0.29	0.010	0.0024	.3	96.7	90-110
GN40383-ICB1	Cyanide	-0.0055	0.010	0.0024			
GN40383-CCV1	Cyanide	0.38	0.010	0.0024	.4	95.0	90-110
GN40383-CCB1	Cyanide	-0.0044	0.010	0.0024			
GN40383-CCV2	Cyanide	0.38	0.010	0.0024	.4	95.0	90-110
GN40383-CCB2	Cyanide	-0.0039	0.010	0.0024			
GN40383-CCV3	Cyanide	0.38	0.010	0.0024	.4	95.0	90-110
GN40383-CCB3	Cyanide	0.0024 U	0.010	0.0024			
GN40383-CCV4	Cyanide	0.38	0.010	0.0024	.4	95.0	90-110
GN40383-CCB4	Cyanide	0.0024 U	0.010	0.0024			
GN40383-CCV5	Cyanide	0.38	0.010	0.0024	.4	95.0	90-110
GN40383-CCB5	Cyanide	0.0024 U	0.010	0.0024			
GN40383-CCV6	Cyanide	0.38	0.010	0.0024	.4	95.0	90-110
GN40383-CCB6	Cyanide	0.0024 U	0.010	0.0024			
GN40383-CCV7	Cyanide	0.39	0.010	0.0024	.4	97.5	90-110
GN40383-CCB7	Cyanide	0.0024 U	0.010	0.0024			
GN40383-CCV8	Cyanide	0.39	0.010	0.0024	.4	97.5	90-110
GN40383-CCB8	Cyanide	0.0024 U	0.010	0.0024			
GN40383-CCV9	Cyanide	0.39	0.010	0.0024	.4	97.5	90-110
GN40383-CCB9	Cyanide	-0.0033	0.010	0.0024			
GN40383-CCV10	Cyanide	0.39	0.010	0.0024	.4	97.5	90-110
GN40383-CCB10	Cyanide	0.0024 U	0.010	0.0024			
GN40383-CCV11	Cyanide	0.38	0.010	0.0024	.4	95.0	90-110
GN40383-CCB11	Cyanide	-0.0030	0.010	0.0024			
GN40383-CCV12	Cyanide	0.39	0.010	0.0024	.4	97.5	90-110
GN40383-CCB12	Cyanide	-0.0025	0.010	0.0024			
GN40383-CCV13	Cyanide	0.38	0.010	0.0024	.4	95.0	90-110
GN40383-CCB13	Cyanide	0.0024 U	0.010	0.0024			
GN40383-CCV14	Cyanide	0.39	0.010	0.0024	.4	97.5	90-110
GN40383-CCB14	Cyanide	-0.0036	0.010	0.0024			

(!) Outside of QC limits

Percent Solids Raw Data Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample: JC13575-1 **Analyzed:** 03-FEB-16 by SP **Method:** SM2540 G-97
ClientID: COMPOSITE SOILPILE AI020216 BORINGS: AL020216-N1,N2,N3,N4,N5

Wet Weight (Total)	25.97	g
Tare Weight	19.48	g
Dry Weight (Total)	25.2	g
Solids, Percent	88.1	%

Sample: JC13575-2 **Analyzed:** 03-FEB-16 by SP **Method:** SM2540 G-97
ClientID: BORING AL020216-N1

Wet Weight (Total)	25.42	g
Tare Weight	19.32	g
Dry Weight (Total)	24.82	g
Solids, Percent	90.2	%

Sample: JC13575-3 **Analyzed:** 03-FEB-16 by SP **Method:** SM2540 G-97
ClientID: COMPOSITE SOILPILE AI020216 BORINGS: AL020216-S1,S2,S3,S4,S5

Wet Weight (Total)	24.33	g
Tare Weight	19.12	g
Dry Weight (Total)	23.89	g
Solids, Percent	91.6	%

Sample: JC13575-4 **Analyzed:** 03-FEB-16 by SP **Method:** SM2540 G-97
ClientID: BORING AL020216-S1

Wet Weight (Total)	33.4	g
Tare Weight	27.06	g
Dry Weight (Total)	32.68	g
Solids, Percent	88.6	%

Sample: JC13575-5 **Analyzed:** 03-FEB-16 by SP **Method:** SM2540 G-97
ClientID: COMPOSITE SOILPILE AI020216 BORINGS:AL020216-N6,N7,N8,N9,N10

Wet Weight (Total)	26.8	g
Tare Weight	21.71	g
Dry Weight (Total)	26.35	g
Solids, Percent	91.2	%

Sample: JC13575-6 **Analyzed:** 03-FEB-16 by SP **Method:** SM2540 G-97
ClientID: BORING AL020216-N6

Wet Weight (Total)	31.05	g
Tare Weight	25.92	g
Dry Weight (Total)	30.56	g
Solids, Percent	90.4	%

Percent Solids Raw Data Summary

Job Number: JC13575
Account: LSRPNJL LSRP Consulting, LLC
Project: Alcoa Building 12, 734 River Road, Edgewater, NJ

Sample: JC13575-7 **Analyzed:** 03-FEB-16 by SP **Method:** SM2540 G-97
ClientID: COMPOSITE SOILPILE AI020216 BORINGS:AL020216-S6,S7,S8,S9,S10

Wet Weight (Total)	24.53	g
Tare Weight	18.71	g
Dry Weight (Total)	23.88	g
Solids, Percent	88.8	%

Sample: JC13575-8 **Analyzed:** 03-FEB-16 by SP **Method:** SM2540 G-97
ClientID: BORING AL020216-S6

Wet Weight (Total)	34.03	g
Tare Weight	28.18	g
Dry Weight (Total)	33.2	g
Solids, Percent	85.8	%