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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

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# *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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E Concrete Chip Laboratory Data Deliverables – J114699
F Trillium Data Validation Report – Concrete Chip Samples
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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.



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### 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.



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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.



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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.

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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.

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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.

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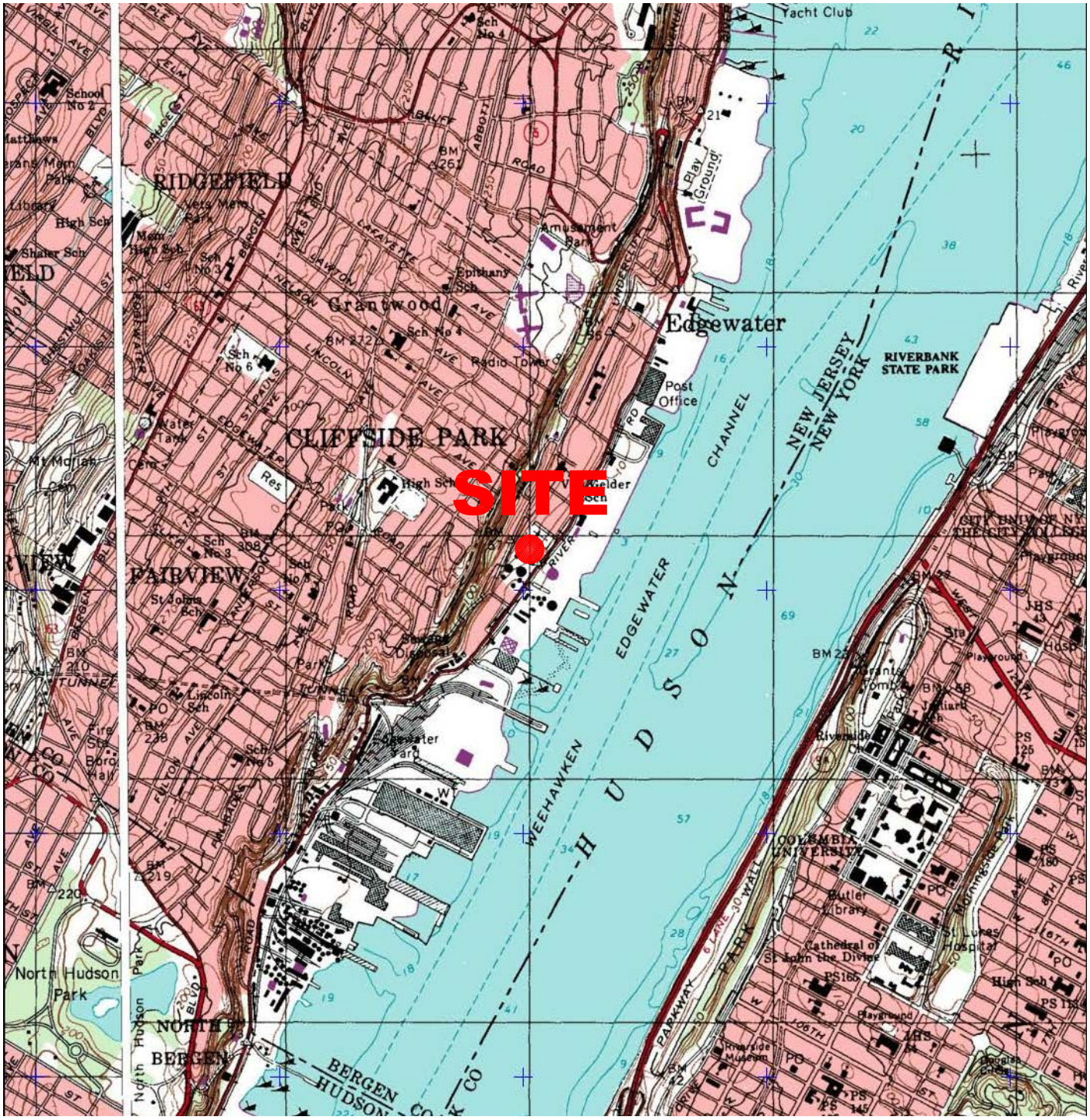
**FIGURES**




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 |
|---|---|---|

NORTH

PROPERTY LINE (TYP)

EXTENT OF FORMER ALCOA BUILDING

ACCESS EASEMENT TO LOT 1.02 BLOCK 74 (SEE DETAIL)

EXISTING CONCRETE WALL (END OF GROUND FLOOR)

TAX LOT 1.02
BLOCK 74

BUILDING

SB-033 ELEV=36.50 FT MSL PCBs=99.6
SB-033

SS-011 ELEV=29 FT MSL PCBs=421.2J
SS-011

SB-011 ELEV=26 FT MSL PCBs=12.6J+
SB-011

SB-030 ELEV=14.50 FT MSL PCBs=15.1
SB-030

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-021A SB-021B SB-021C

SB-015A ELEV=14 FT MSL PCBs=46.4J SB-015B ELEV=14 FT MSL PCBs=80.1J
SB-015A SB-015B

SS-015 ELEV=15 FT MSL PCBs=61.4J
SS-015

SB-012A ELEV=14 FT MSL PCBs=17.5J SB-012B ELEV=13 FT MSL PCBs=183.3J
SB-012A SB-012B

SS-012 ELEV=15 FT MSL PCBs=260.4J
SS-012

SB-009A ELEV=14 FT MSL PCBs=186.3J- SB-009B ELEV=9 FT MSL PCBs=25.7J-
SB-009A SB-009B

SS-009 ELEV=15 FT MSL PCBs=289.9J
SS-009

SB-006A ELEV=14 FT MSL PCBs=181.3J- SB-006B ELEV=8 FT MSL PCBs=0.1J-
SB-006A SB-006B

SS-006 ELEV=15 FT MSL PCBs=173.5J
SS-006

SS-003 ELEV=15 FT MSL PCBs=14.8J
SS-003

SB-003A SB-003B ELEV=14 FT MSL PCBs=34.1J+ SB-003B ELEV=9 FT MSL PCBs=0.3J-
SB-003A SB-003B

SB-034 ELEV=36.50 FT MSL PCBs=21.5
SB-034

SB-031 ELEV=25 FT MSL PCBs=145.5
SB-031

SB-032 ELEV=25 FT MSL PCBs=171.2
SB-032

SB-029 ELEV=14.50 FT MSL PCBs=7.2
SB-029

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-070

PE-071 ELEV=16 FT MSL PCBs=446J+
PE-071

CS-002 ELEV=21 FT MSL PCBs=12.3J
CS-002

PE-078 ELEV=16 FT MSL PCBs=0.04J-
PE-078

CS-003 ELEV=21 FT MSL PCBs=0.7J
CS-003

PE-069 ELEV=16 FT MSL PCBs=94.8J+
PE-069

PE-068 ELEV=16 FT MSL PCBs=52.4J+
PE-068

PE-075 CS-007

CS-001 ELEV=23 FT MSL PCBs=12J
CS-001

PE-074 ELEV=16 FT MSL PCBs=0.5J- CS-006 ELEV=20 FT MSL PCBs=7.9J
PE-074 CS-006

PE-077 CS-009

PE-077 ELEV=16 FT MSL PCBs=0.8J- CS-009 ELEV=20 FT MSL PCBs=0.3J

SS-014 ELEV=15 FT MSL PCBs=125J
SS-014

SB-016A ELEV=14 FT MSL PCBs=2.2J- SB-016B ELEV=13 FT MSL PCBs=22J-
SB-016A SB-016B

SS-008 ELEV=15 FT MSL PCBs=204.8J
SS-008

SB-008A ELEV=14 FT MSL PCBs=215.1J- SB-008B ELEV=9 FT MSL PCBs=44.3J+
SB-008A SB-008B

SS-005 ELEV=15 FT MSL PCBs=139.2J
SS-005

SB-005A ELEV=13 FT MSL PCBs=43.1J- SB-005B ELEV=8 FT MSL PCBs=0.1J-
SB-005A SB-005B

SS-002 ELEV=15 FT MSL PCBs=46.6J
SS-002

SB-002A ELEV=15 FT MSL PCBs=29.6J- SB-002B ELEV=9 FT MSL PCBs=0.3J-
SB-002A SB-002B

USTPS-001A ELEV=34 FT MSL PCBs=<0.039 USTPS-001B ELEV=28 FT MSL PCBs=<0.034
USTPS-001A USTPS-001B

USTPS-002A ELEV=34 FT MSL PCBs=<0.039 USTPS-002B ELEV=29 FT MSL PCBs=<0.034
USTPS-002A USTPS-002B

SB-017 ELEV=27 FT MSL PCBs=12.8J+
SB-017

USTPS-003A ELEV=34 FT MSL PCBs=<0.039 USTPS-003B ELEV=28 FT MSL PCBs=<0.040
USTPS-003A USTPS-003B

PS-002R ELEV=37 FT MSL PCBs=51.2
PS-002R

USTPS-004A ELEV=34 FT MSL PCBs=<0.037 USTPS-004B ELEV=27 FT MSL PCBs=<0.037
USTPS-004A USTPS-004B

SB-020A SB-020B SB-020C
USTPS-005A USTPS-005B

PS-001R ELEV=37 FT MSL PCBs=2.4
PS-001R

USTPS-006A ELEV=34 FT MSL PCBs=<0.039 USTPS-006B ELEV=28 FT MSL PCBs=<0.035
USTPS-006A USTPS-006B

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=13.2J+ SB-019C ELEV=37 FT MSL PCBs=66.1J+ SB-019D ELEV=26 FT MSL PCBs=<0.03J
SB-019A SB-019B SB-019C SB-019D

SB-018 ELEV=18 FT MSL PCBs=3J
SB-018

PE-067 ELEV=16 FT MSL PCBs=188.7J+
PE-067

PE-066 ELEV=16 FT MSL PCBs=442J+
PE-066

PE-073 ELEV=16 FT MSL PCBs=0.1J- CS-005 ELEV=20 FT MSL PCBs=0.6J
PE-073 CS-005

CS-008 ELEV=20 FT MSL PCBs=1.6J
CS-008

PE-076 ELEV=16 FT MSL PCBs=0.2J-
PE-076

PE-065 ELEV=16 FT MSL PCBs=42.1J+
PE-065

PE-064 ELEV=16 FT MSL PCBs=371J+
PE-064

PE-072 CS-004

PE-072 ELEV=16 FT MSL PCBs=0.4J- CS-004 ELEV=20 FT MSL PCBs=16.6J

PE-063 PE-063R

PS-061R ELEV=16 FT MSL PCBs=13.0
PE-061R
PE-061

PS-063R ELEV=16 FT MSL PCBs=364.7

PE-062 ELEV=16 FT MSL PCBs=407J+
PE-062

SB-007A ELEV=14 FT MSL PCBs=274.4J- SB-007B ELEV=9 FT MSL PCBs=0.3J-
SB-007A SB-007B

SS-004 ELEV=15 FT MSL PCBs=123.4J
SS-004

SB-004A ELEV=13 FT MSL PCBs=151J- SB-004B ELEV=9 FT MSL PCBs=31.5J-
SB-004A SB-004B

SS-001 ELEV=15 FT MSL PCBs=5.5J
SS-001

SB-001A ELEV=15 FT MSL PCBs=152J- SB-001B ELEV=10 FT MSL PCBs=341J-
SB-001A SB-001B

SB-010A ELEV=14 FT MSL PCBs=38J SB-010B ELEV=12 FT MSL PCBs=105J
SB-010A SB-010B

SS-013 ELEV=15 FT MSL PCBs=21.2J
SS-013

SS-010 ELEV=15 FT MSL PCBs=433.6J
SS-010

SS-007 ELEV=15 FT MSL PCBs=371J
SS-007

SB-035 ELEV=11 FT MSL PCBs=173.4
SB-035

SB-022A ELEV=36 FT MSL PCBs=<0.04J SB-022B ELEV=24 FT MSL PCBs=<0.1J+
SB-022A SB-022B

SB-023A ELEV=34 FT MSL PCBs=<0.04 SB-023B ELEV=26 FT MSL PCBs=<0.04
SB-023A SB-023B

SB-024A ELEV=28 FT MSL PCBs=0.04J+ SB-024B ELEV=22 FT MSL PCBs=<0.04
SB-024A SB-024B

SB-025A ELEV=25 FT MSL PCBs=<0.04 SB-025B ELEV=20 FT MSL PCBs=<0.03
SB-025A SB-025B

SB-026A ELEV=21 FT MSL PCBs=<0.04 SB-026B ELEV=16 FT MSL PCBs=<0.03
SB-026A SB-026B

SB-027 ELEV=15 FT MSL PCBs=<0.03
SB-027

SB-028 ELEV=13 FT MSL PCBs=<0.04
SB-028

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

LEGEND

SB-028 SOIL SAMPLE LOCATION AND DESIGNATION

SB-035 SOIL SAMPLE LOCATION AND DESIGNATION

PCB RESULTS IN PPB

0 5 10 20

SCALE: 1"=10'

MAP SOURCE: SITE PLAN, PENNJERSEY ENVIRONMENTAL CONSULTING, MARCH 2015.

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 |
|---|---|---|

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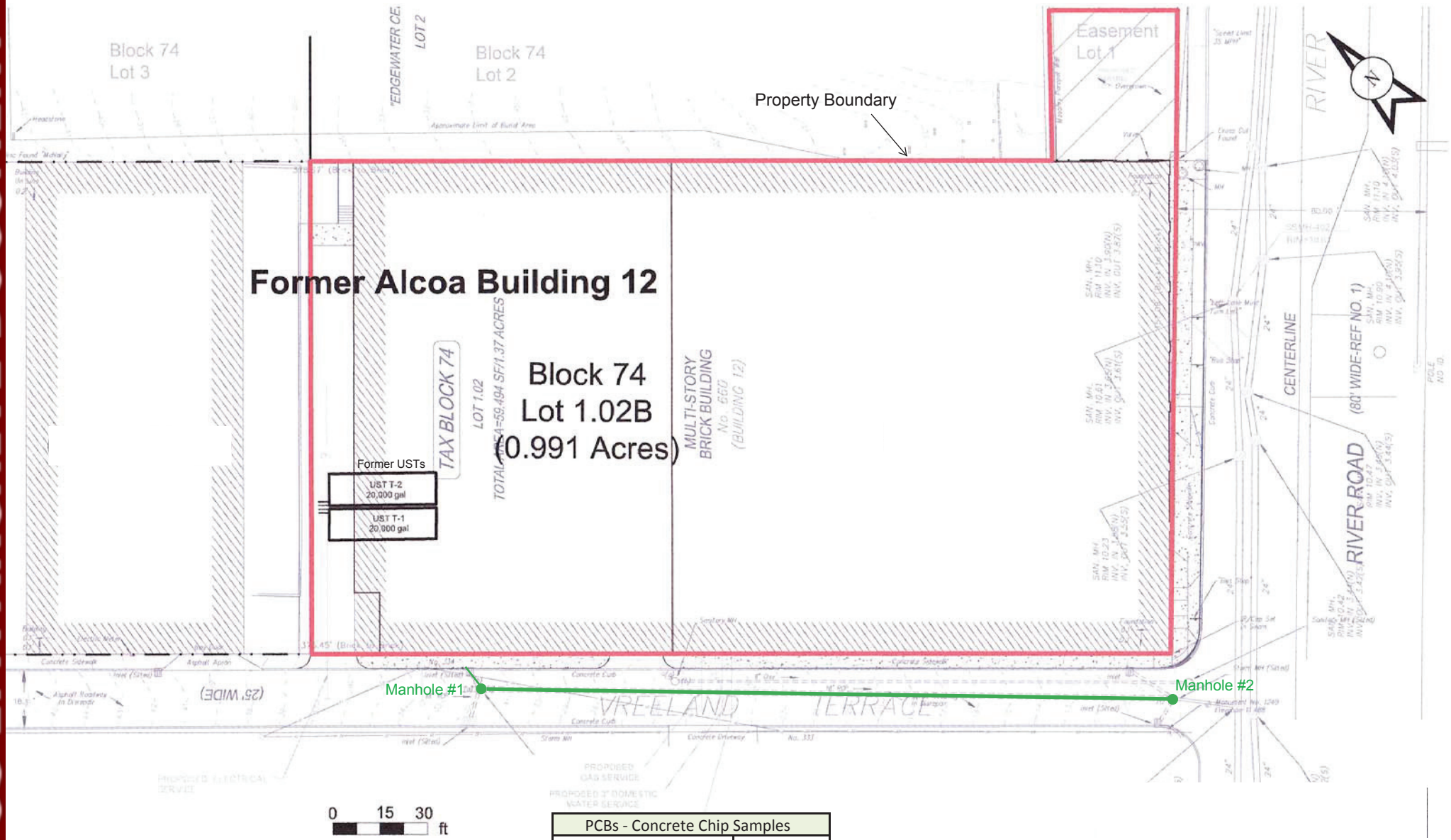



| PCBs - Concrete Chip Samples | |
|---|---|
| Manhole #1 Base | 0.319 |
| Manhole #1 Sidewall | 0.076 |
| Manhole #2 Base | 3.3 |
| Manhole #2 Sidewall | 0.62 |

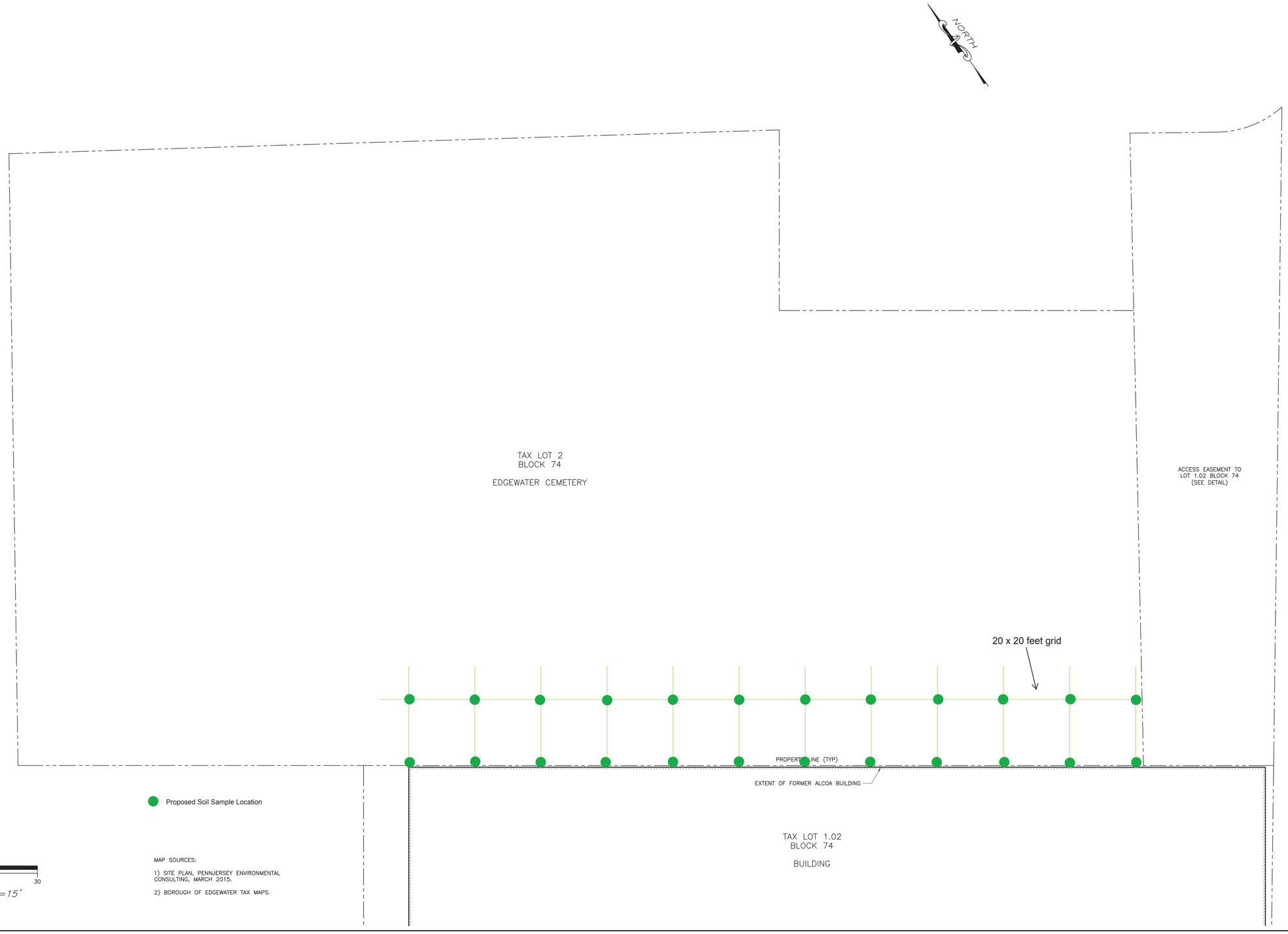
Results in ppm

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

Figure 3

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

US EPA ARCHIVE DOCUMENT




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 |
|---|---|---|

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**TABLES**

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**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

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**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.

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**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

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**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

US EPA ARCHIVE DOCUMENT

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

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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

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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.

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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

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**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:

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**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.

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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

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**ATTACHMENT 2**

**PROPOSED SOIL SAMPLE LOCATIONS**

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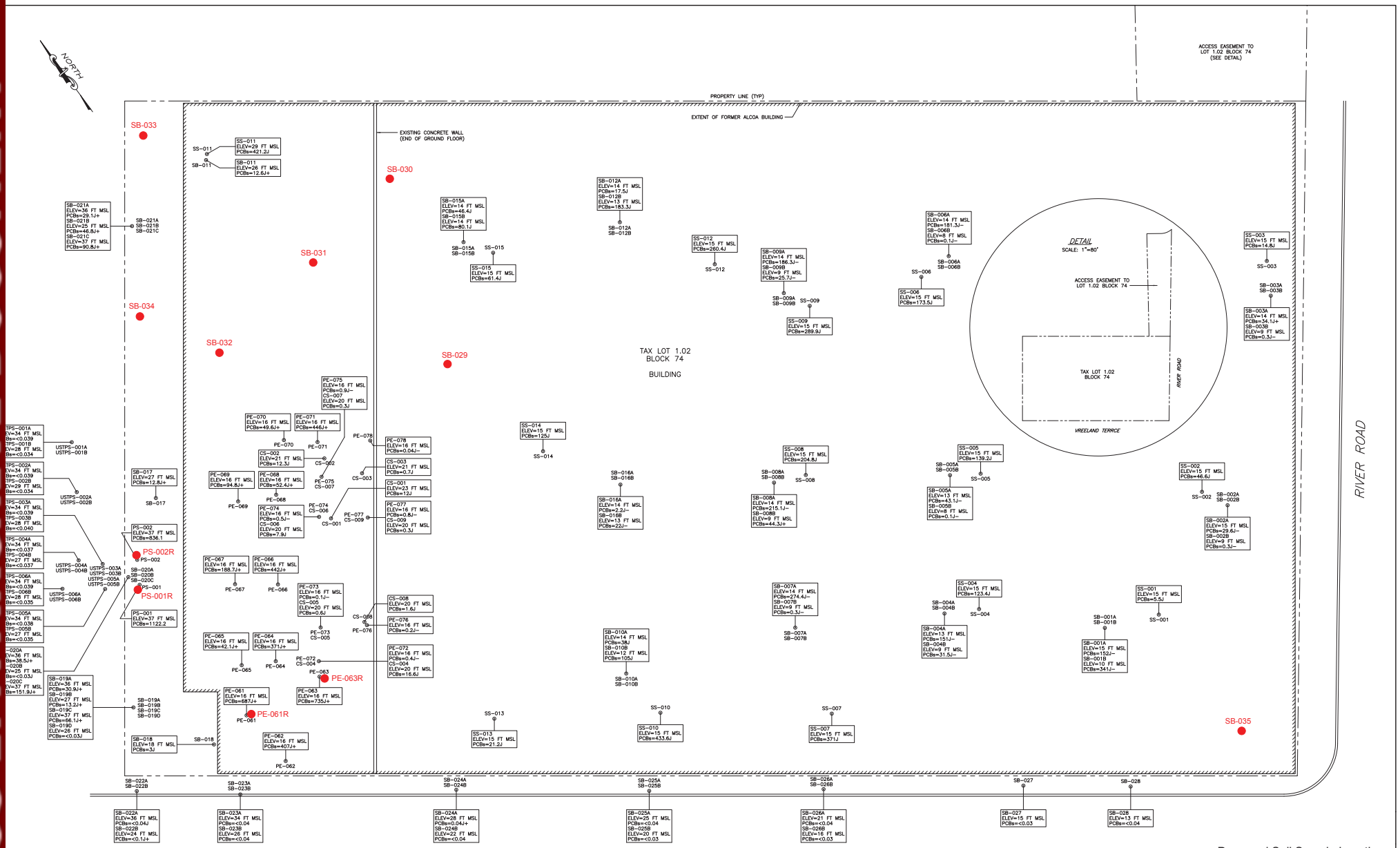


Map source: Site Plan, Pennjersey Environmental Consulting, March 2015

Proposed Soil Sample Locations
Former Alcoa Building 12
Edgewater, NJ

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**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.

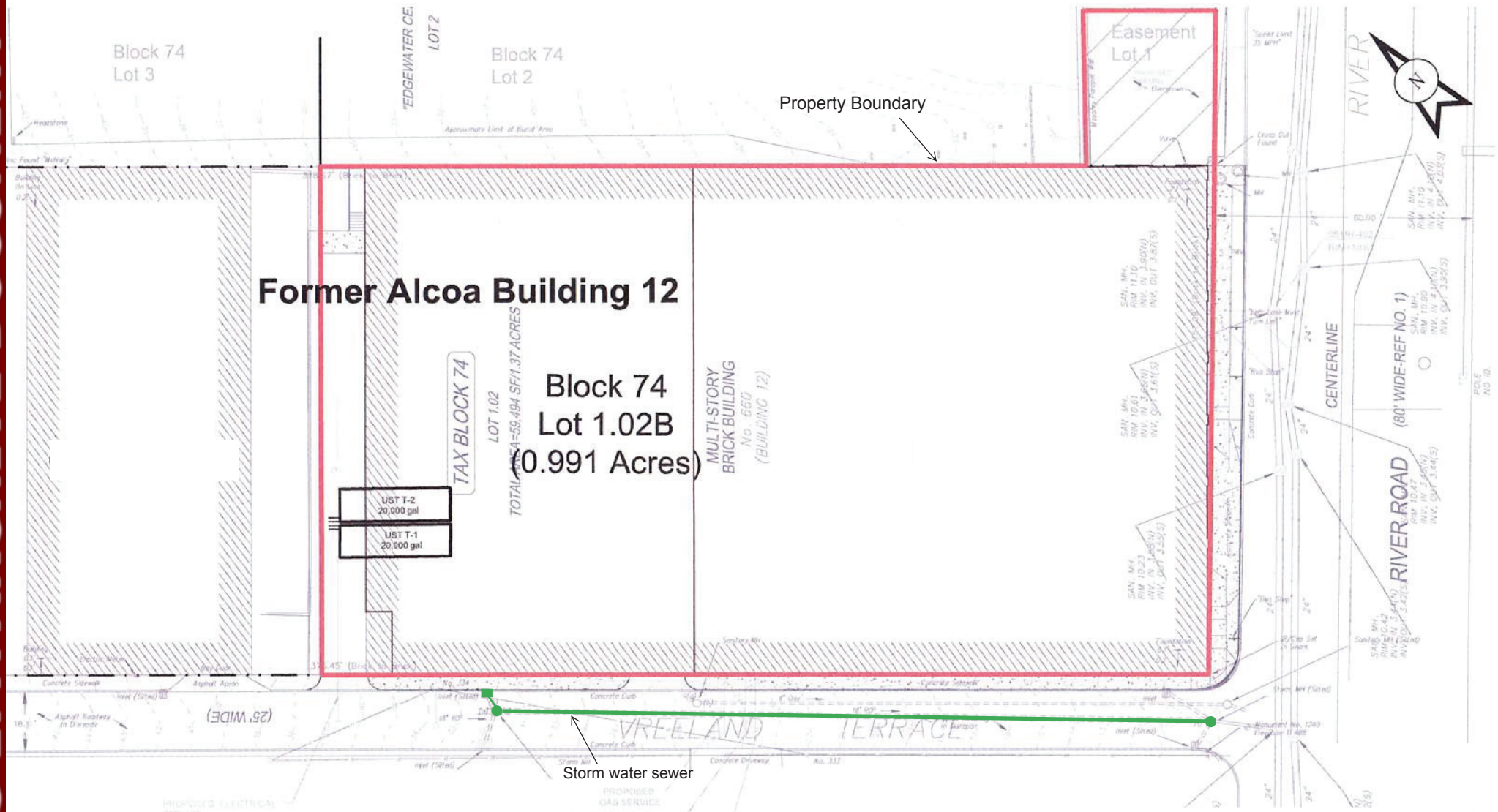
The measures taken to minimize the exposure of workers and nearby residents to any construction dust during the demolition and removal process was successful.

US EPA ARCHIVE DOCUMENT

**ATTACHMENT 4**

**STORM WATER SYSTEM BENEATH VREELAND TERRACE**

US EPA ARCHIVE DOCUMENT




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

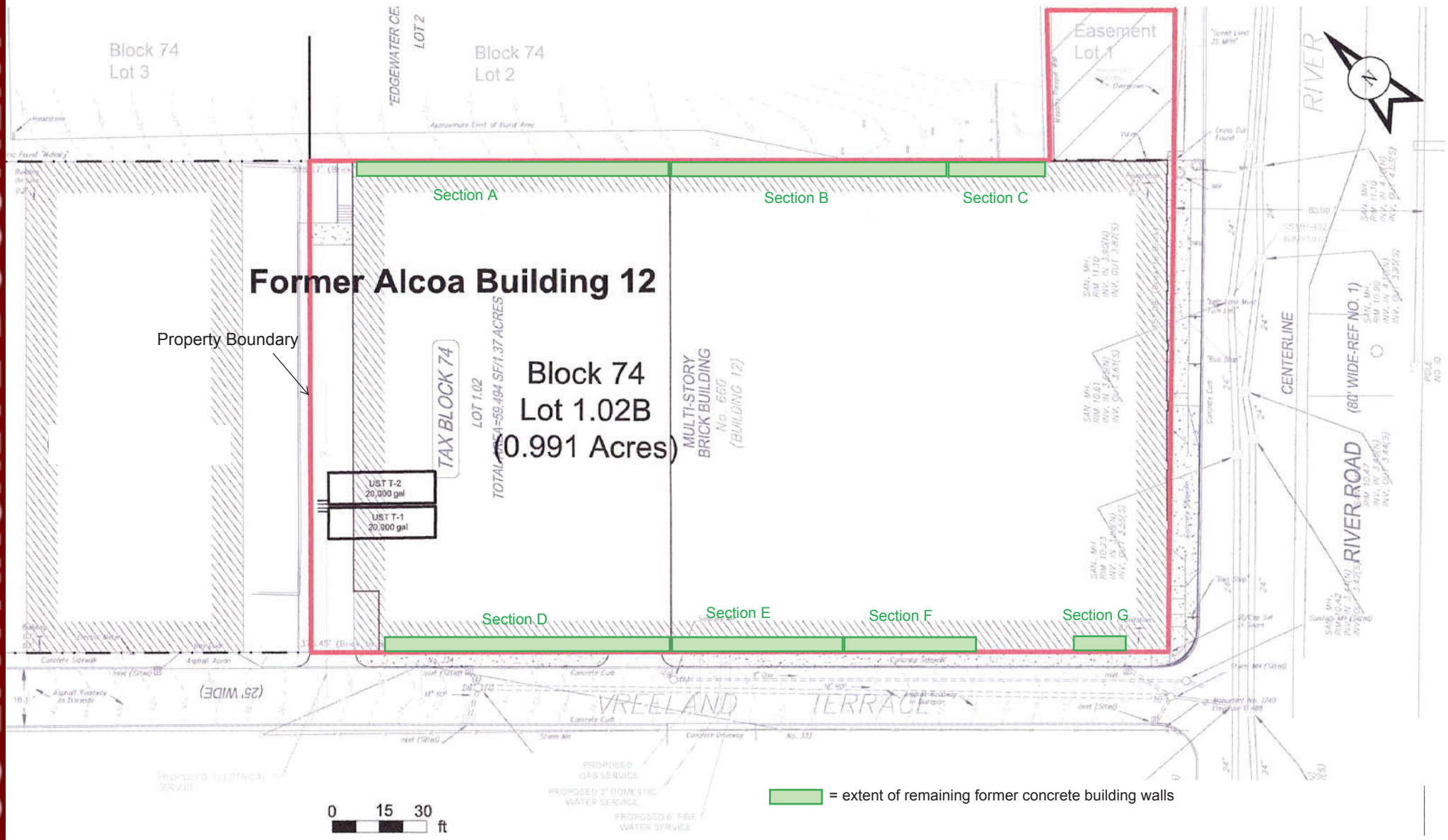
Map source: Site Plan, Pennjersey Environmental Consulting, March 2015

US EPA ARCHIVE DOCUMENT

**ATTACHMENT 5**

**LOCATION OF REMAINING FORMER CONCRETE BUILDING WALLS**

US EPA ARCHIVE DOCUMENT




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

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

US EPA ARCHIVE DOCUMENT

**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.

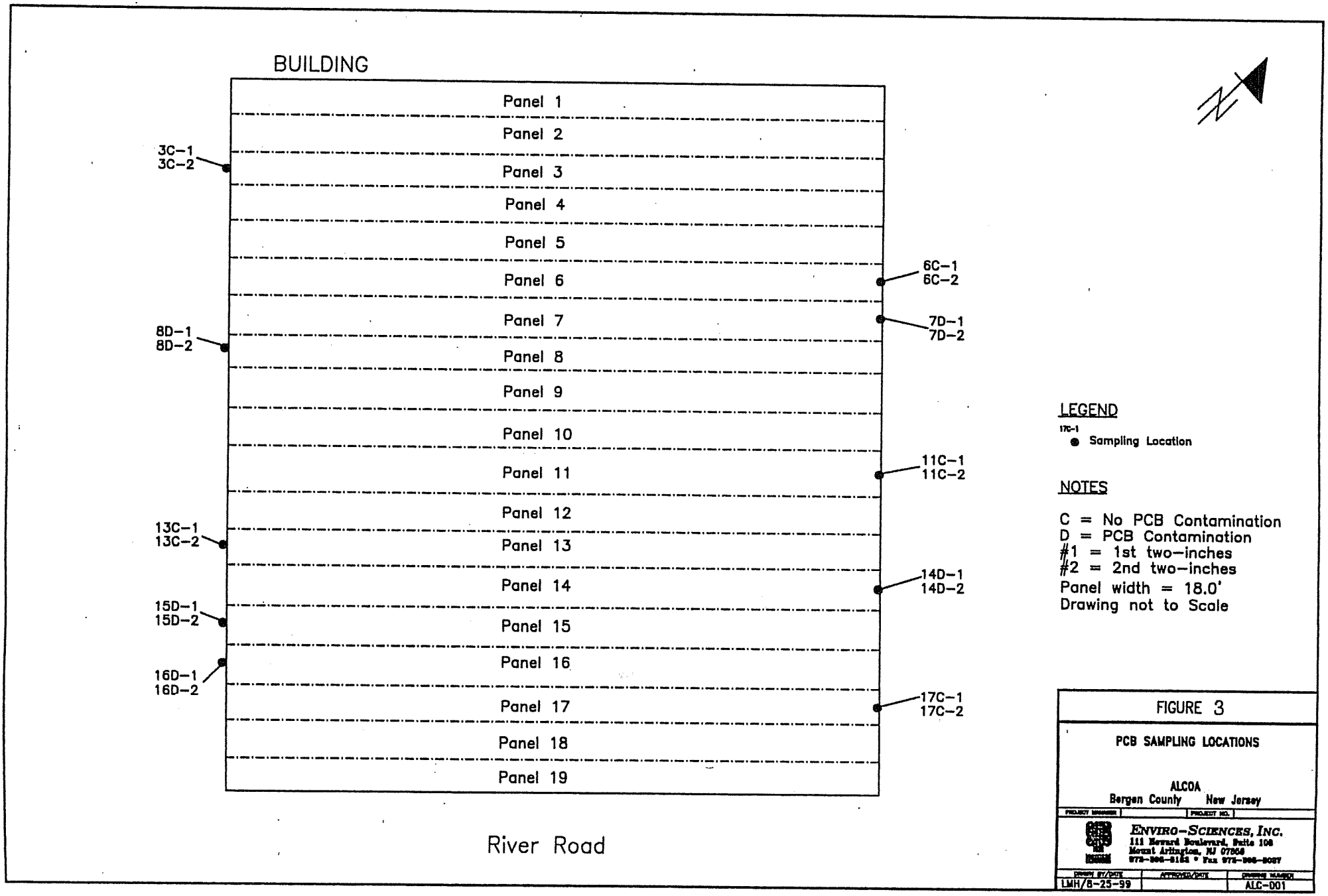

BUILDING
Panel 1
Panel 2
Panel 3
Panel 4
Panel 5
Panel 6
Panel 7
Panel 8
Panel 9
Panel 10
Panel 11
Panel 12
Panel 13
Panel 14
Panel 15
Panel 16
Panel 17
Panel 18
Panel 19
3C-1
3C-2
6C-1
6C-2
7D-1
7D-2
8D-1
8D-2
11C-1
11C-2
13C-1
13C-2
14D-1
14D-2
15D-1
15D-2
16D-1
16D-2
17C-1
17C-2
River Road
LEGEND
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
ENVIRO-SCIENCES, INC.
111 Howard Boulevard, Suite 108
Mount Arlington, NJ 07856
973-398-8181 * Fax 973-398-8037
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

US EPA ARCHIVE DOCUMENT

**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**

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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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



| Lab Sample ID<br>Analyte | Client Sample ID | Result/<br>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<br>Analyte | Client Sample ID | Result/<br>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

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# 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
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

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# Report of Analysis





**Client Sample ID:** PE-061R (16.0-16.5)
**Lab Sample ID:** JC10583-3
**Matrix:** SO - Soil
**Method:** SW846 8082A SW846 3546
**Project:** Alcoa, Edgewater, NJ

**Date Sampled:** 12/11/15
**Date Received:** 12/14/15
**Percent Solids:** 89.7

| | 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
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

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# 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
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

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# Report of Analysis





**Client Sample ID:** PS-001R(36.5-37.0)
**Lab Sample ID:** JC10583-5
**Matrix:** SO - Soil
**Method:** SW846 8082A SW846 3546
**Project:** Alcoa, Edgewater, NJ

**Date Sampled:** 12/11/15
**Date Received:** 12/14/15
**Percent Solids:** 82.3

| | 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
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

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# Report of Analysis





**Client Sample ID:** PS-002R(36.5-37.0)
**Lab Sample ID:** JC10583-6
**Matrix:** SO - Soil
**Method:** SW846 8082A SW846 3546
**Project:** Alcoa, Edgewater, NJ

**Date Sampled:** 12/11/15
**Date Received:** 12/14/15
**Percent Solids:** 92.8

| | 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
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

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# 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
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

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# Report of Analysis





**Client Sample ID:** SB-031(25.0-25.5)
**Lab Sample ID:** JC10583-8
**Matrix:** SO - Soil
**Method:** SW846 8082A SW846 3546
**Project:** Alcoa, Edgewater, NJ

**Date Sampled:** 12/11/15
**Date Received:** 12/14/15
**Percent Solids:** 88.3

| | 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
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

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# 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
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

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# 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
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

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# 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
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

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

**Cooler Temperature**

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

**Sample Integrity - Condition**

| | Y | or | 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.

## 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.

**Job No:** JC10583

Alcoa, Edgewater, NJ



| 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

# 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 |

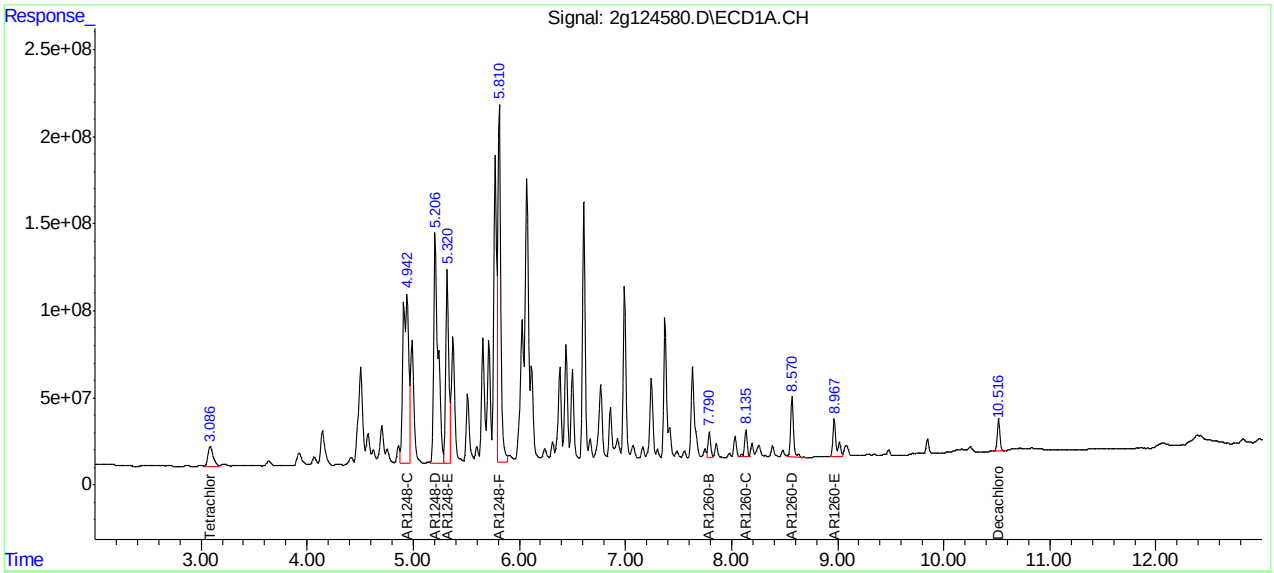
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

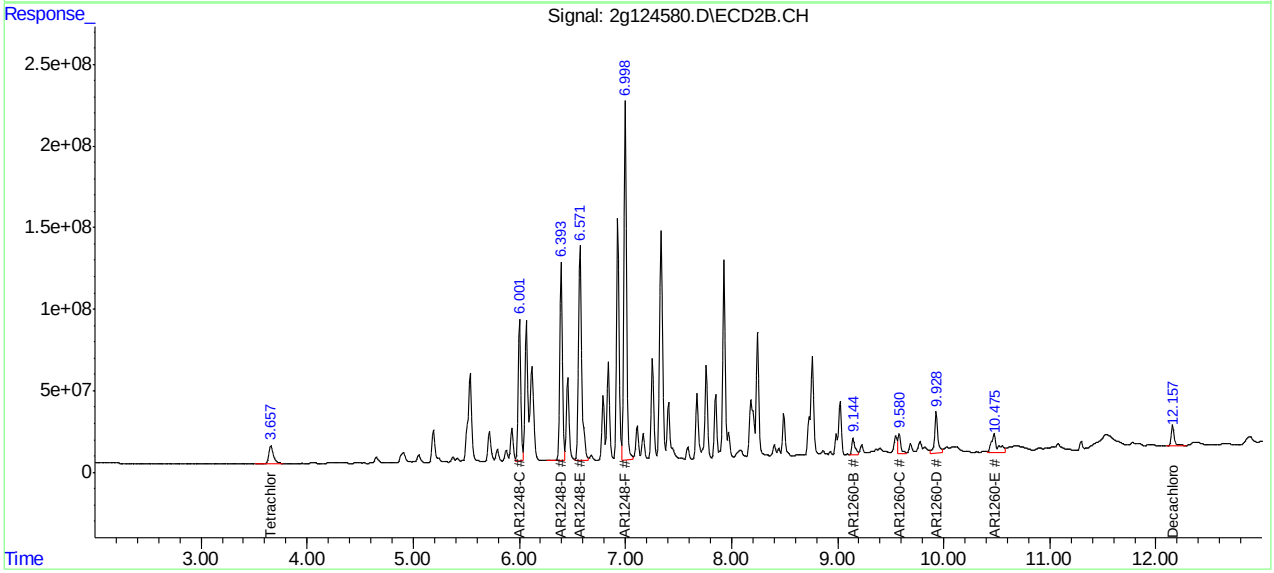
Quantitation Report (QT Reviewed)

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 |

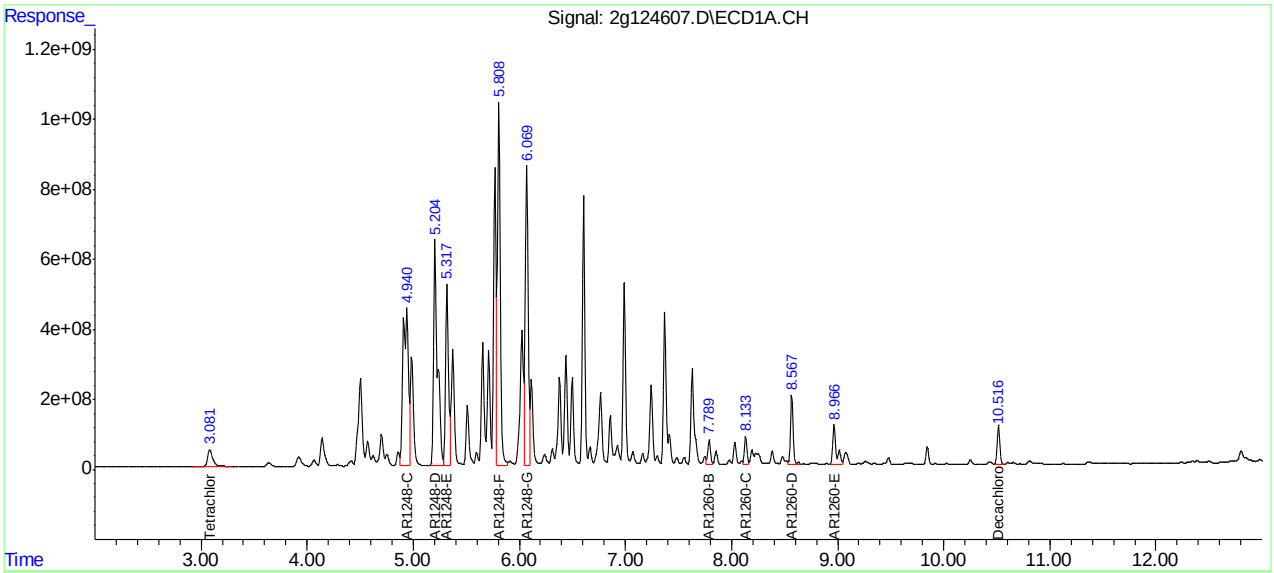
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

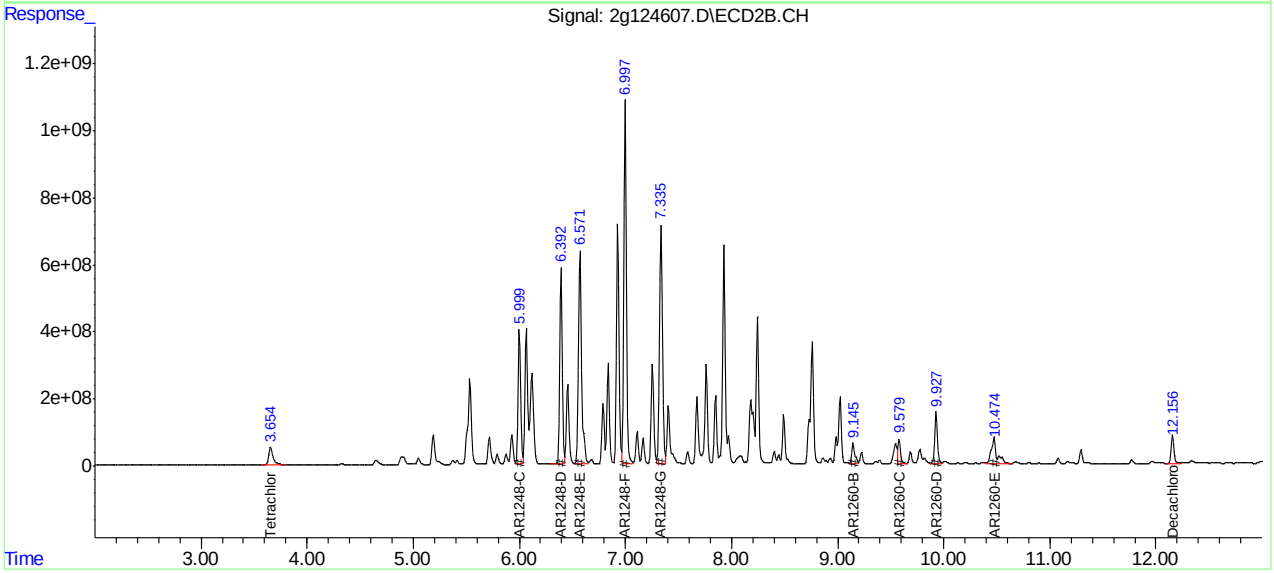
Quantitation Report (QT Reviewed)

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# |

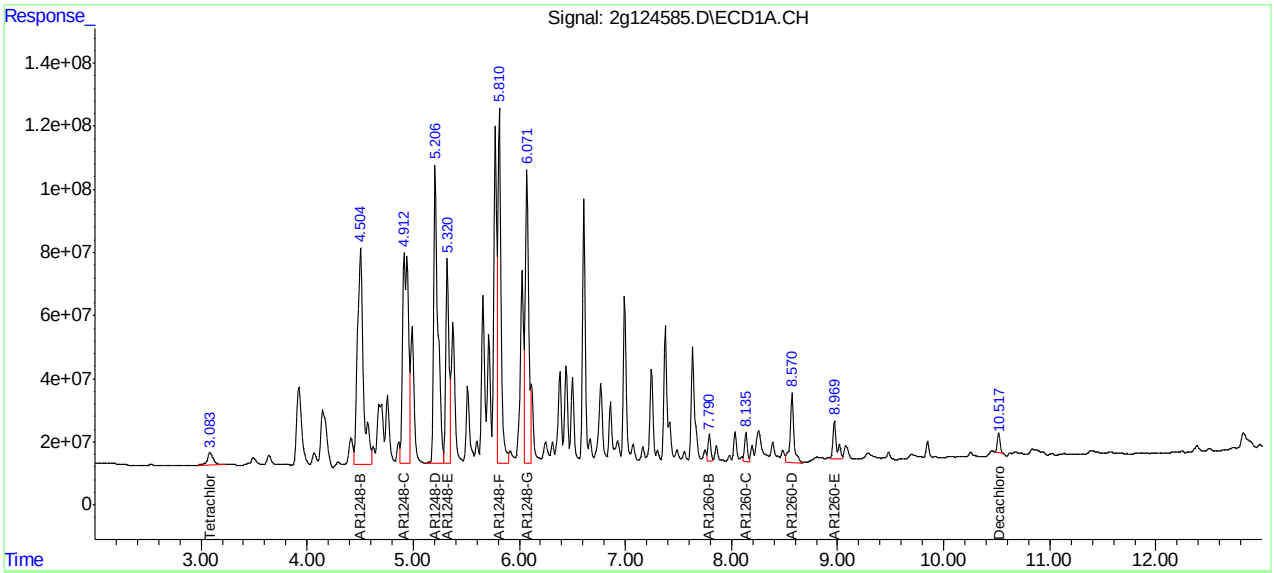
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

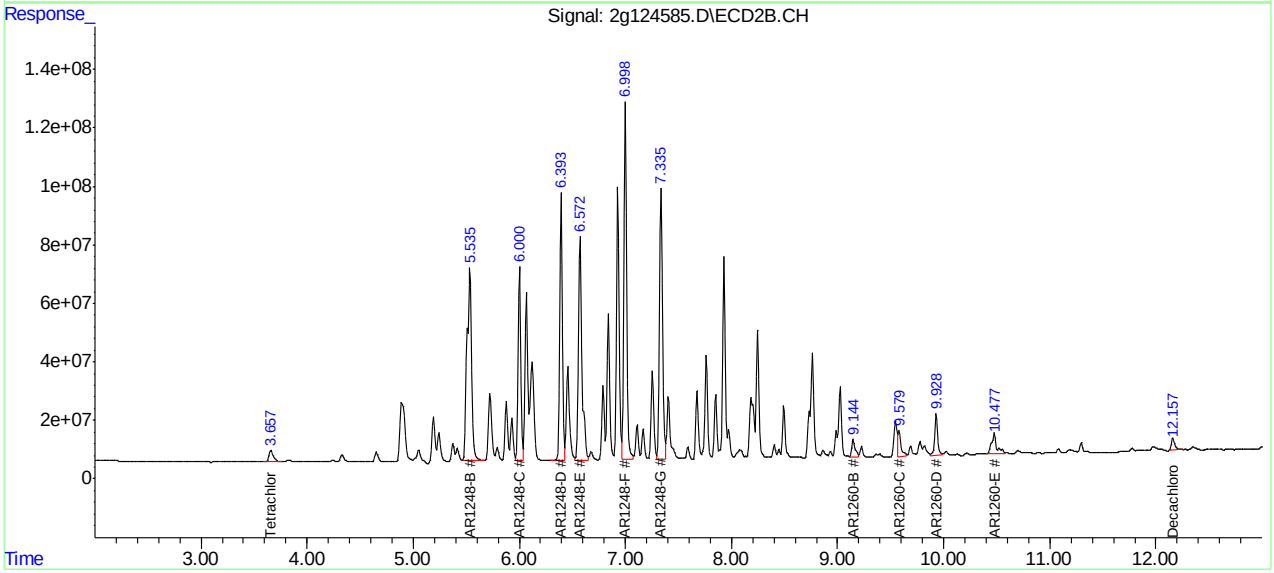
Quantitation Report (QT Reviewed)

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 |

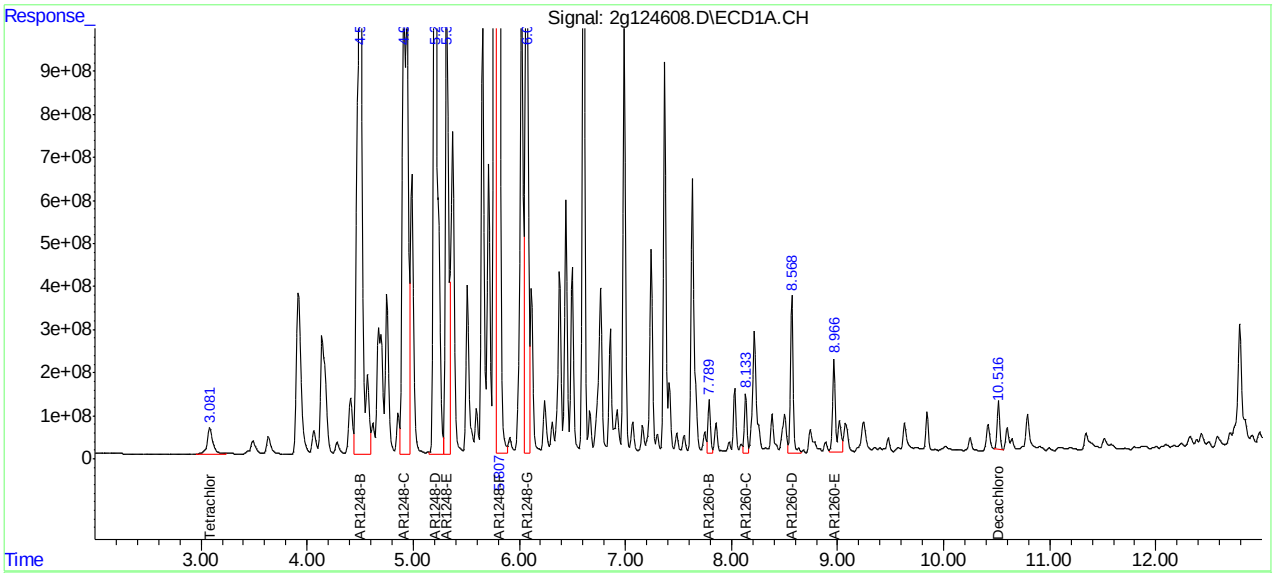
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

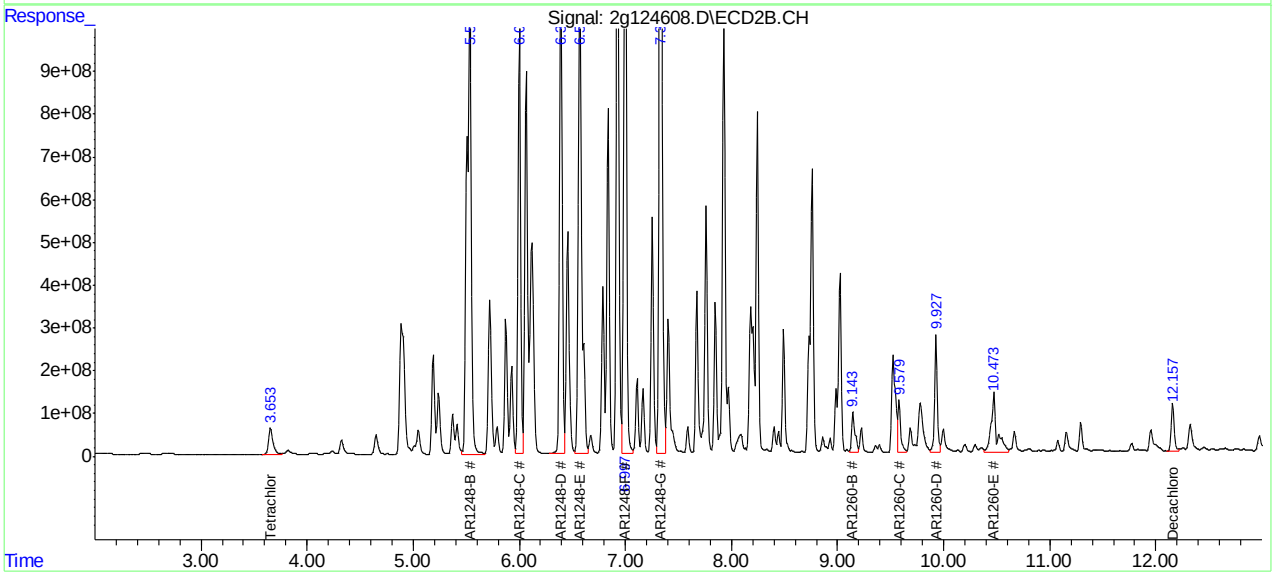
Quantitation Report (QT Reviewed)

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)










ACCUTEST LABORATORIES JC10583

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 | |

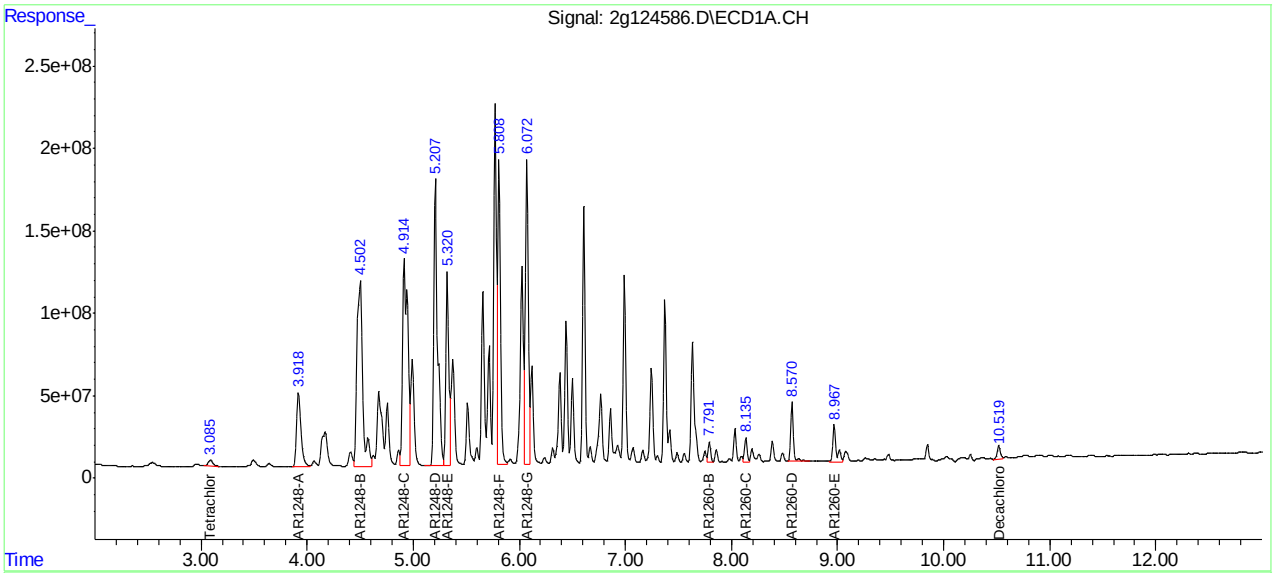
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

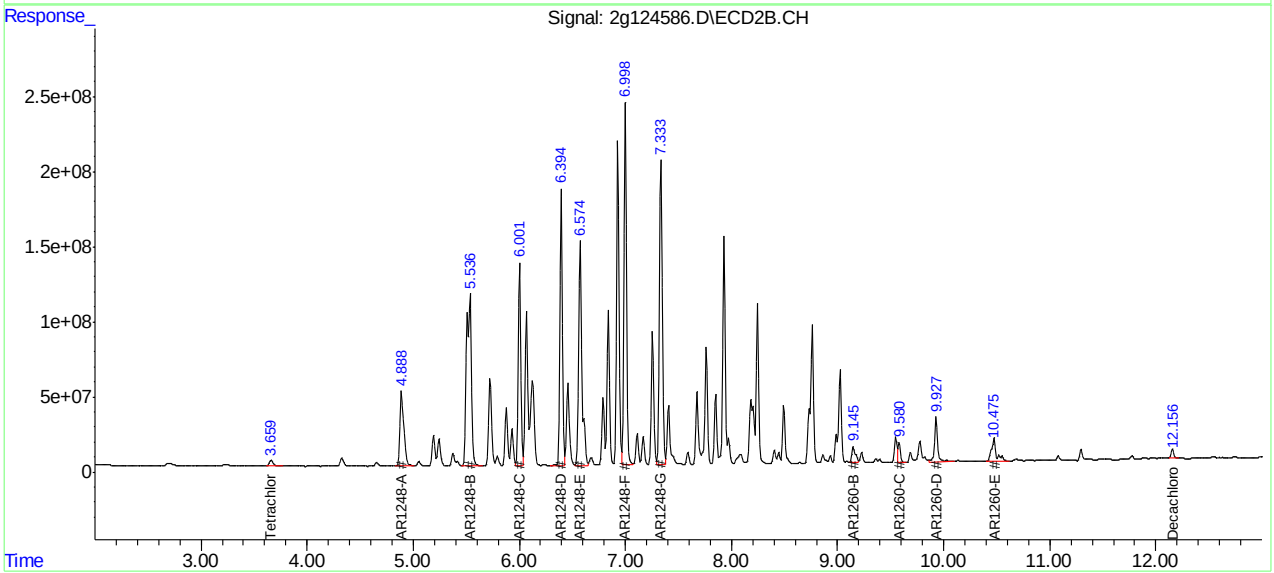
Quantitation Report (QT Reviewed)

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 |

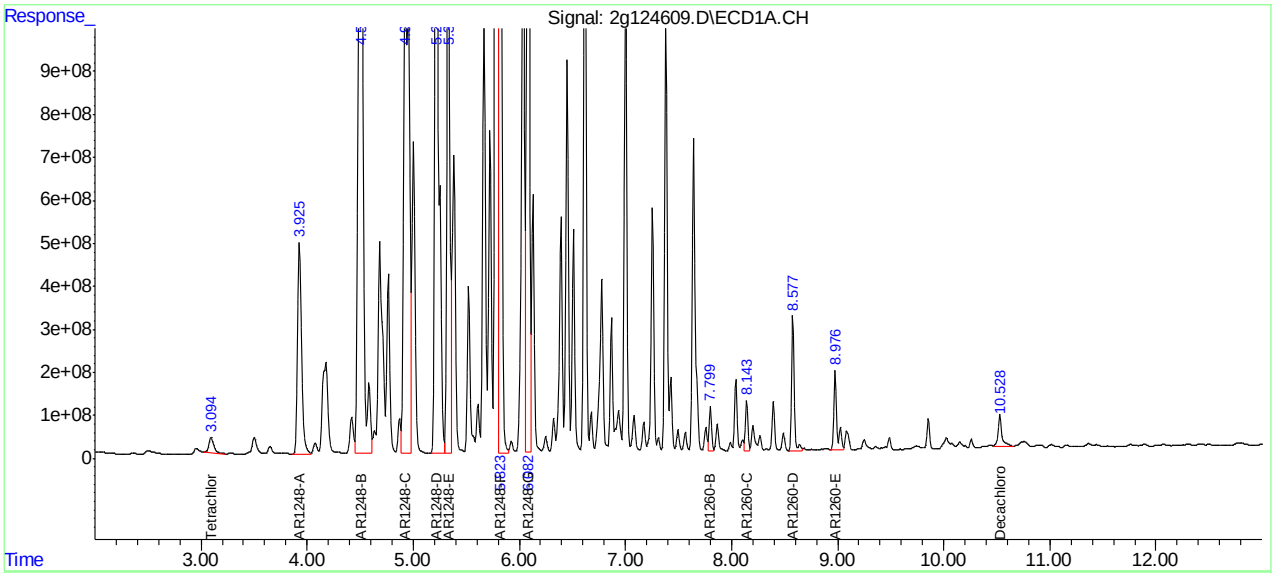
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

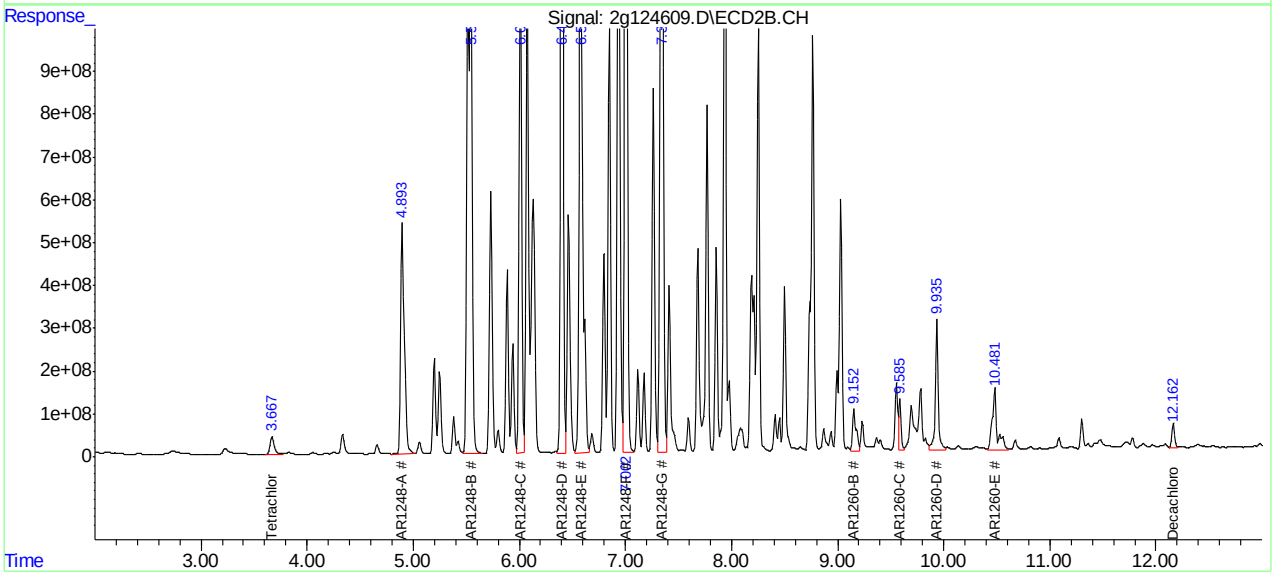
Quantitation Report (QT Reviewed)

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 | | | | | | |

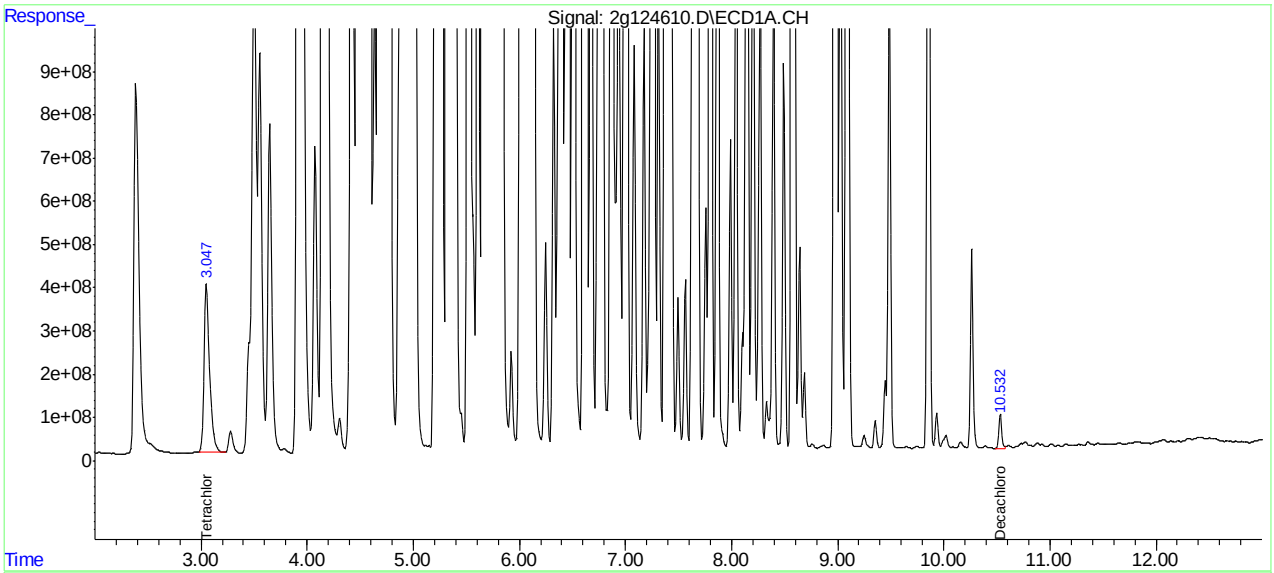
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

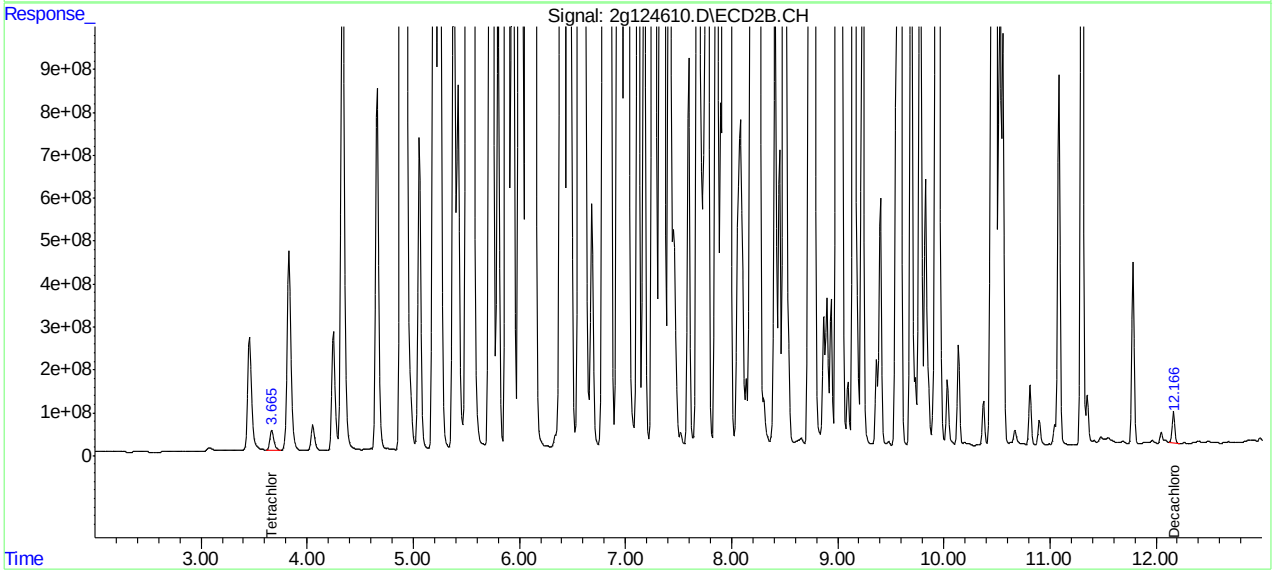
Quantitation Report (QT Reviewed)

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 |

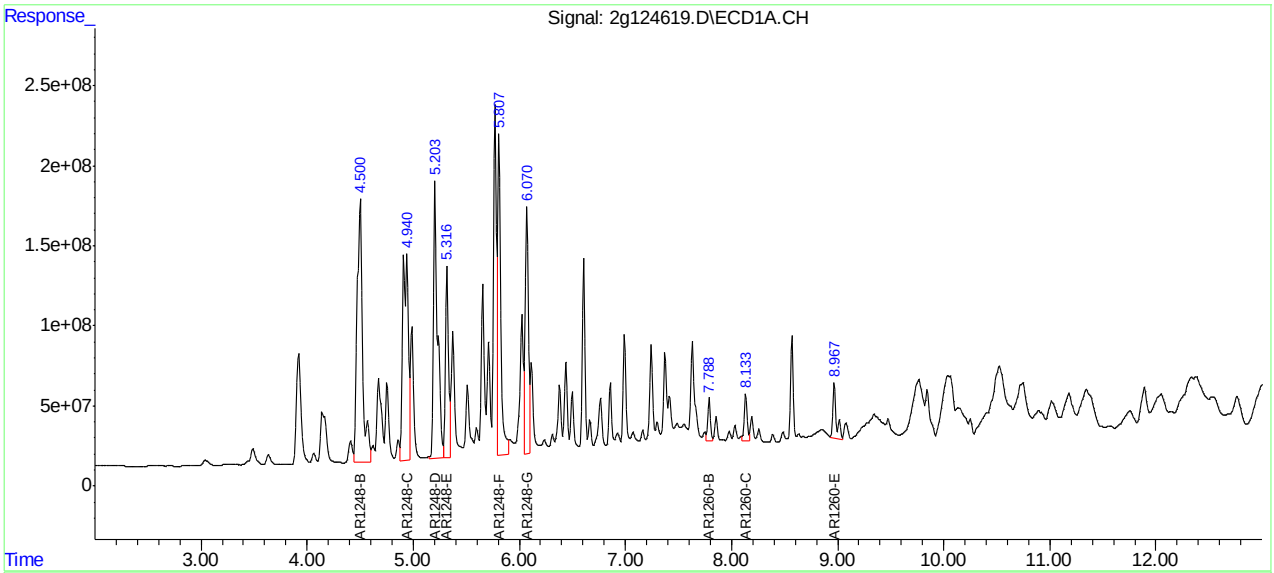
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

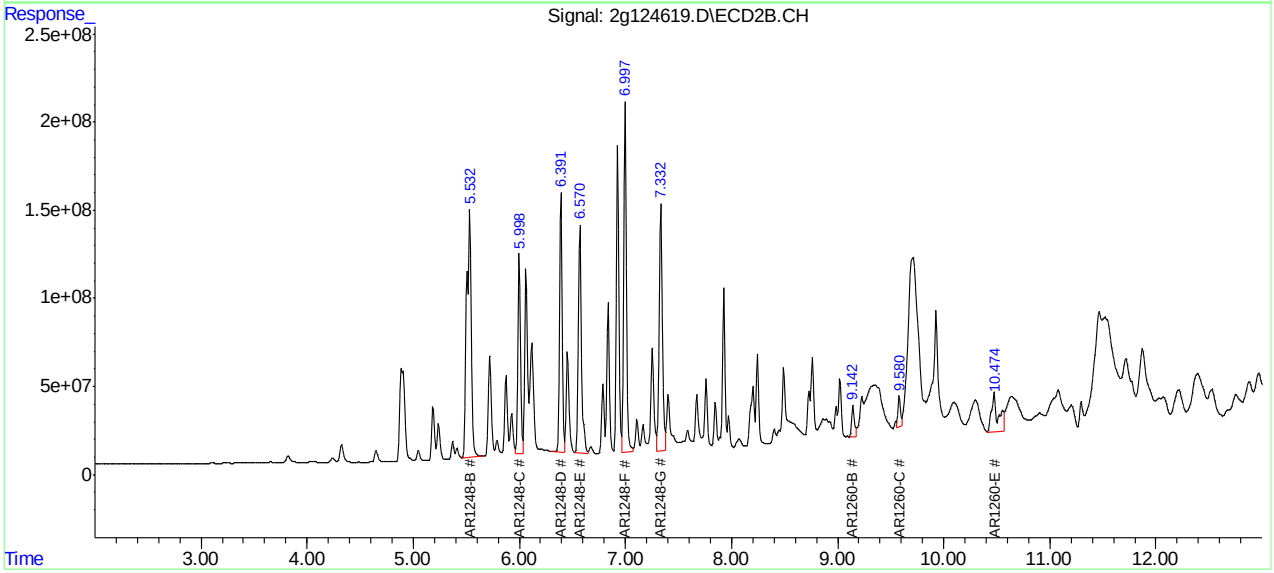
Quantitation Report (QT Reviewed)

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 |

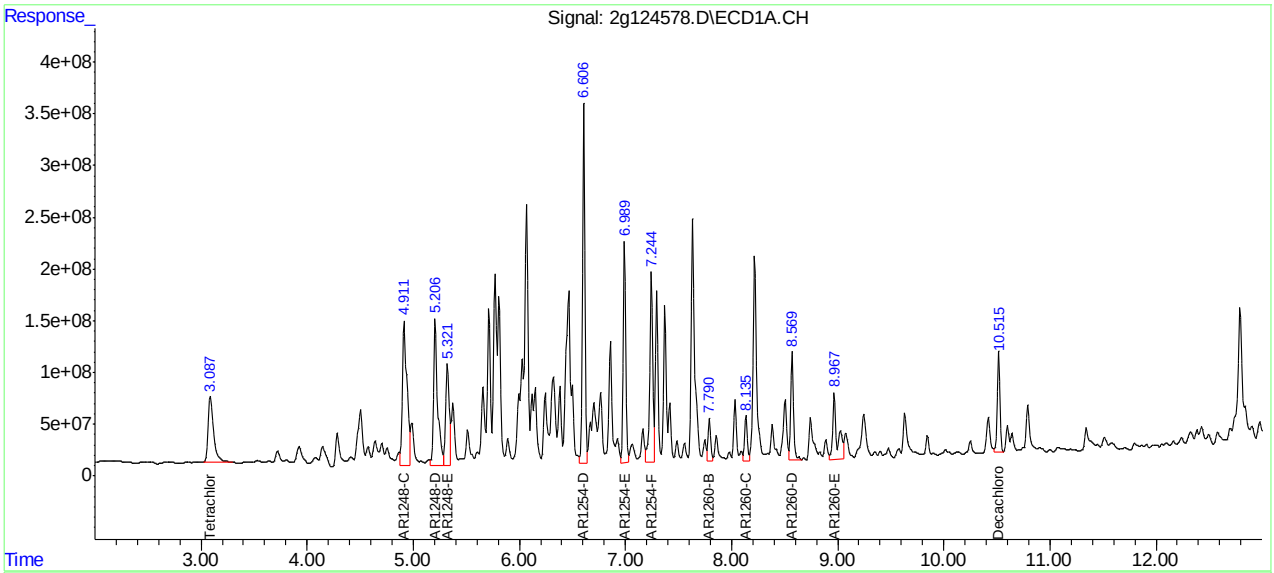
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

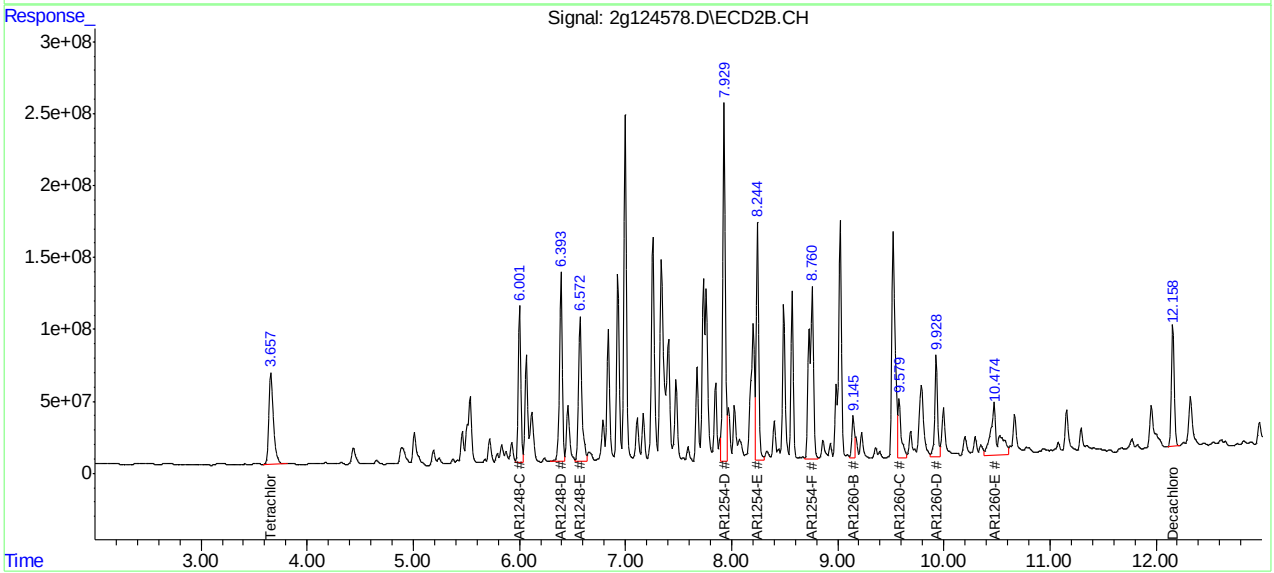
Quantitation Report (QT Reviewed)

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 | | | | | | |

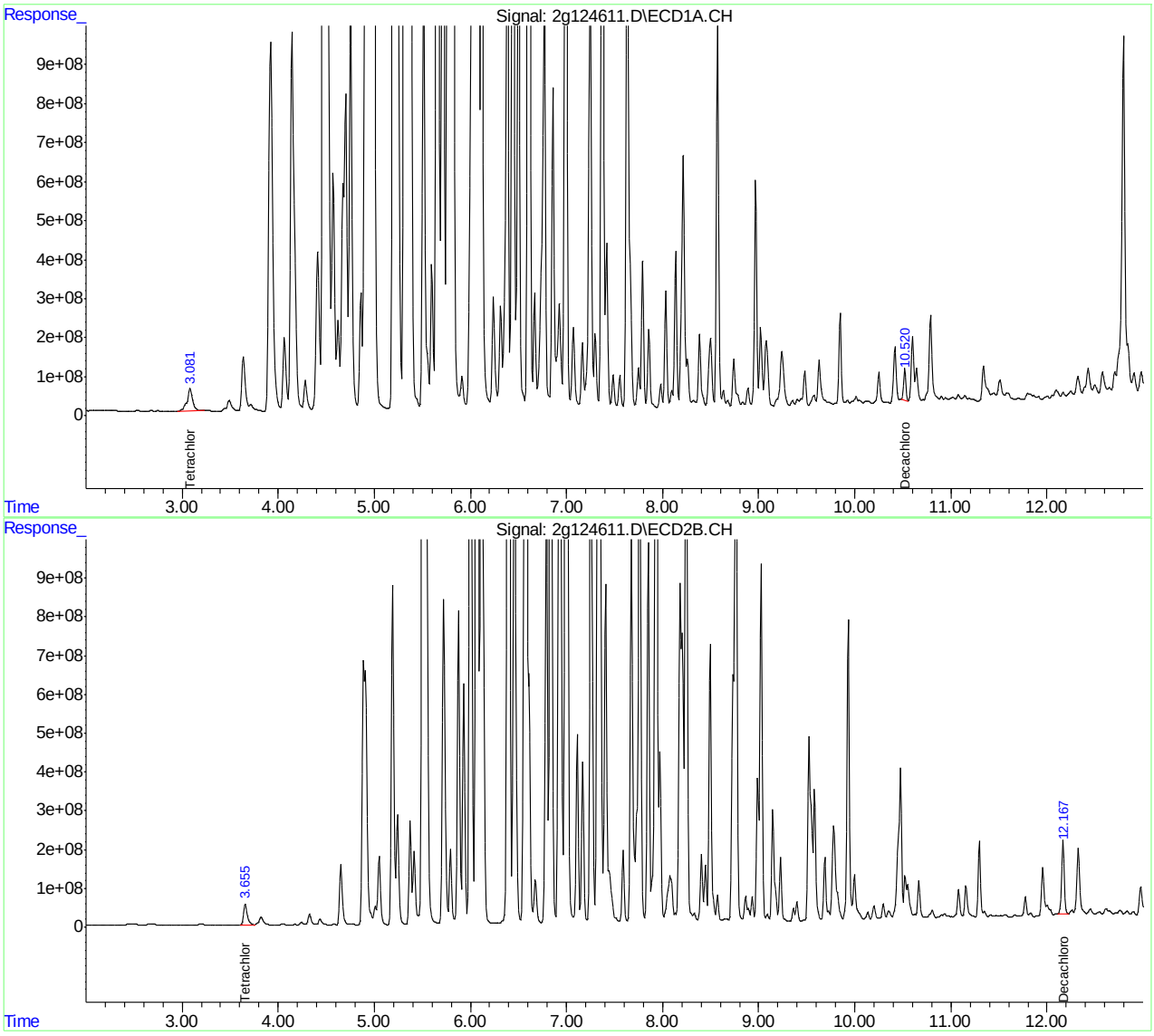
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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 # |

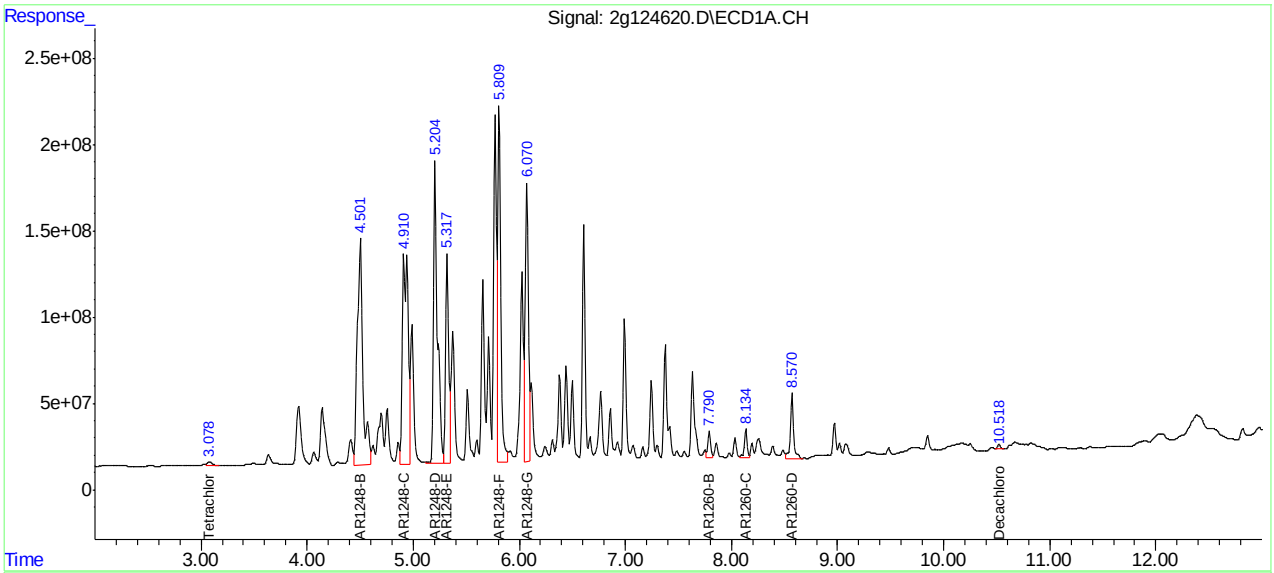
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

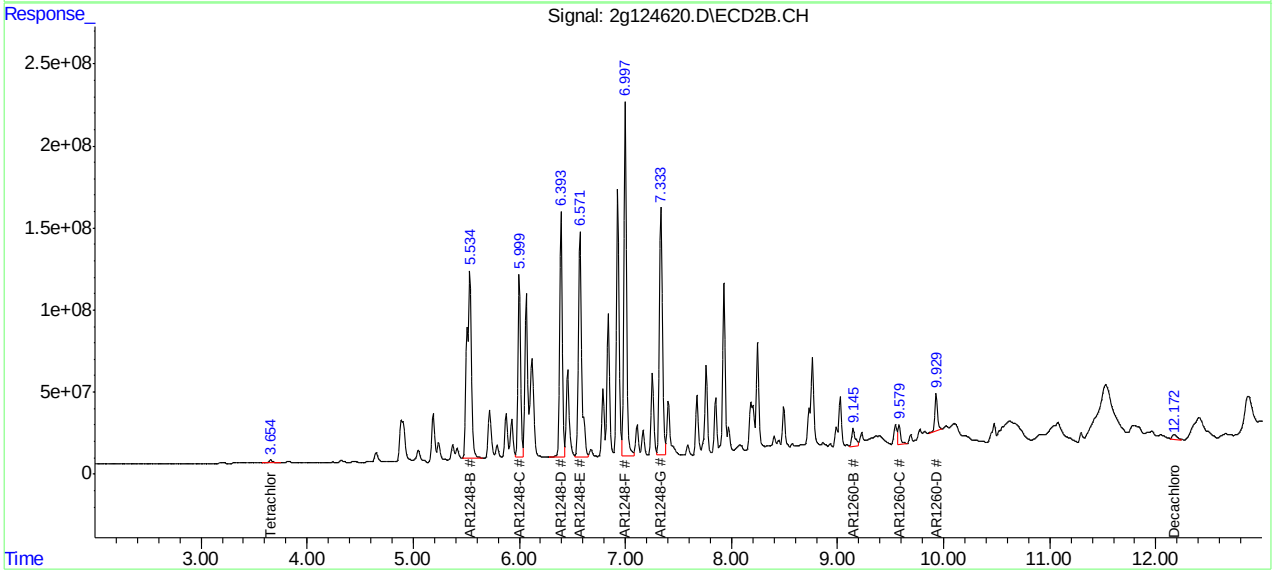
Quantitation Report (QT Reviewed)

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 |

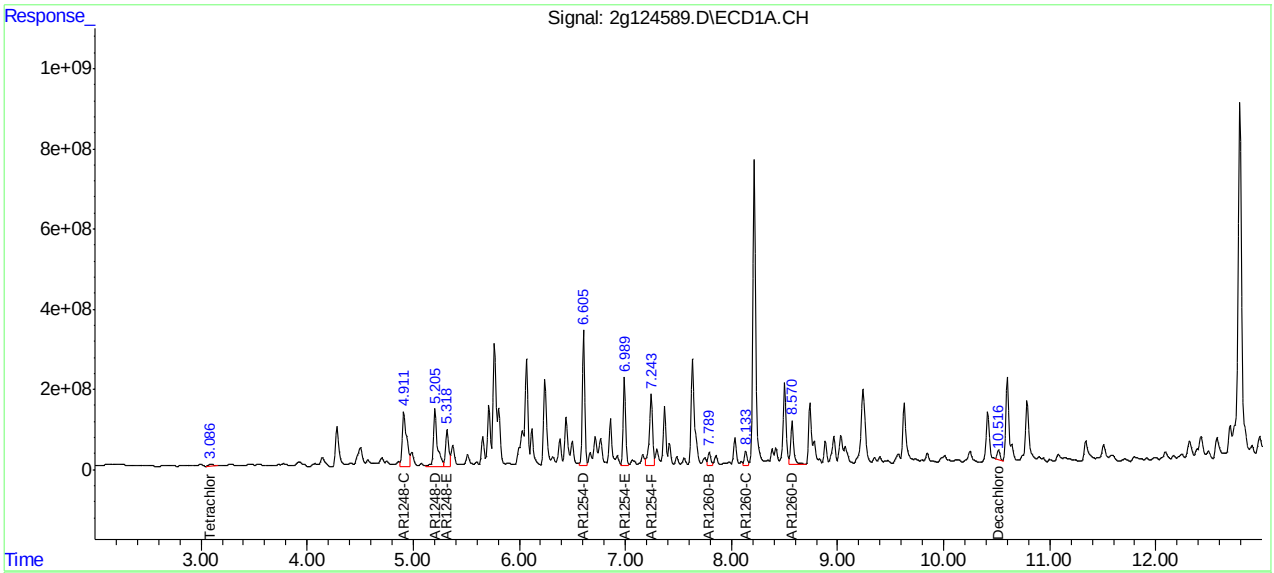
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

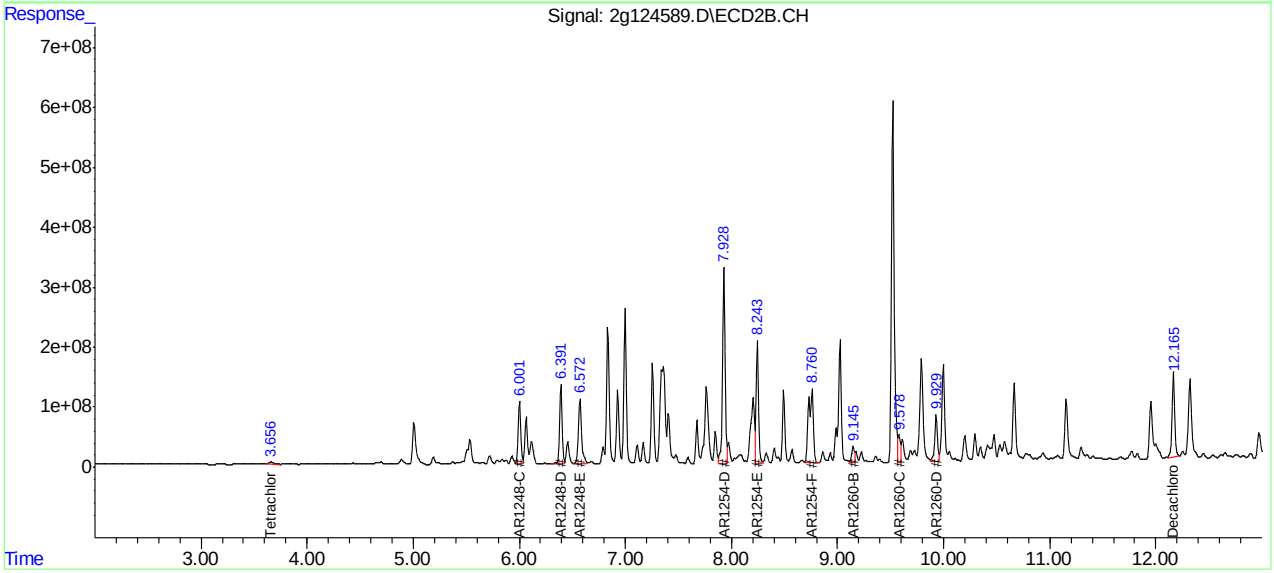
Quantitation Report (QT Reviewed)

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 | | | | | | |

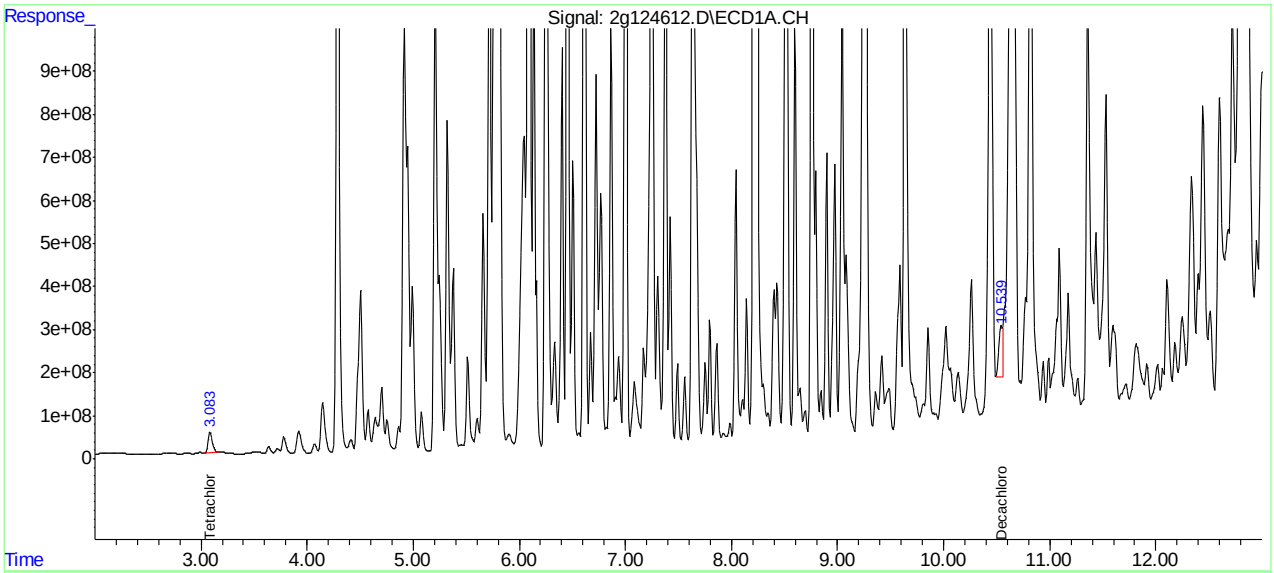
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

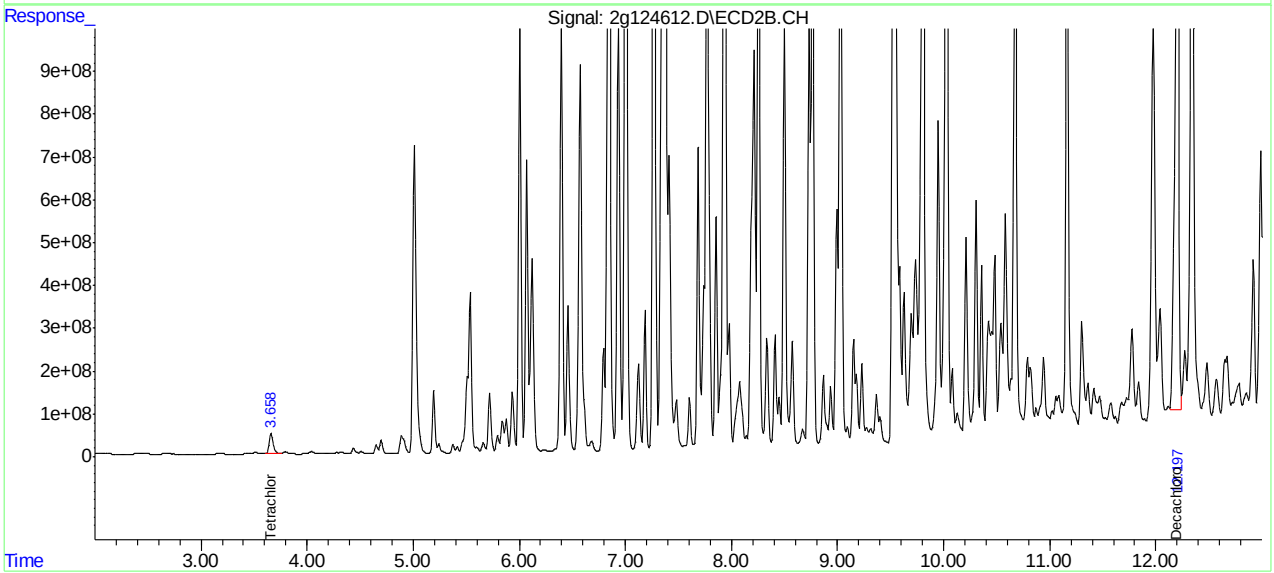
Quantitation Report (QT Reviewed)

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 | | | | | | |

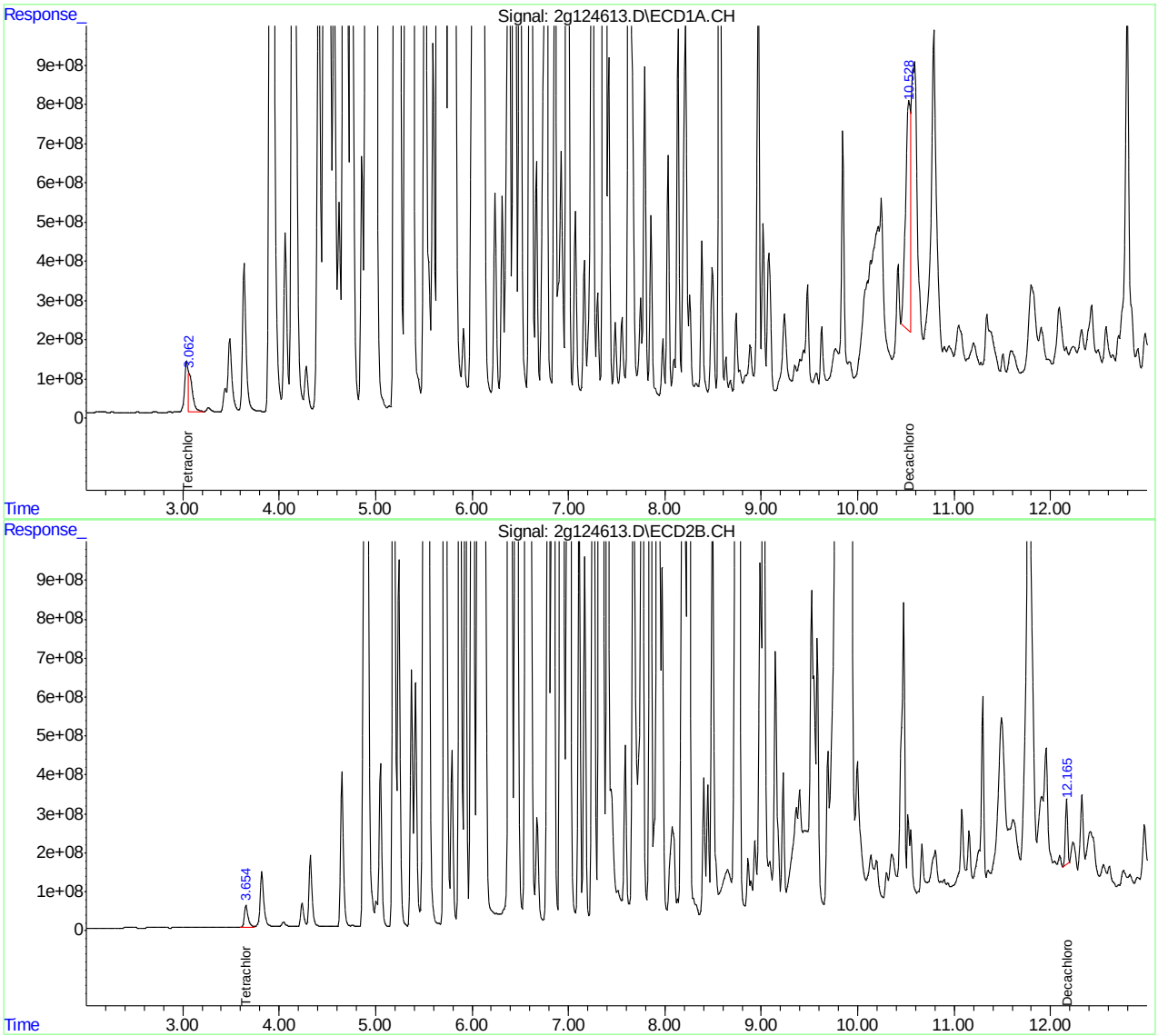
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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 |

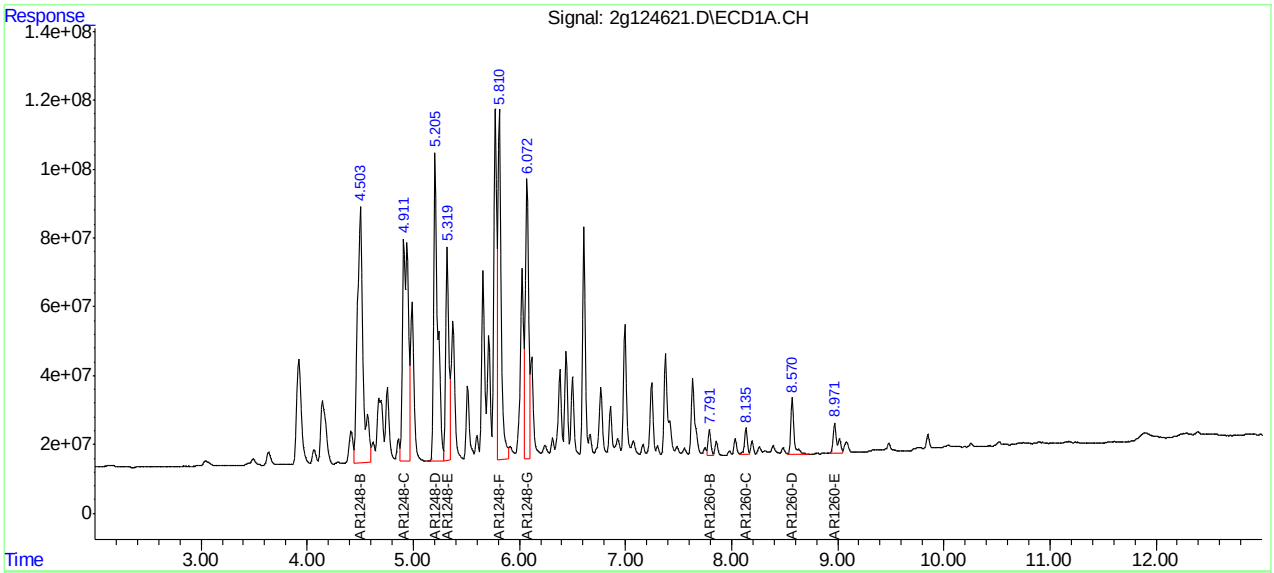
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

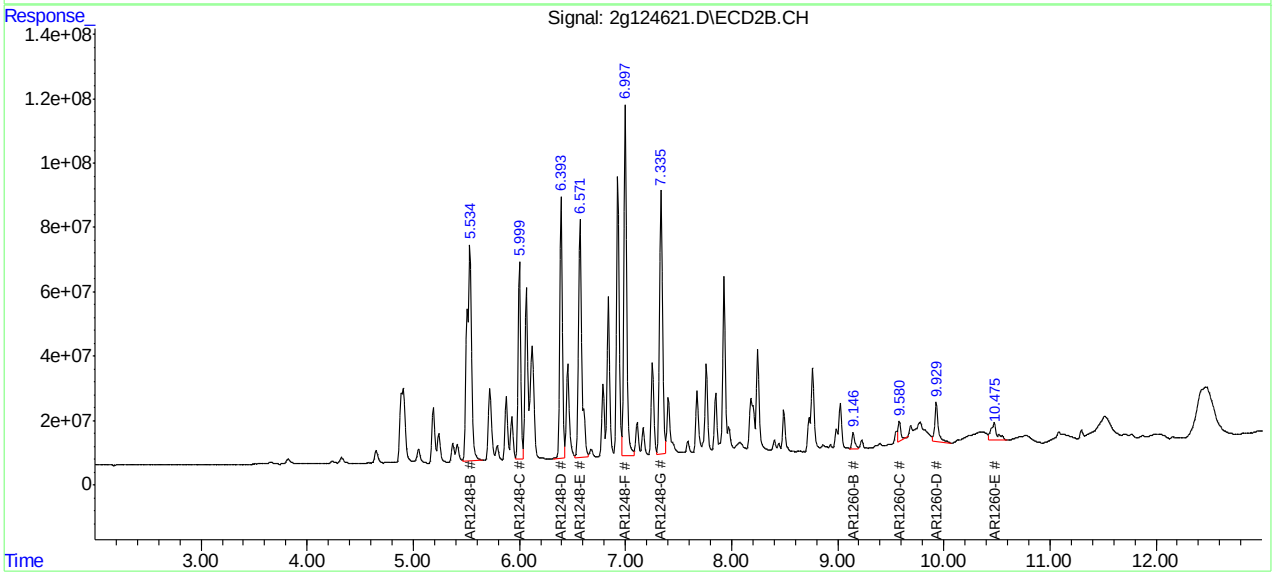
Quantitation Report (QT Reviewed)

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 | | | | | | |

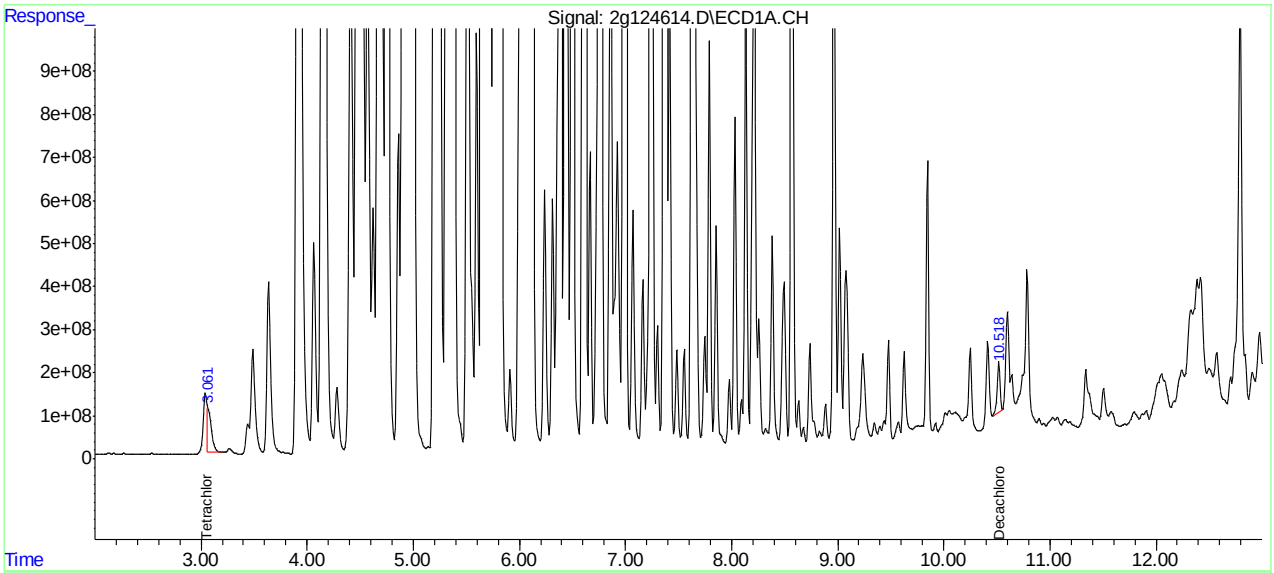
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

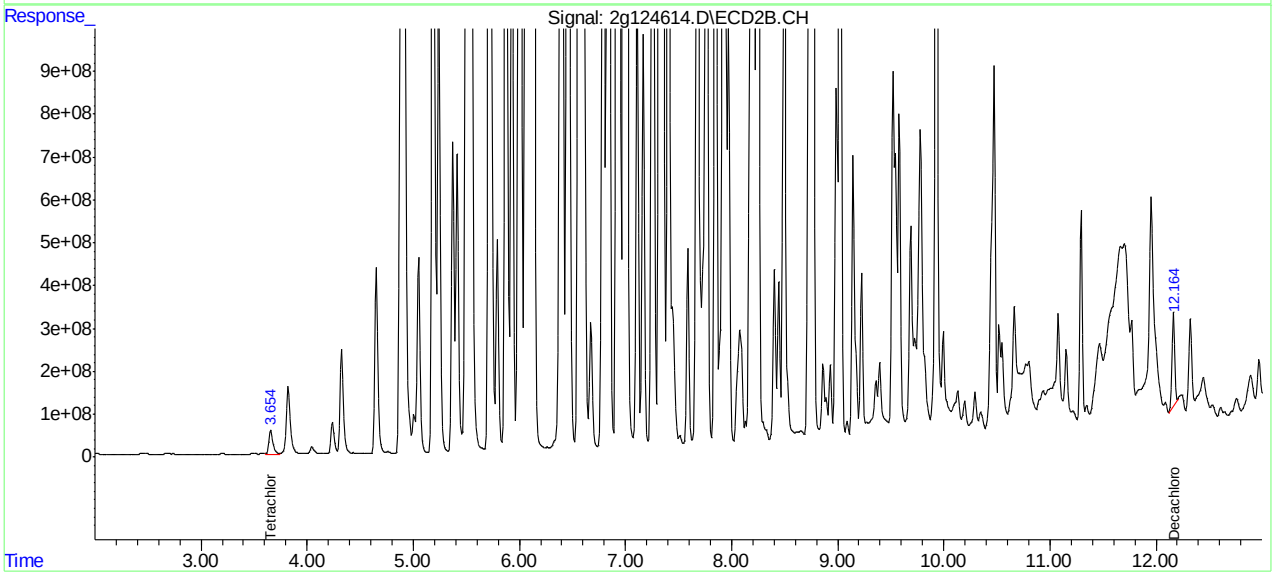
Quantitation Report (QT Reviewed)

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 |

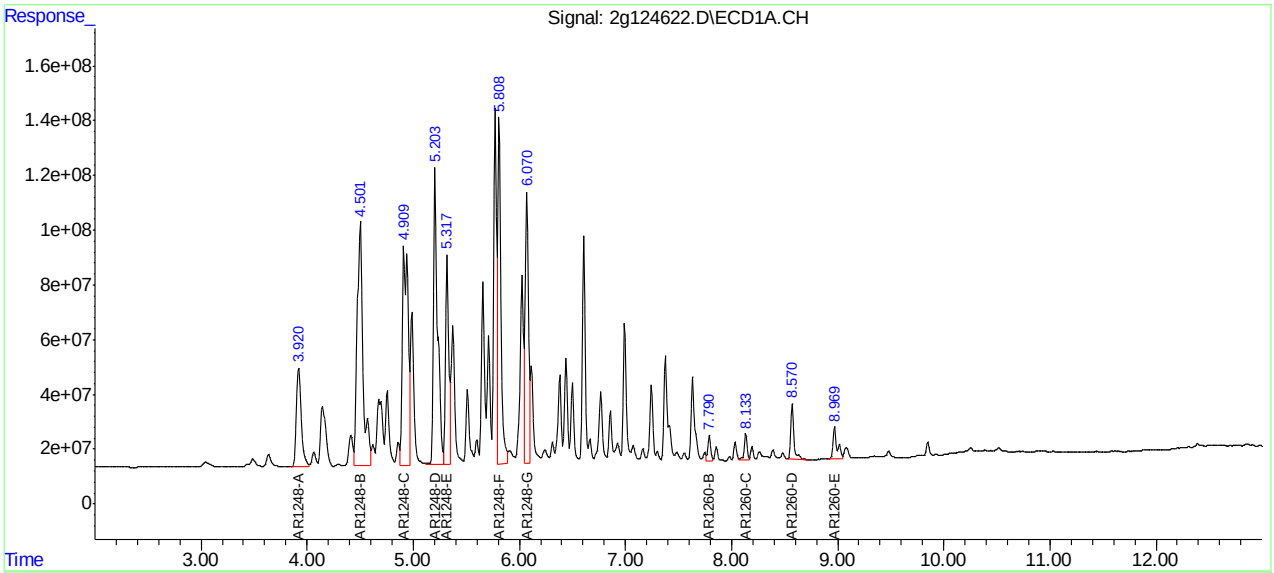
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

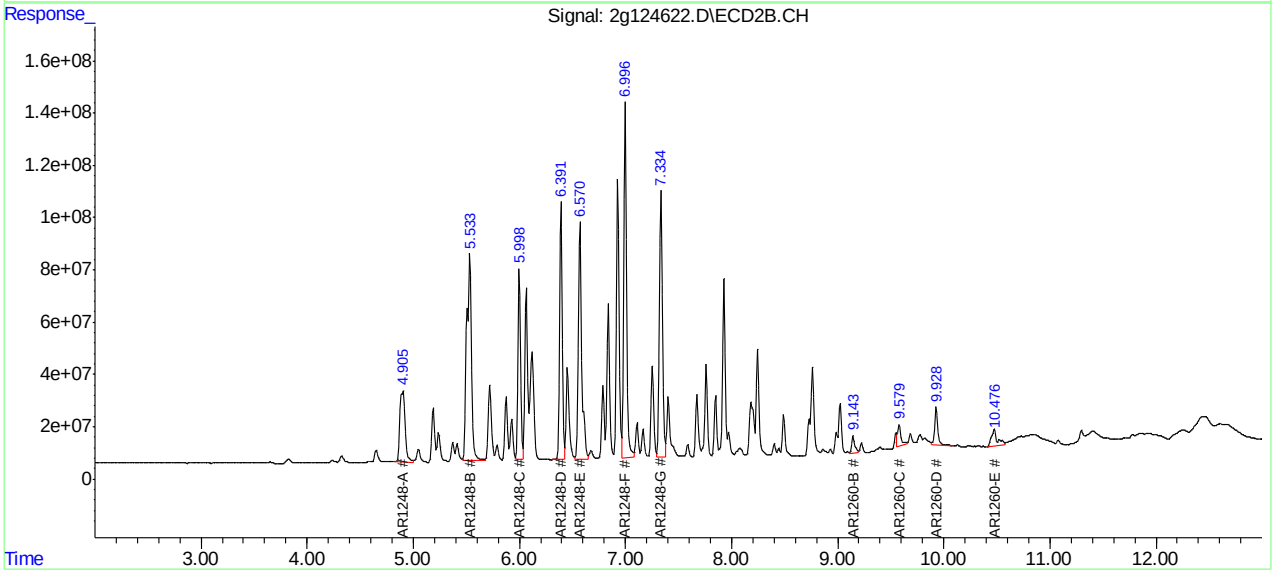
Quantitation Report (QT Reviewed)

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)



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.

7.1.18

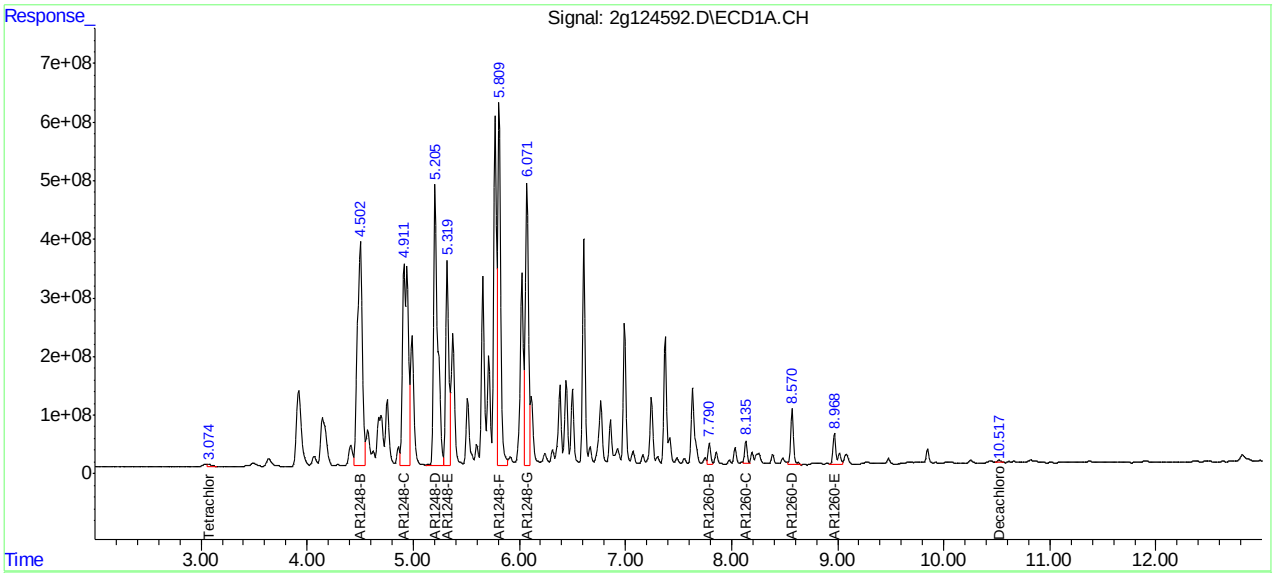
7

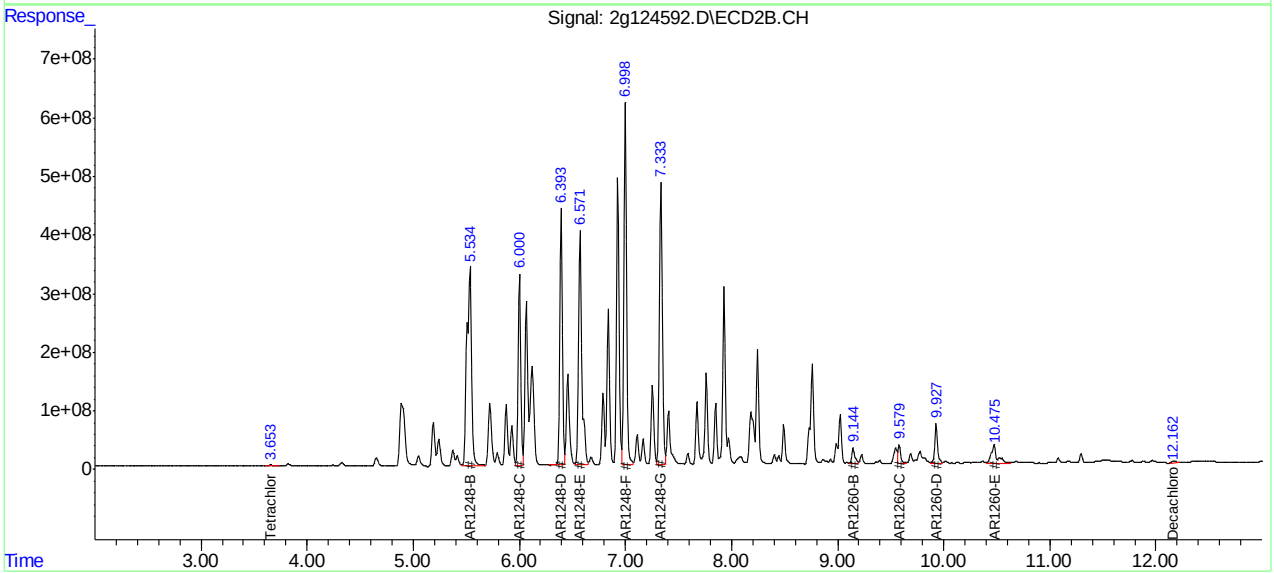
Quantitation Report (QT Reviewed)

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 | | | | | | |

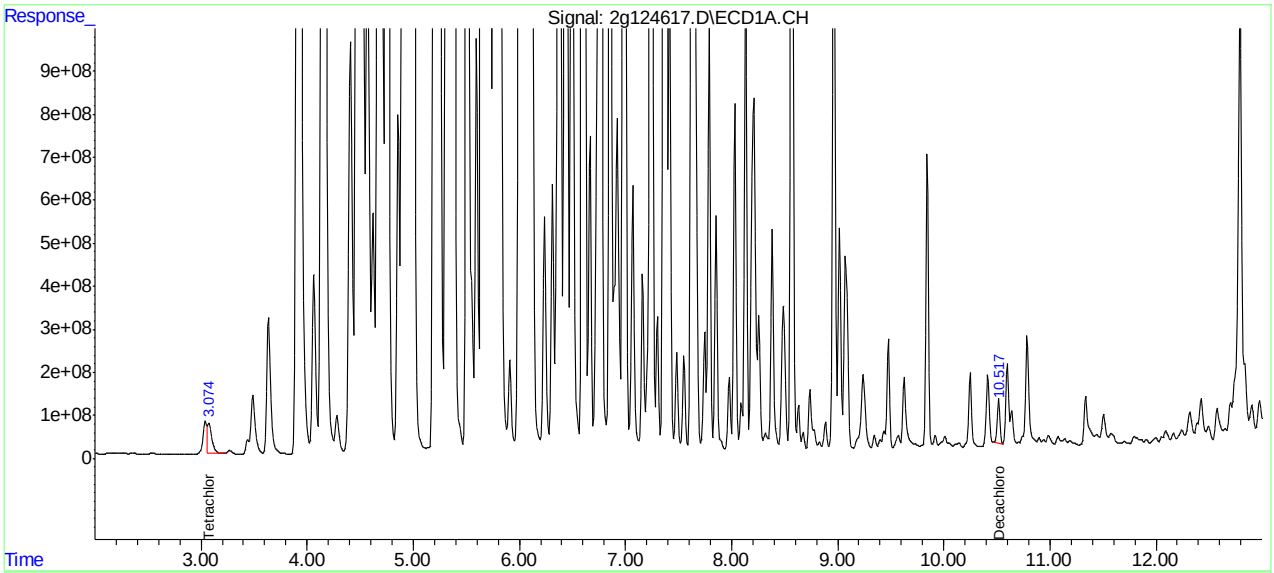
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

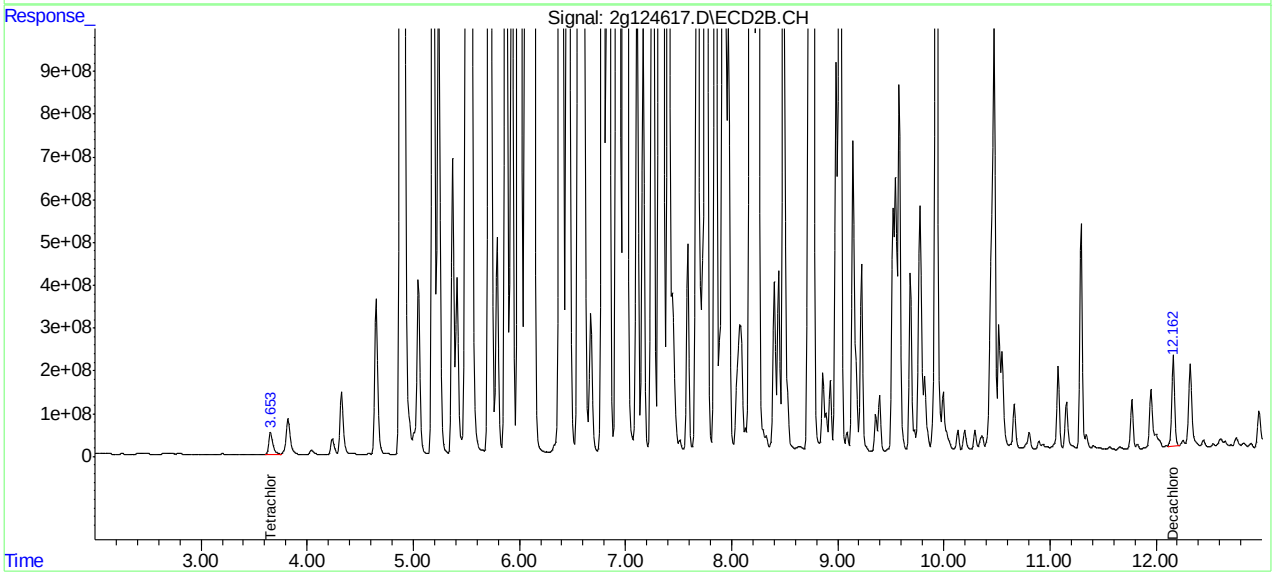
Quantitation Report (QT Reviewed)

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 |

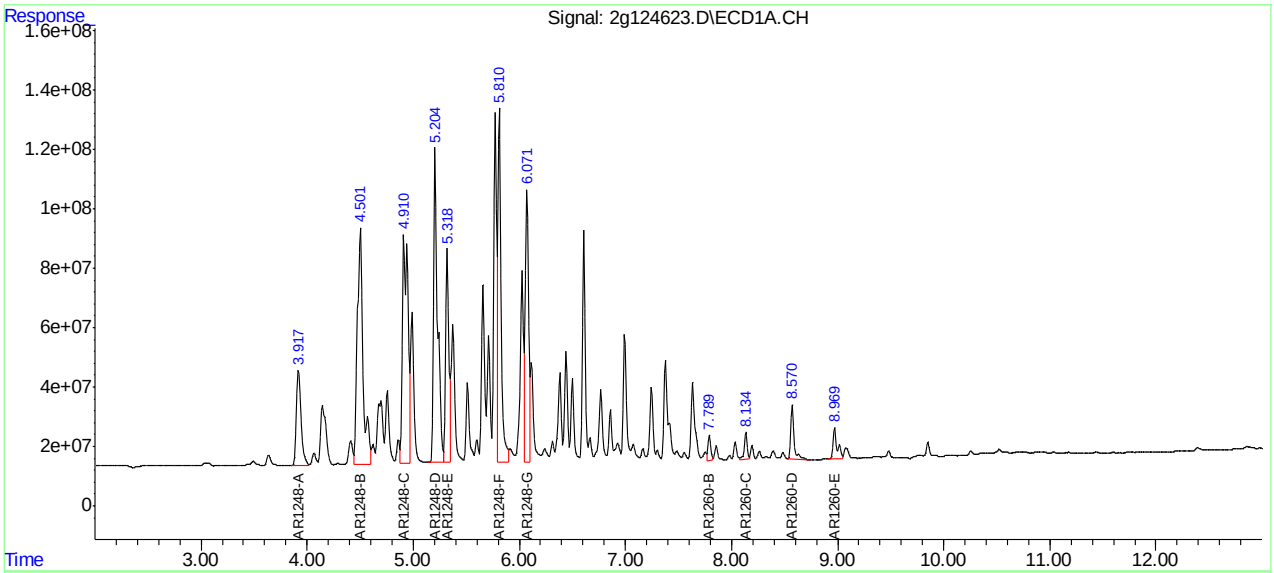
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

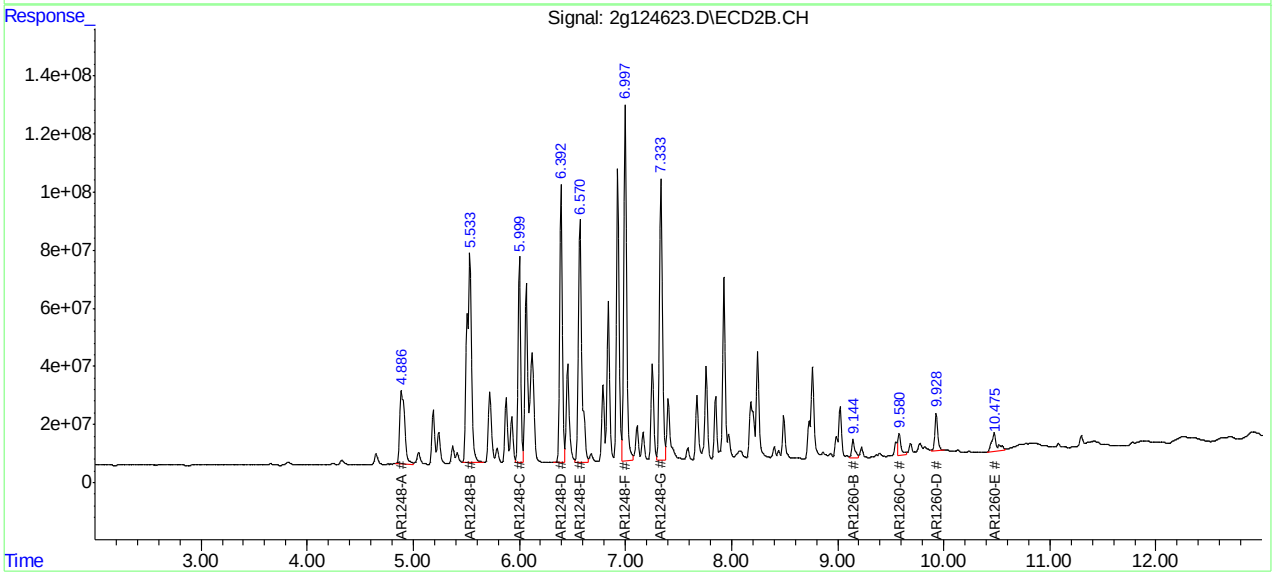
Quantitation Report (QT Reviewed)

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)










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\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 |

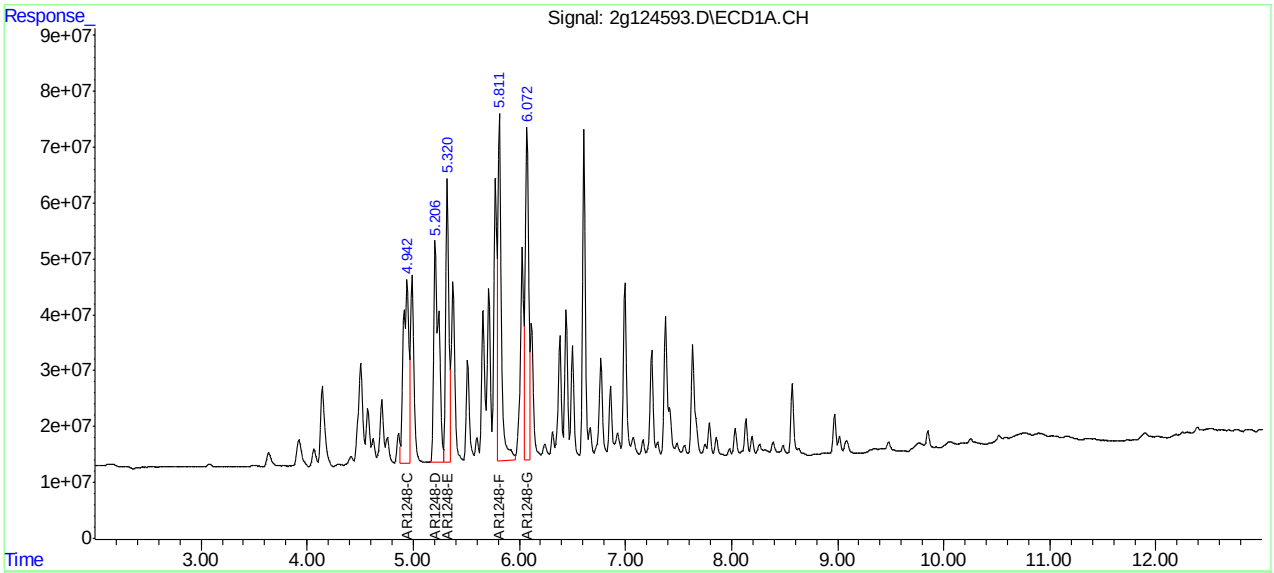
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

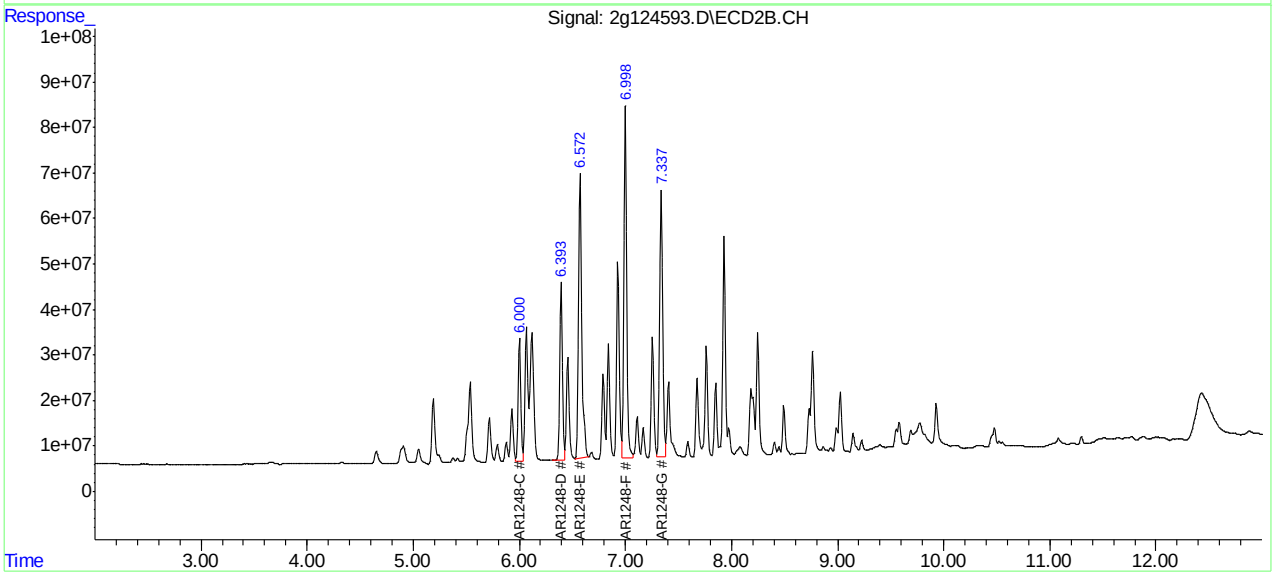
Quantitation Report (QT Reviewed)

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)



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 | | | | | | |

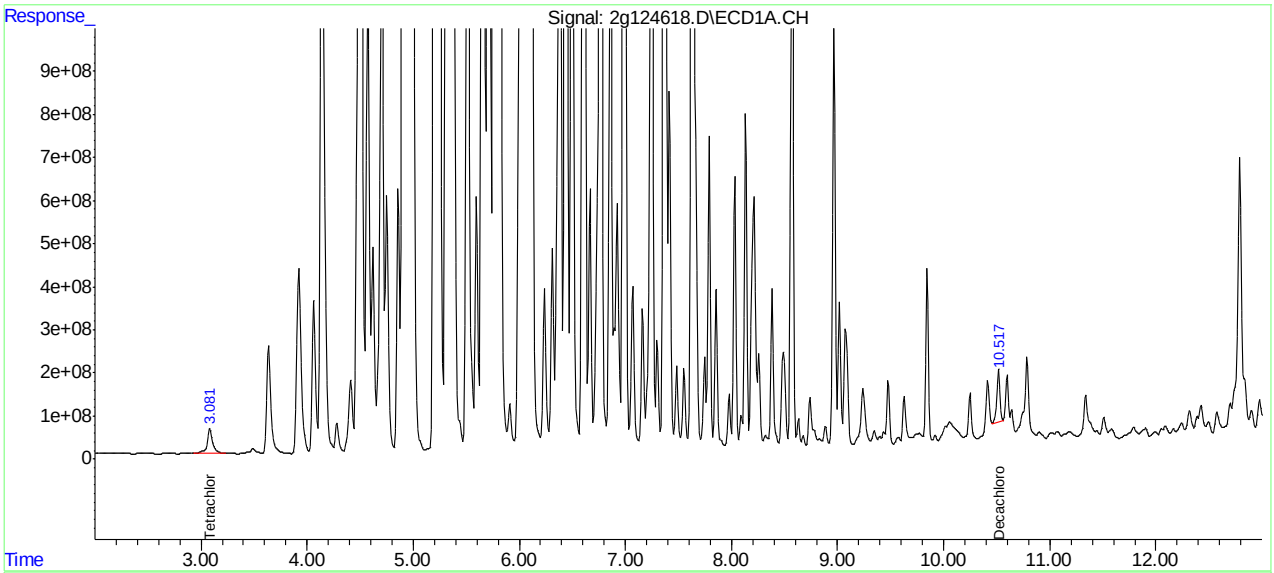
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

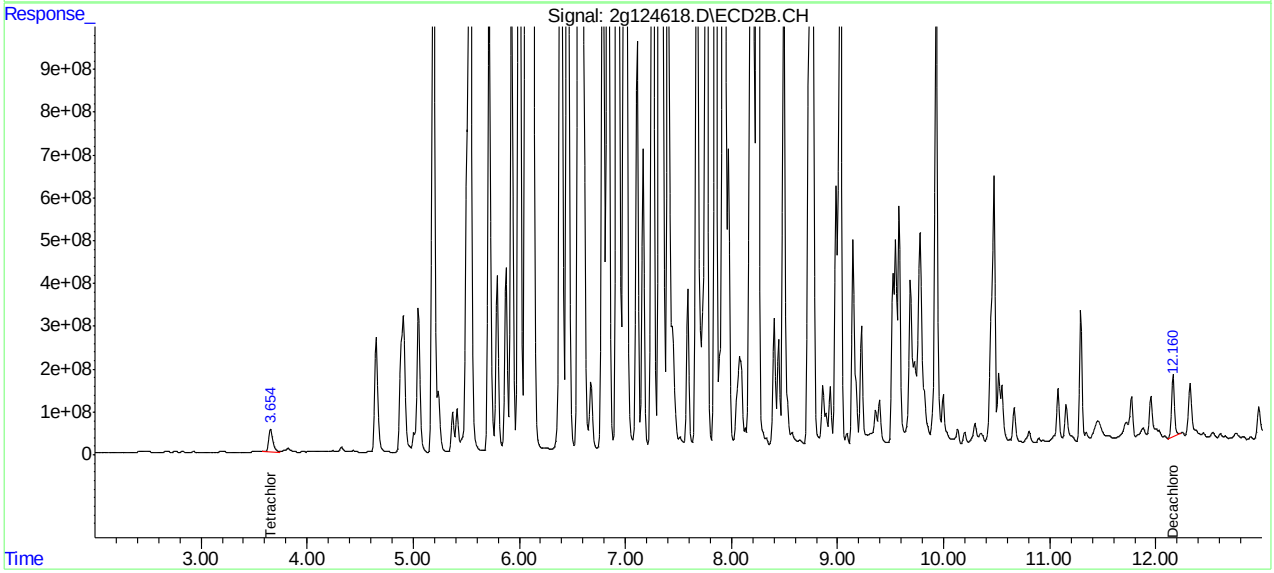
Quantitation Report (QT Reviewed)

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)










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 |

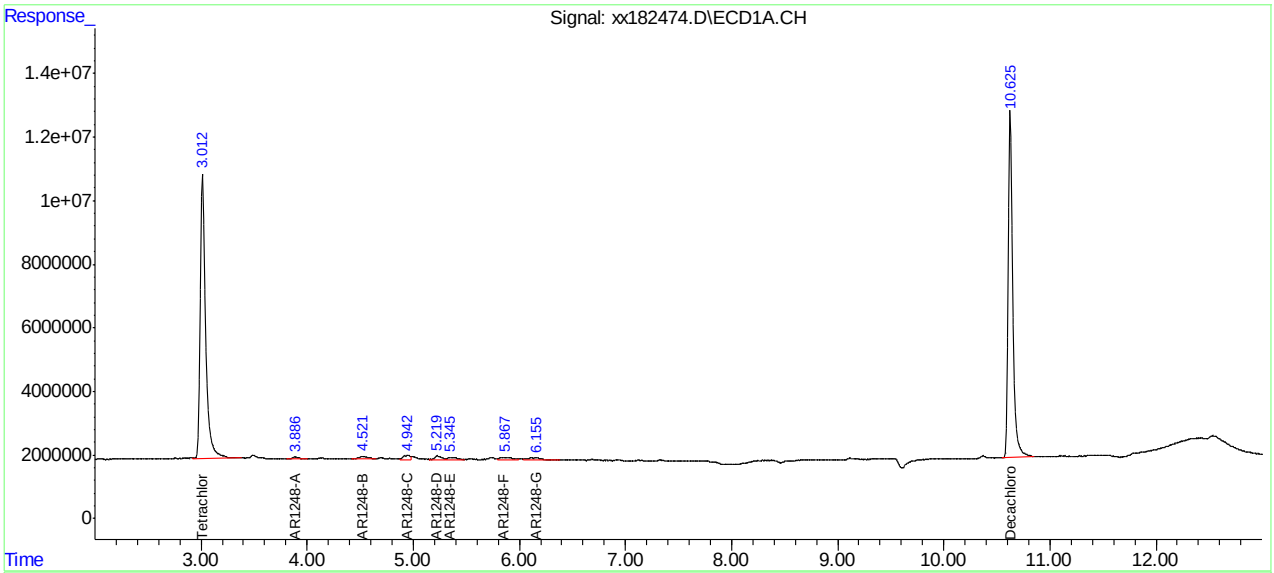
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

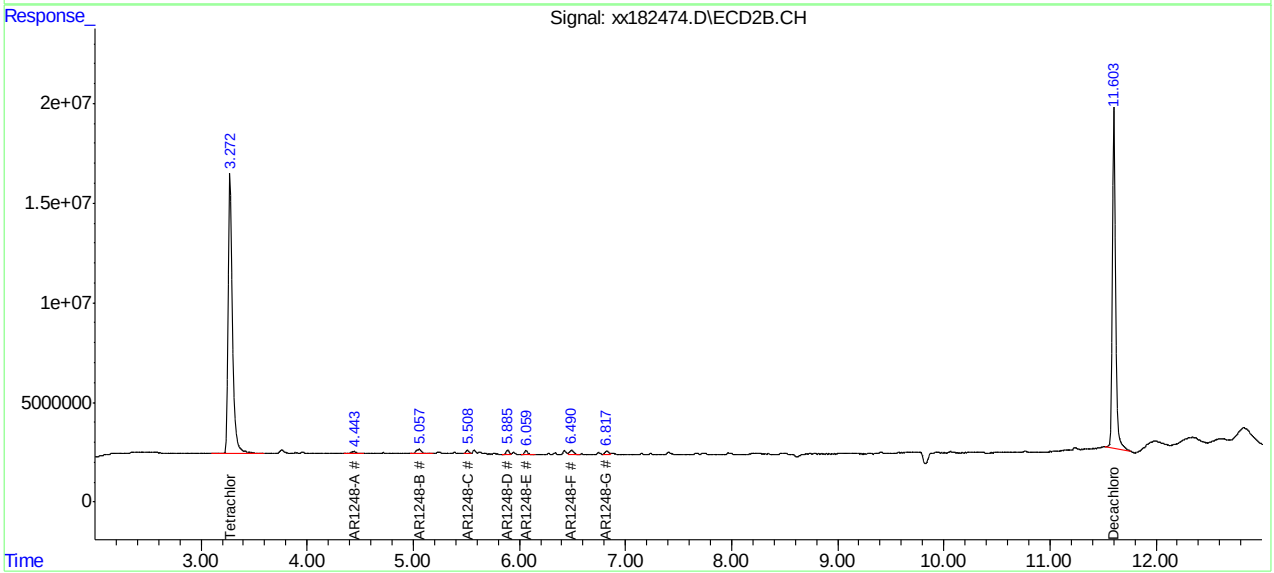
Quantitation Report (QT Reviewed)

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)



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.

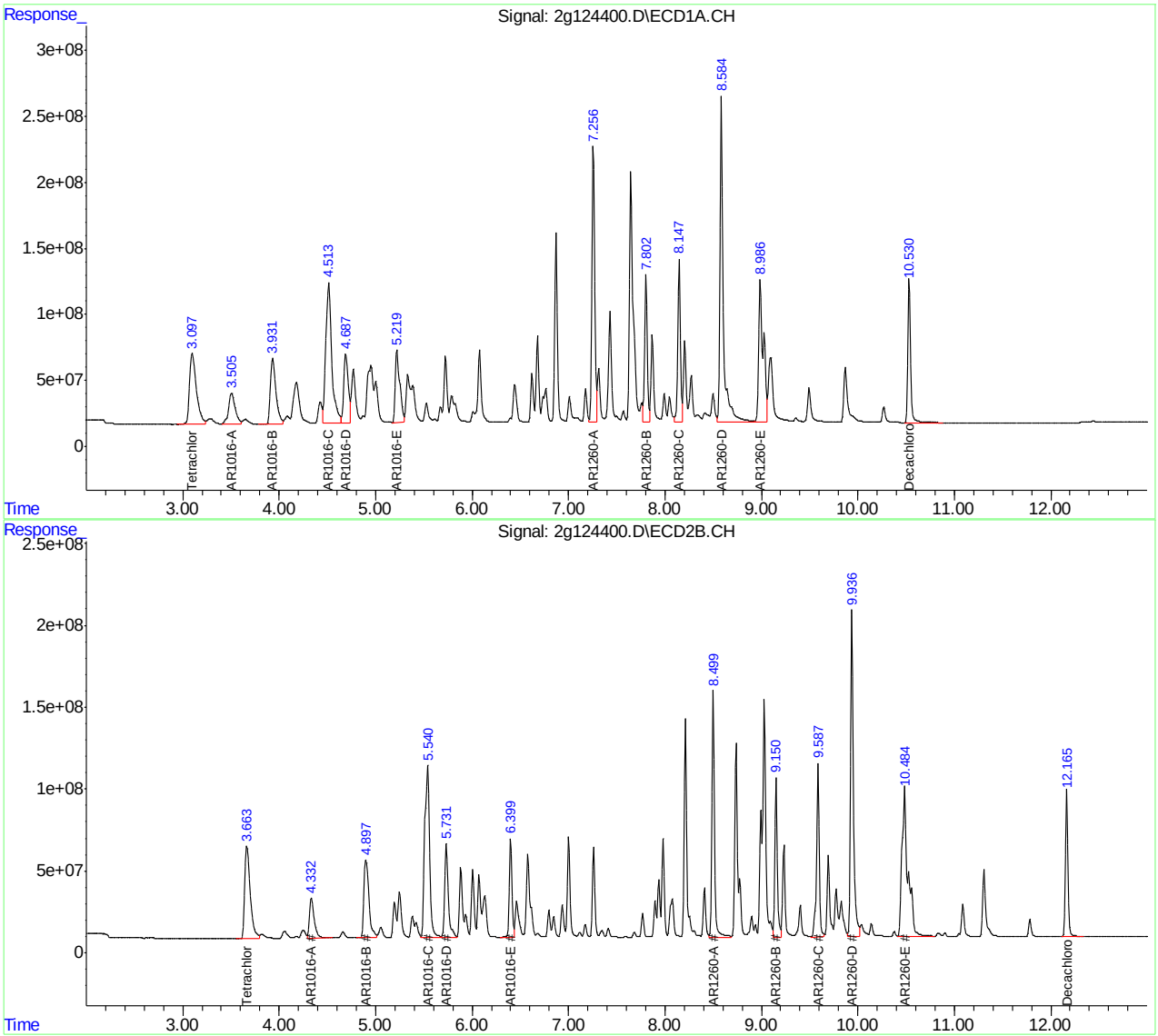
7.3.1
7

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)



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 | |

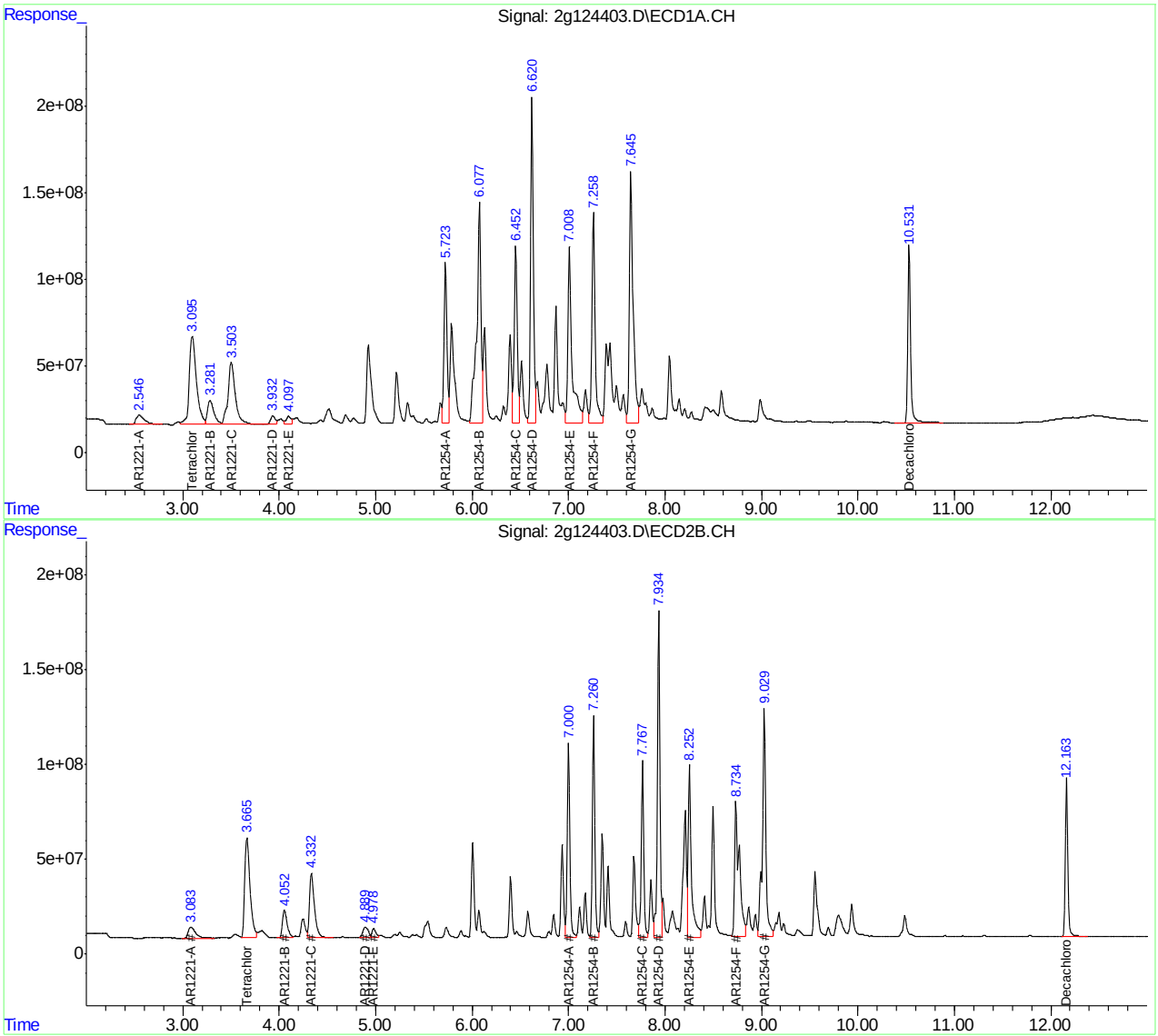
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

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)



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 |

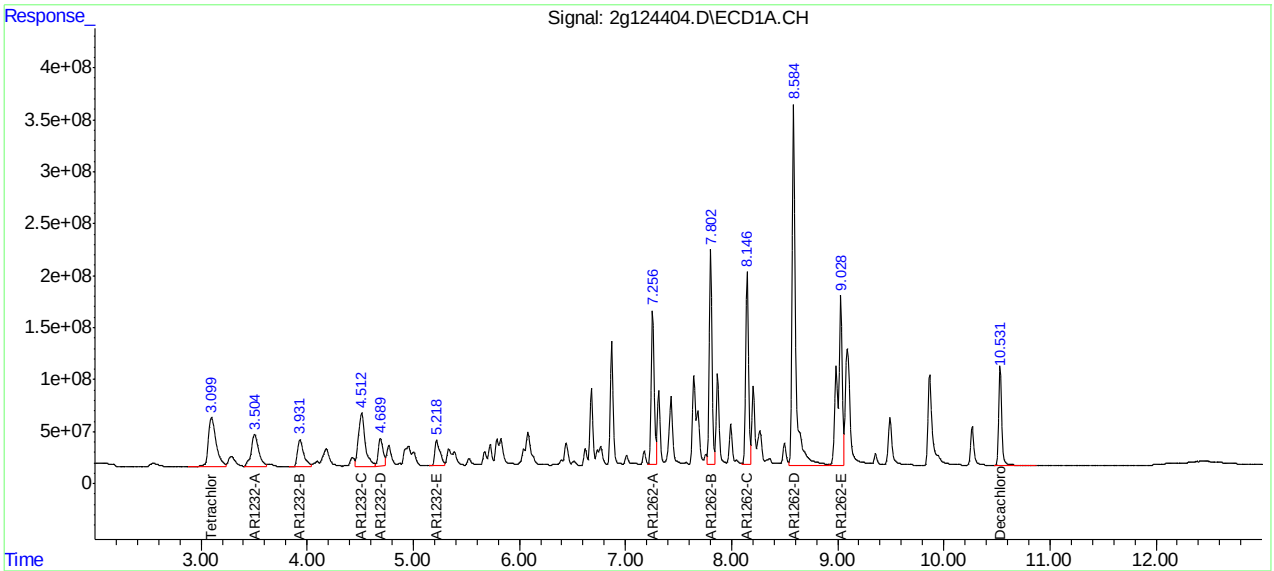
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

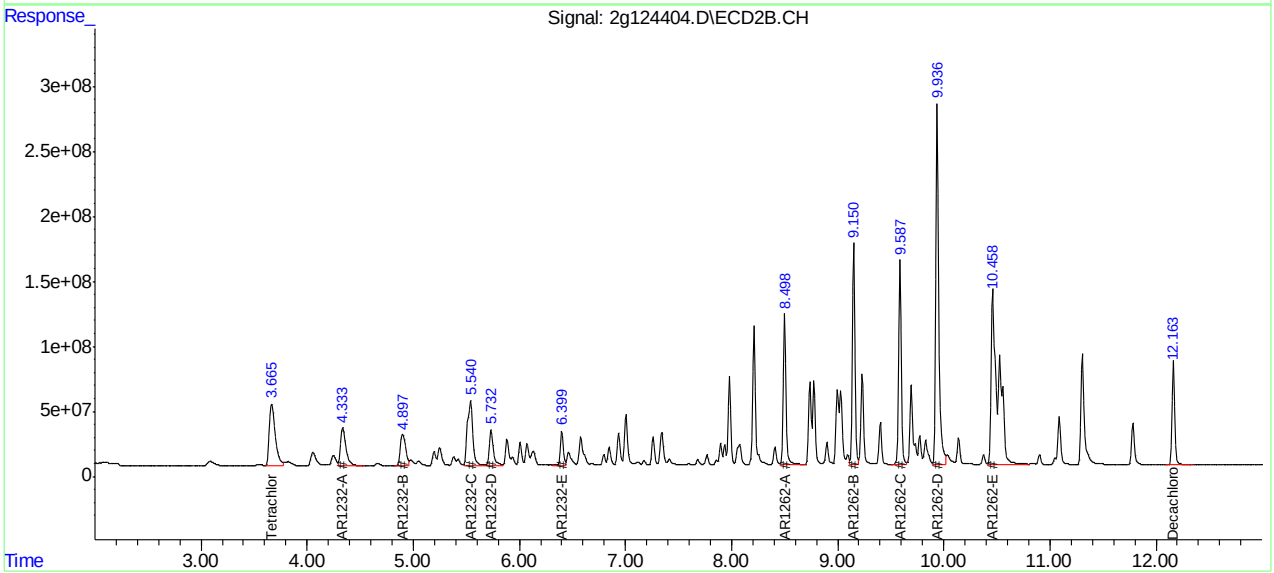
Quantitation Report (QT Reviewed)

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)



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 |

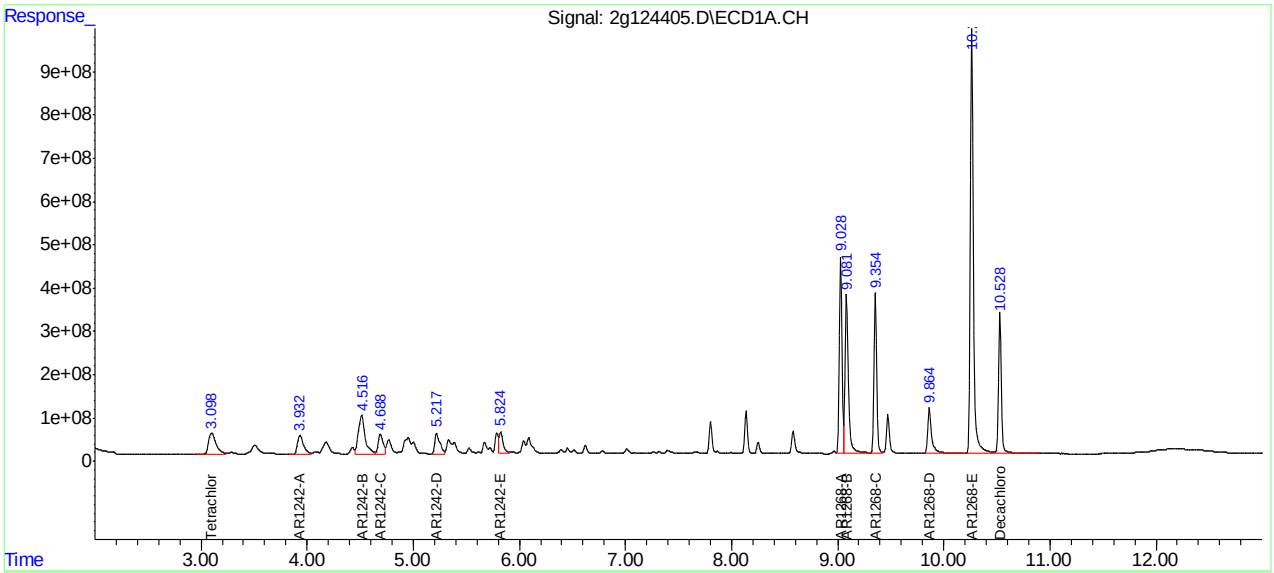
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

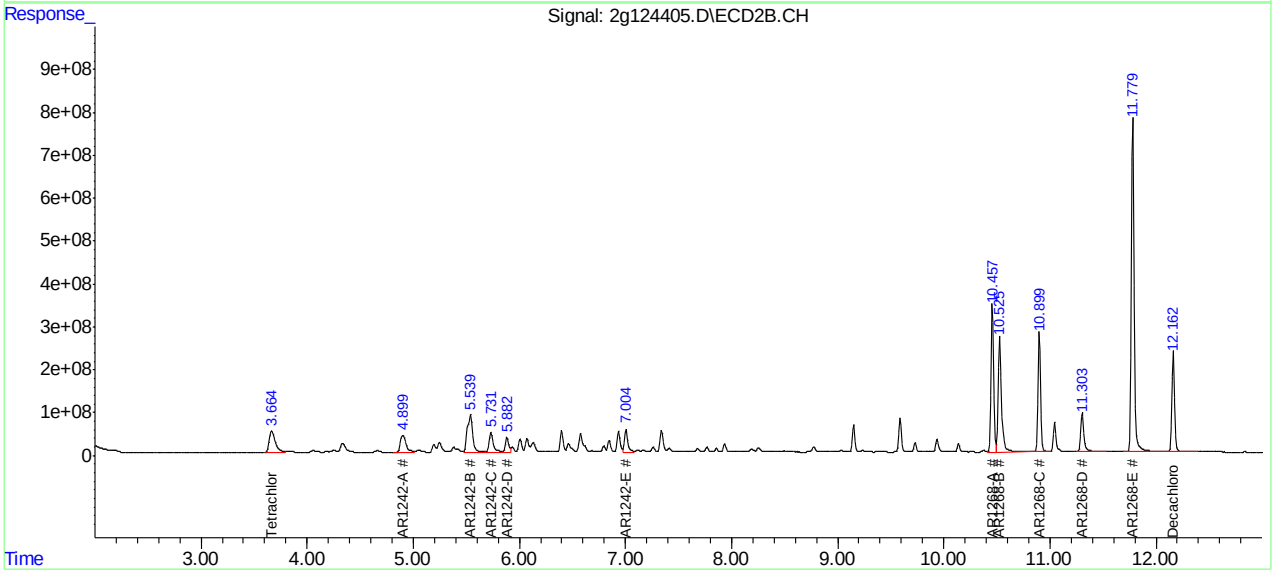
Quantitation Report (QT Reviewed)

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)










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 : 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.

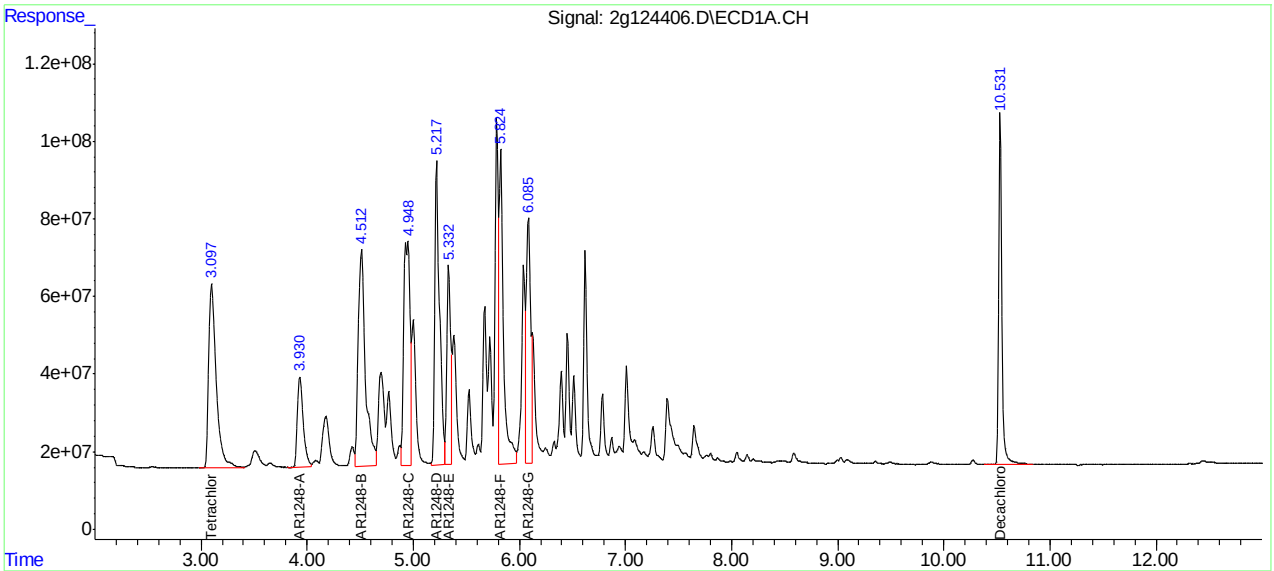
7.3.5
7

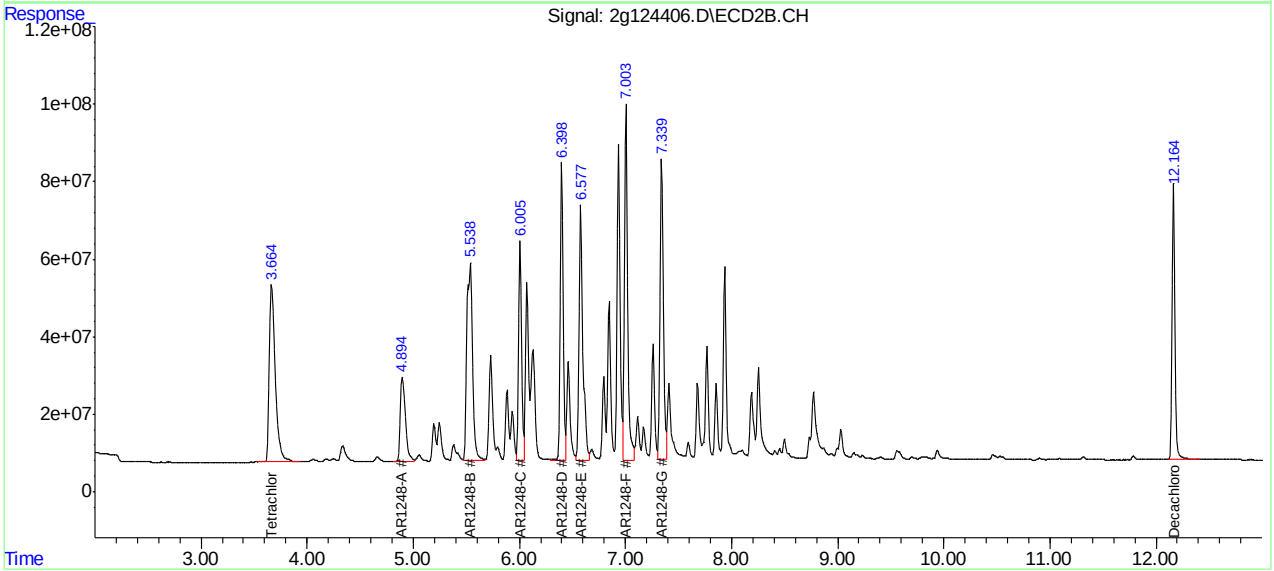
Quantitation Report (QT Reviewed)

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 | % |

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**APPENDIX D**

**TRILLIUM DATA VALIDATION REPORT**
**SOIL SAMPLES**

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# 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

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## 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 part of the data package for all future distributions of the PCBs data.

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## 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.

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## 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 |



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| 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.

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## 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



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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



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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 part of the data package for all future distributions of the PCBs data.

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# ATTACHMENT A

**DATA SUMMARY FORMS**
**Accutest Laboratories Job No. JC10583**
**Samples Collected December 11, 2015**

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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.

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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.

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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.

US EPA ARCHIVE DOCUMENT

**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

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



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# 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

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



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# 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 | 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



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# 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.

1/22/16

ND = Not detected MDL = Method Detection Limit
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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



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# 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. Dec 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



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# 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. Drechsler 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



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# 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~~ 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. Dreier 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



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# 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. Dec 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



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# 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



US EPA ARCHIVE DOCUMENT

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. Dreier 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



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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. 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



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**APPENDIX E**

**CONCRETE CHIP LABORATORY DATA DELIVERABLES**
**J114699**

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# 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.

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# 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**
**Matrix: Solid**
**Date Received: 06/01/16 13:20**
**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**
**Matrix: Solid**
**Date Received: 06/01/16 13:20**
**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) |

## 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
**Date Collected: 05/31/16 08:40**
**Date Received: 06/01/16 13:20**

## Lab Sample ID: 460-114699-1
**Matrix: Solid**
**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
**Date Collected: 05/31/16 08:30**
**Date Received: 06/01/16 13:20**

## Lab Sample ID: 460-114699-2
**Matrix: Solid**
**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
**Date Collected: 05/31/16 12:05**
**Date Received: 06/01/16 13:20**

## Lab Sample ID: 460-114699-3
**Matrix: Solid**
**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
**Date Collected: 05/31/16 10:55**
**Date Received: 06/01/16 13:20**

## Lab Sample ID: 460-114699-4
**Matrix: Solid**
**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 |

US EPA ARCHIVE DOCUMENT

# 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 | |

| DCB = DCB Decachlorobiphenyl | QC LIMITS |
|---|---|
| | 47-150 |

# Column to be used to flag recovery values

FORM II 8082A



US EPA ARCHIVE DOCUMENT

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



US EPA ARCHIVE DOCUMENT

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



US EPA ARCHIVE DOCUMENT

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 | | |

US EPA ARCHIVE DOCUMENT

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 | | |

US EPA ARCHIVE DOCUMENT

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 | | |

US EPA ARCHIVE DOCUMENT

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 | | |

US EPA ARCHIVE DOCUMENT

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 |

US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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

US EPA ARCHIVE DOCUMENT

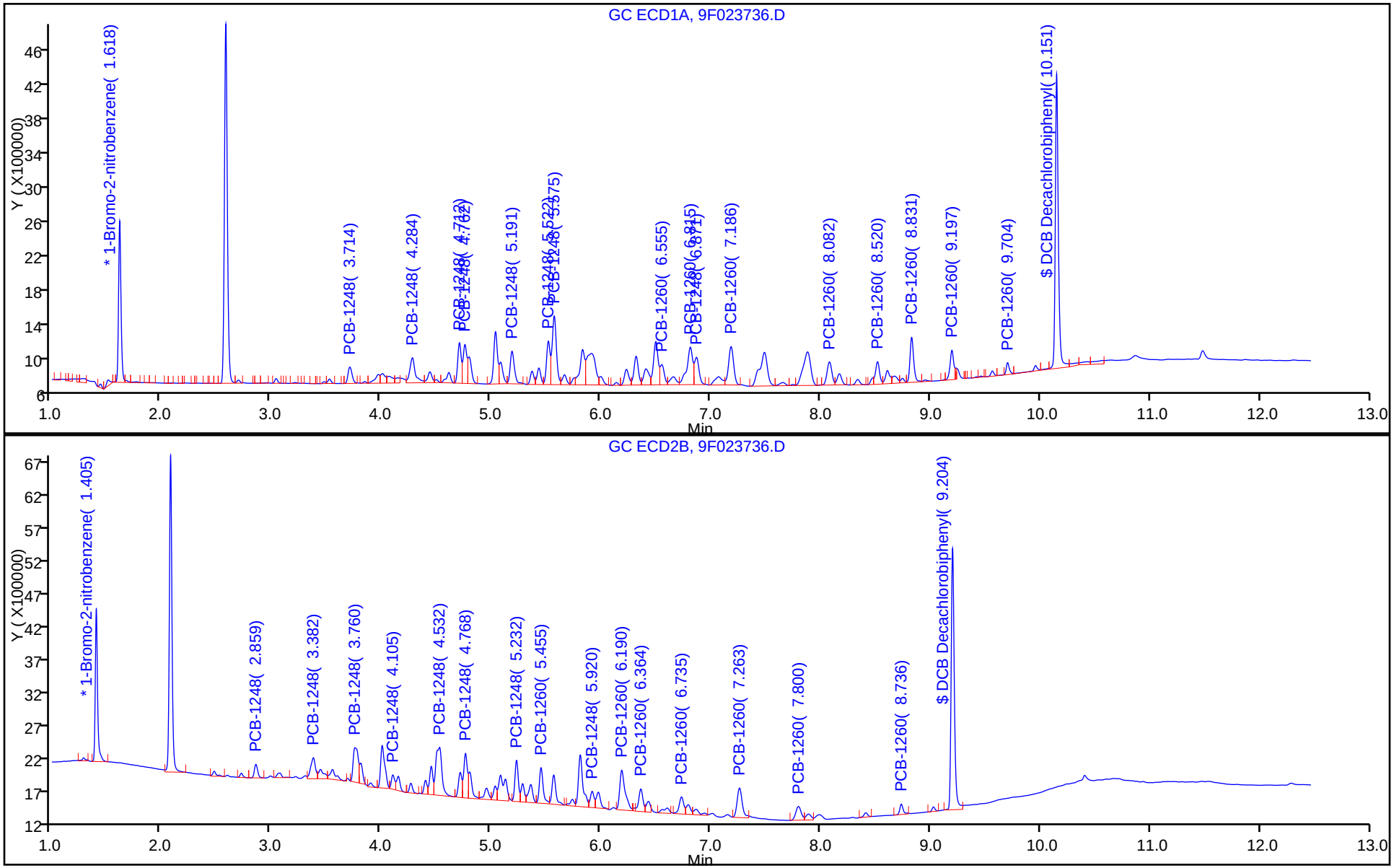
US EPA ARCHIVE DOCUMENT

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 | | |



US EPA ARCHIVE DOCUMENT

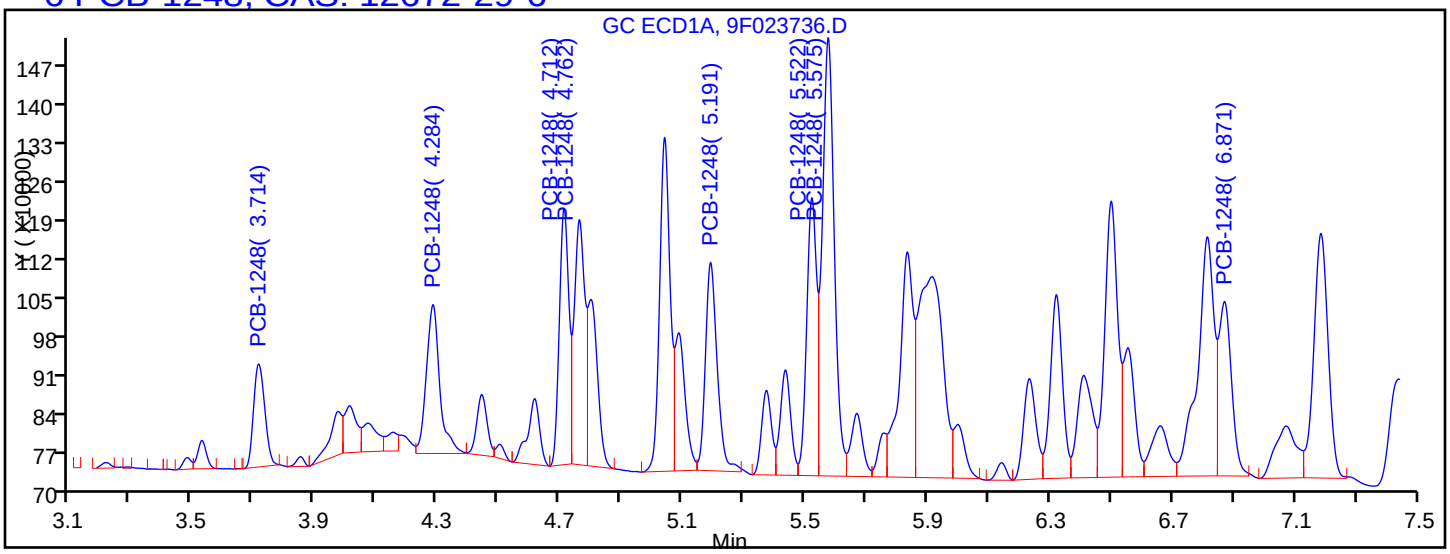
Report Date: 13-Jun-2016 08:53:31 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023736.D

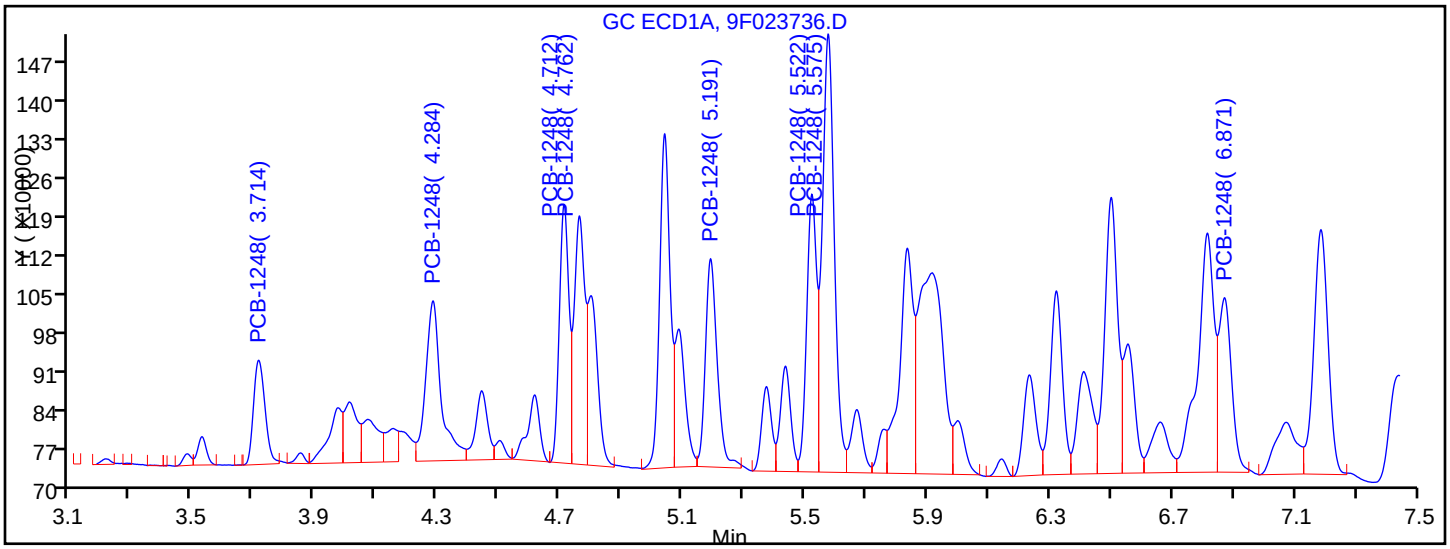
| | | | |
|---|---|---|---|
| Injection Date: | 11-Jun-2016 15:00:08 | Instrument ID: | CPESTGC9 |
| Lims ID: | 460-114699-A-1-A | Lab Sample ID: | 460-114699-1 |
| Client ID: | Manhole 1-1 | | |
| Operator ID: | | ALS Bottle#: | 7 Worklist Smp#: 7 |
| Injection Vol: | 1.0 ul | Dil. Factor: | 1.0000 |
| 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 | |

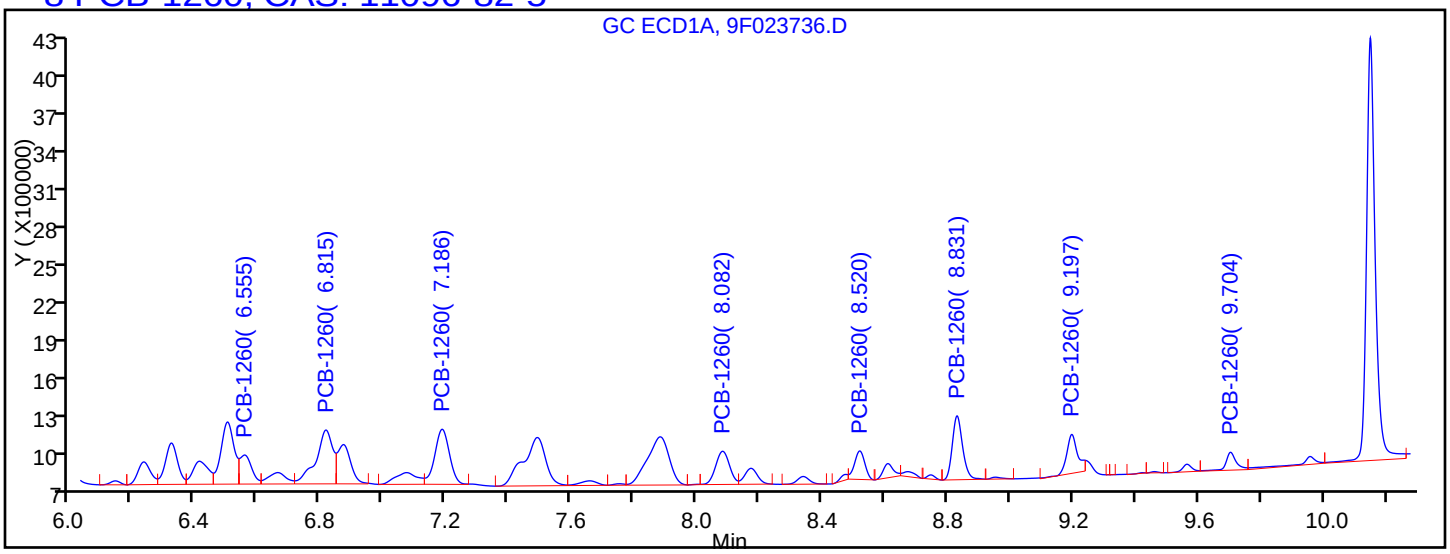
Report Date: 13-Jun-2016 08:53:32 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023736.D

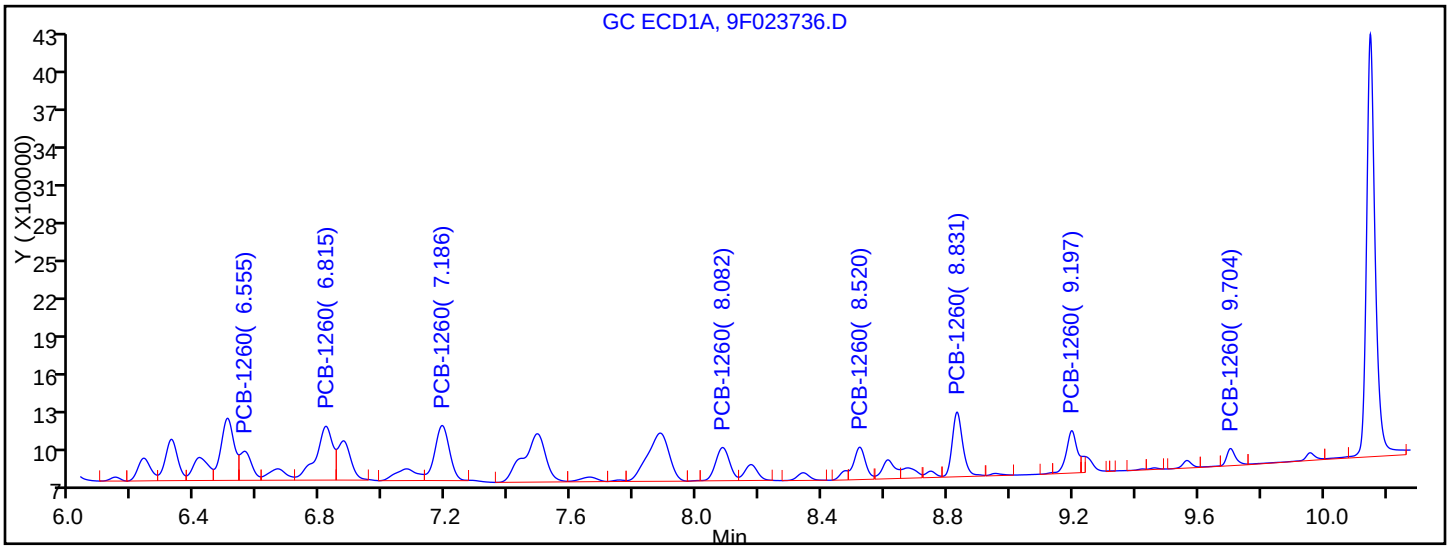
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 11-Jun-2016 15:00:08 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | 460-114699-A-1-A | Lab Sample ID: | 460-114699-1 | | |
| Client ID: | Manhole 1-1 | | | | |
| Operator ID: | | ALS Bottle#: | 7 | Worklist Smp#: | 7 |
| Injection Vol: | 1.0 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 |



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

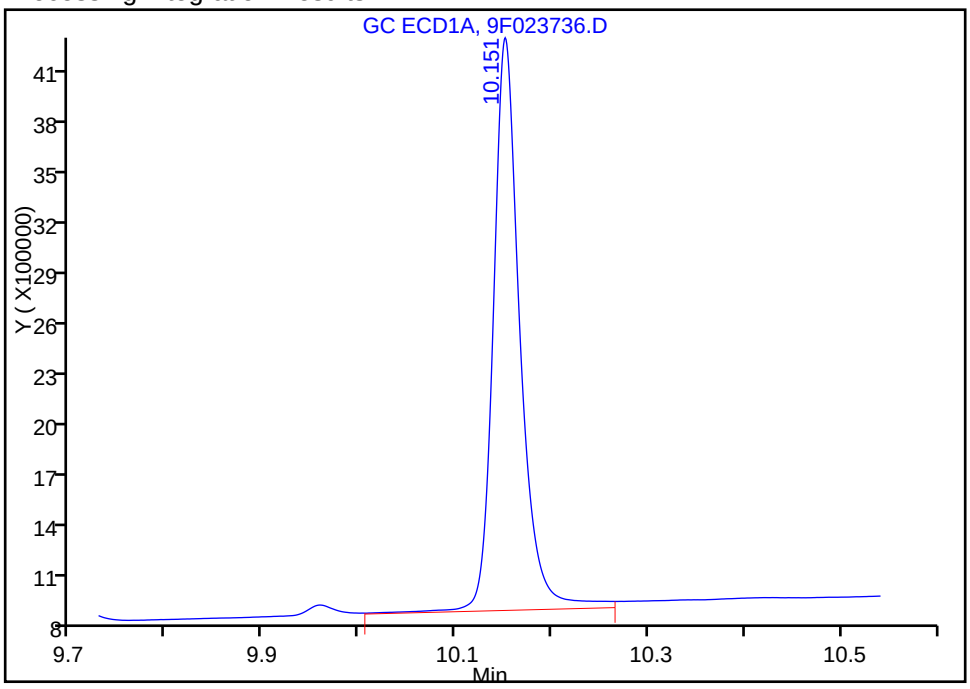
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023736.D | | | | |
| Injection Date: | 11-Jun-2016 15:00:08 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | 460-114699-A-1-A | Lab Sample ID: | 460-114699-1 | | |
| Client ID: | Manhole 1-1 | | | | |
| 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

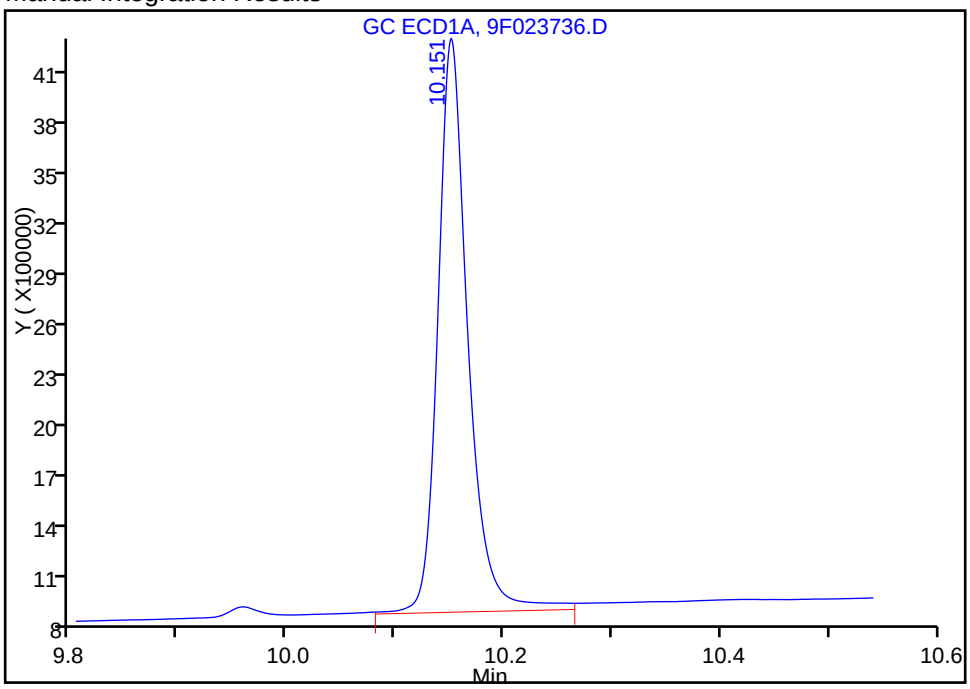
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

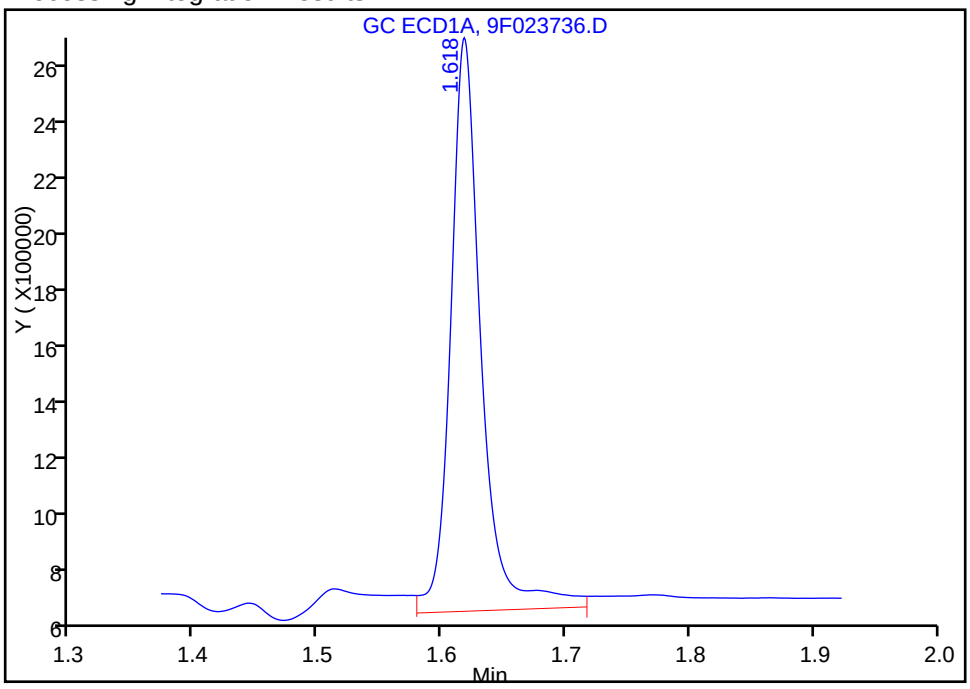
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023736.D | | | | |
| Injection Date: | 11-Jun-2016 15:00:08 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | 460-114699-A-1-A | Lab Sample ID: | 460-114699-1 | | |
| Client ID: | Manhole 1-1 | | | | |
| 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 | | |

## * 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 1

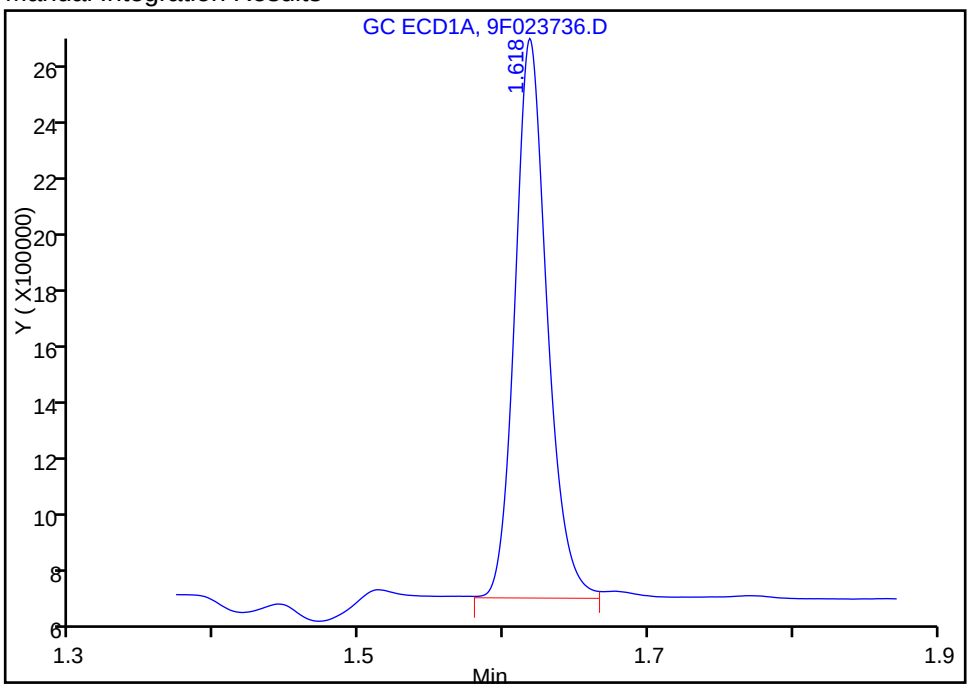
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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 |

US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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

US EPA ARCHIVE DOCUMENT

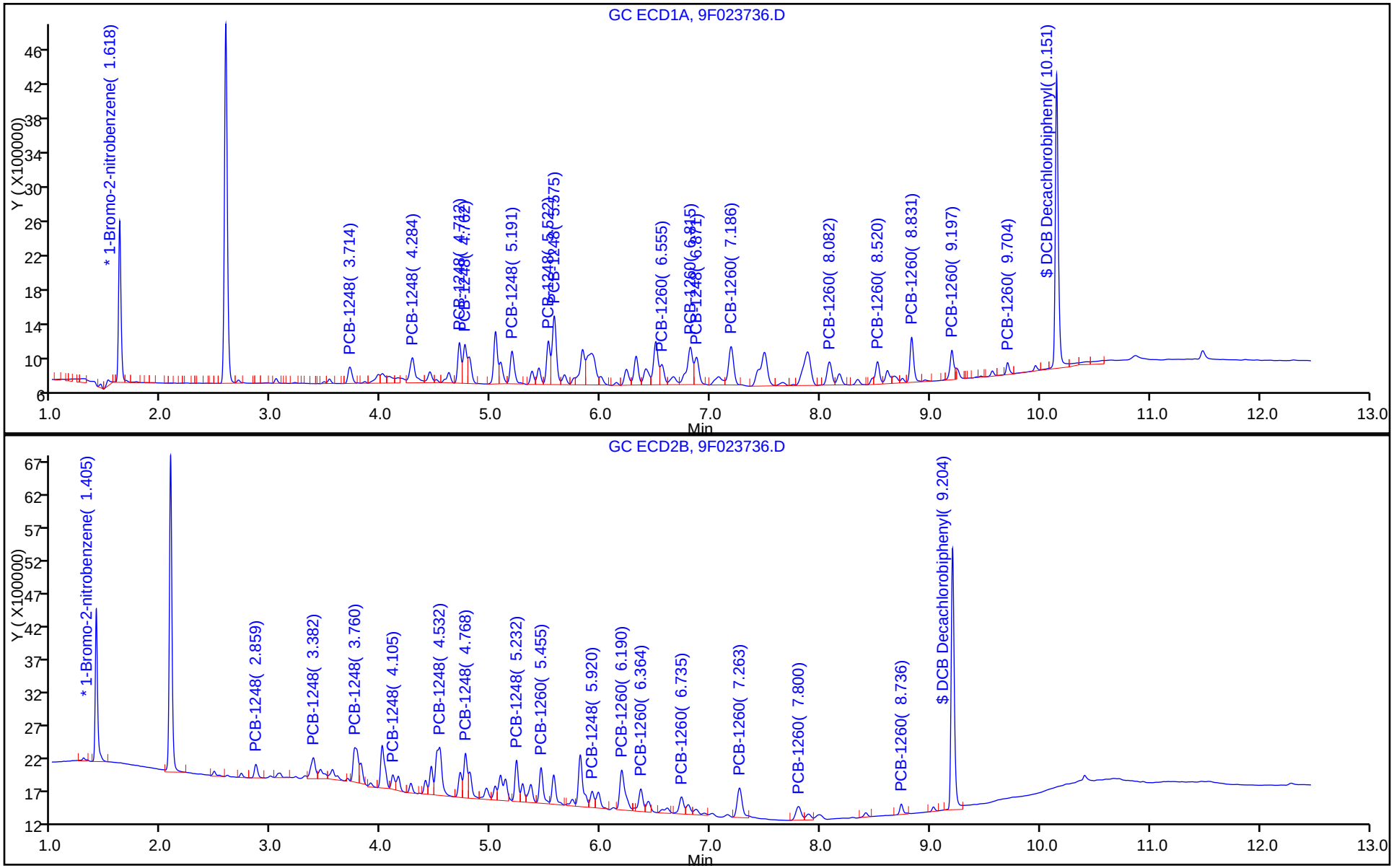
US EPA ARCHIVE DOCUMENT

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 | | |



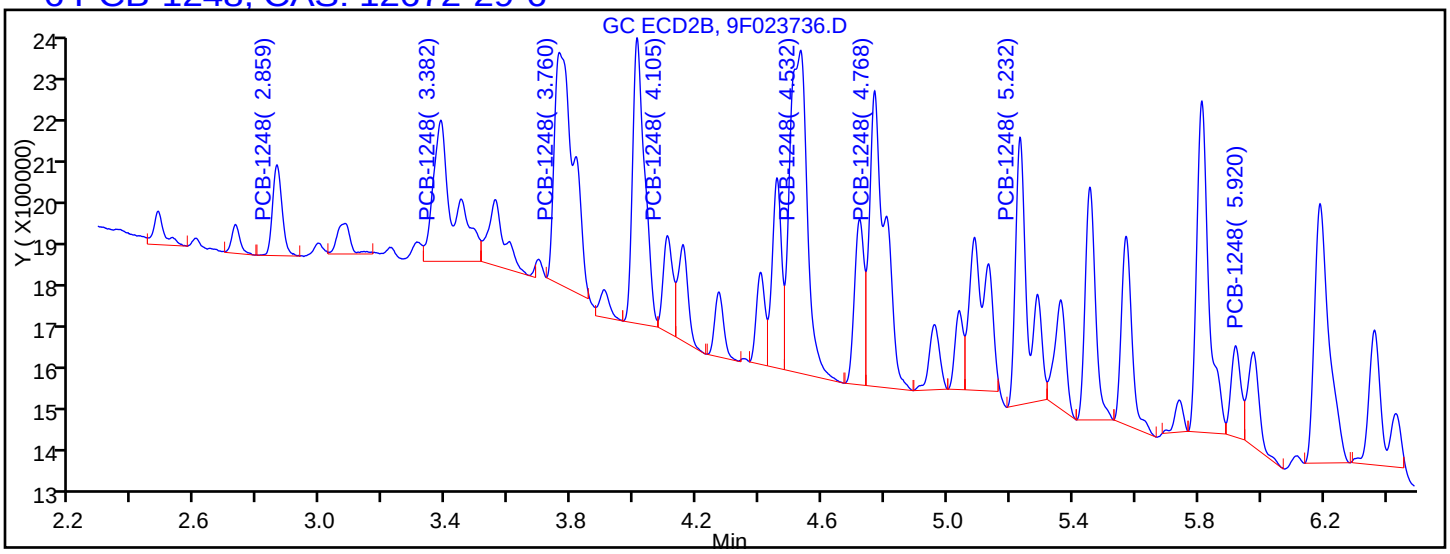
Report Date: 13-Jun-2016 08:53:32 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023736.D

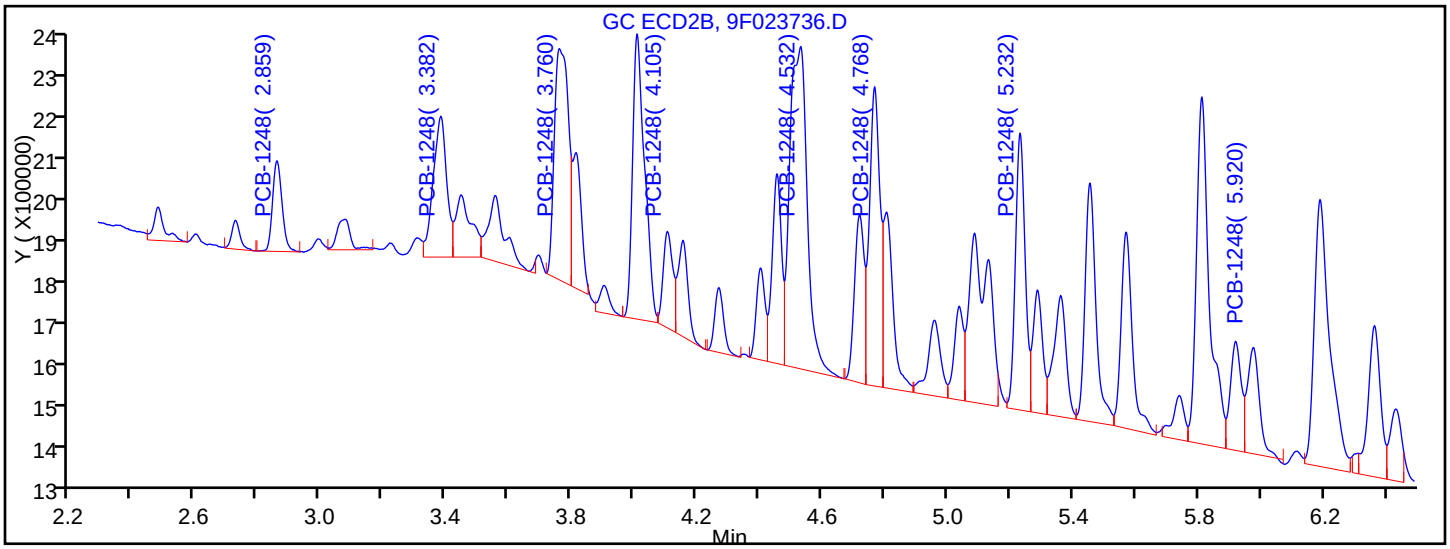
| | | | |
|---|---|---|---|
| Injection Date: | 11-Jun-2016 15:00:08 | Instrument ID: | CPESTGC9 |
| Lims ID: | 460-114699-A-1-A | Lab Sample ID: | 460-114699-1 |
| Client ID: | Manhole 1-1 | | |
| Operator ID: | | ALS Bottle#: | 7 Worklist Smp#: 7 |
| Injection Vol: | 1.0 ul | Dil. Factor: | 1.0000 |
| 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 |



US EPA ARCHIVE DOCUMENT

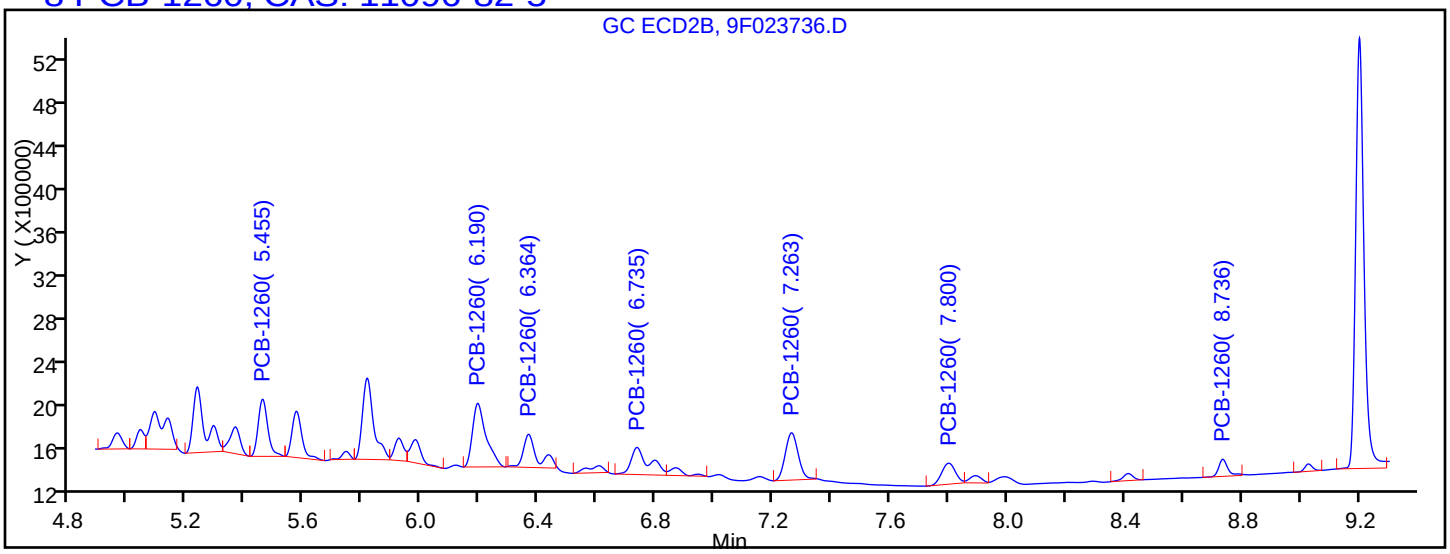
Report Date: 13-Jun-2016 08:53:33 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023736.D

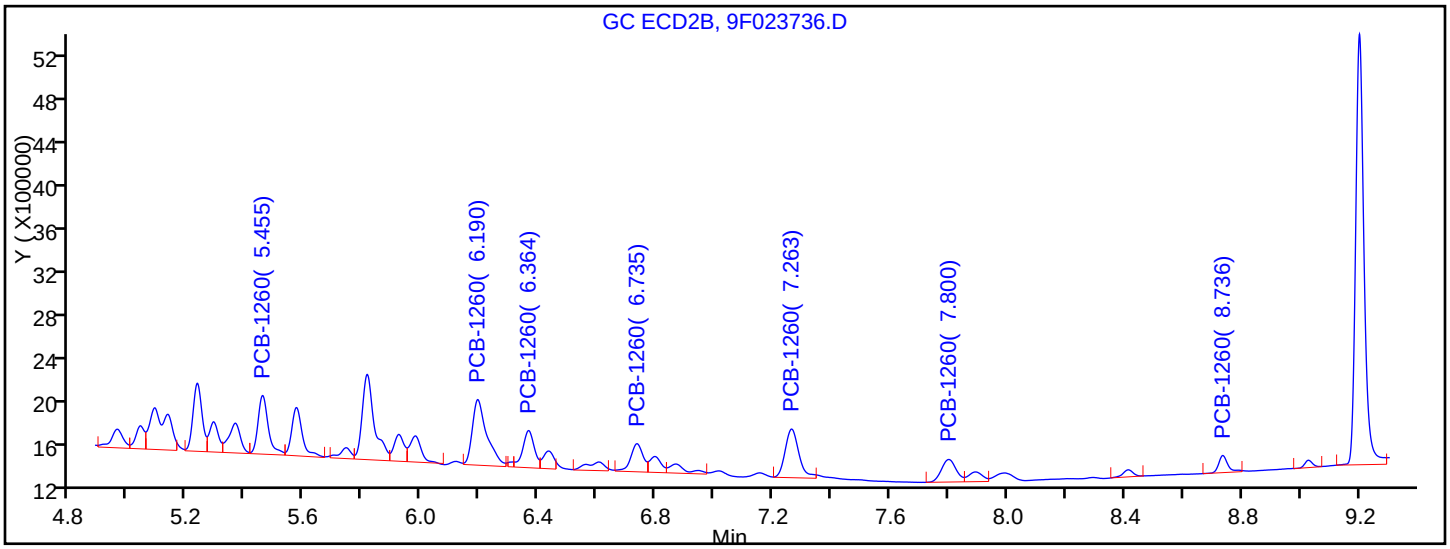
| | | | |
|---|---|---|---|
| Injection Date: | 11-Jun-2016 15:00:08 | Instrument ID: | CPESTGC9 |
| Lims ID: | 460-114699-A-1-A | Lab Sample ID: | 460-114699-1 |
| Client ID: | Manhole 1-1 | | |
| Operator ID: | | ALS Bottle#: | 7 Worklist Smp#: 7 |
| Injection Vol: | 1.0 ul | Dil. Factor: | 1.0000 |
| 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 |



US EPA ARCHIVE DOCUMENT

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 |

US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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

US EPA ARCHIVE DOCUMENT

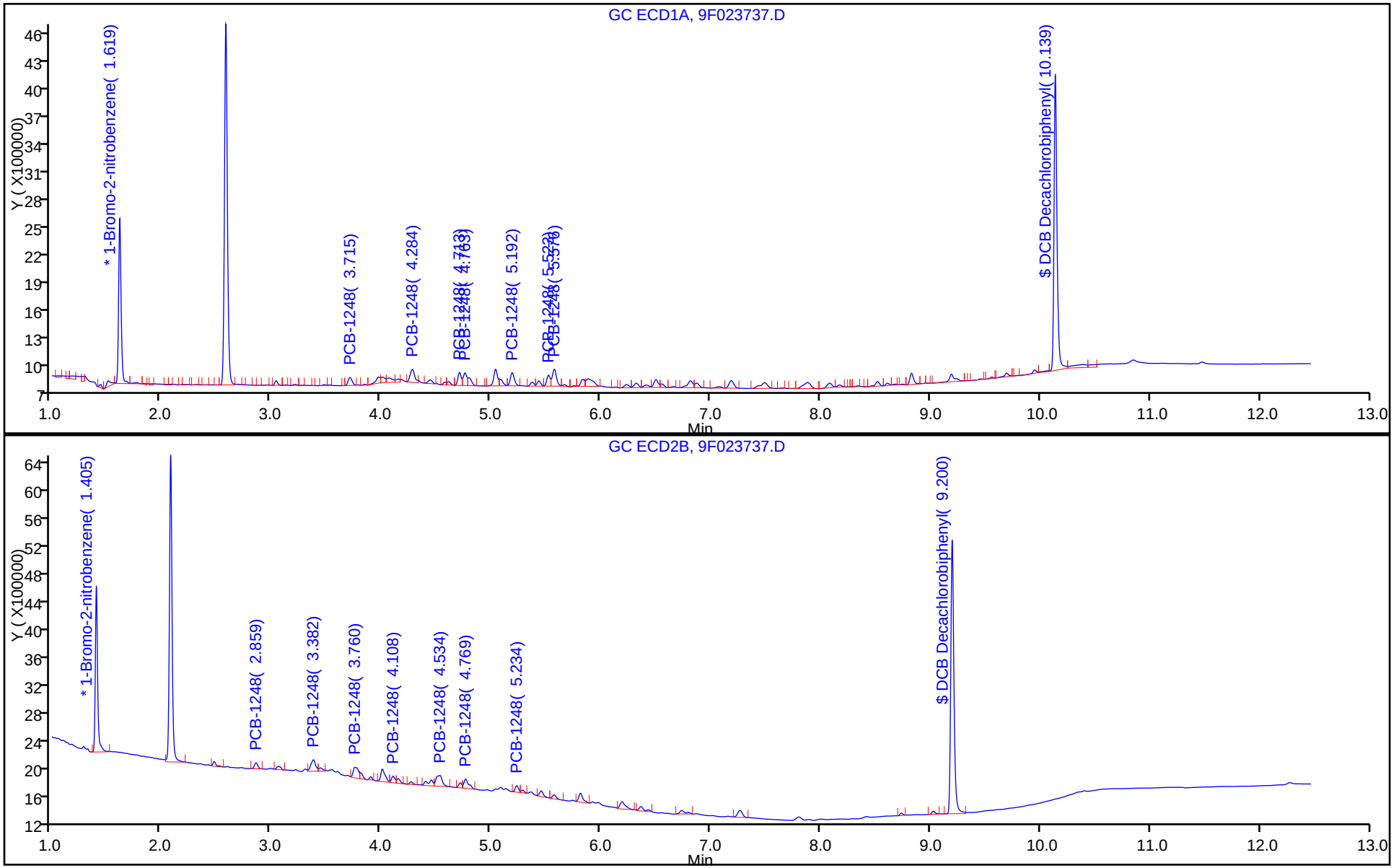
US EPA ARCHIVE DOCUMENT

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 | | |



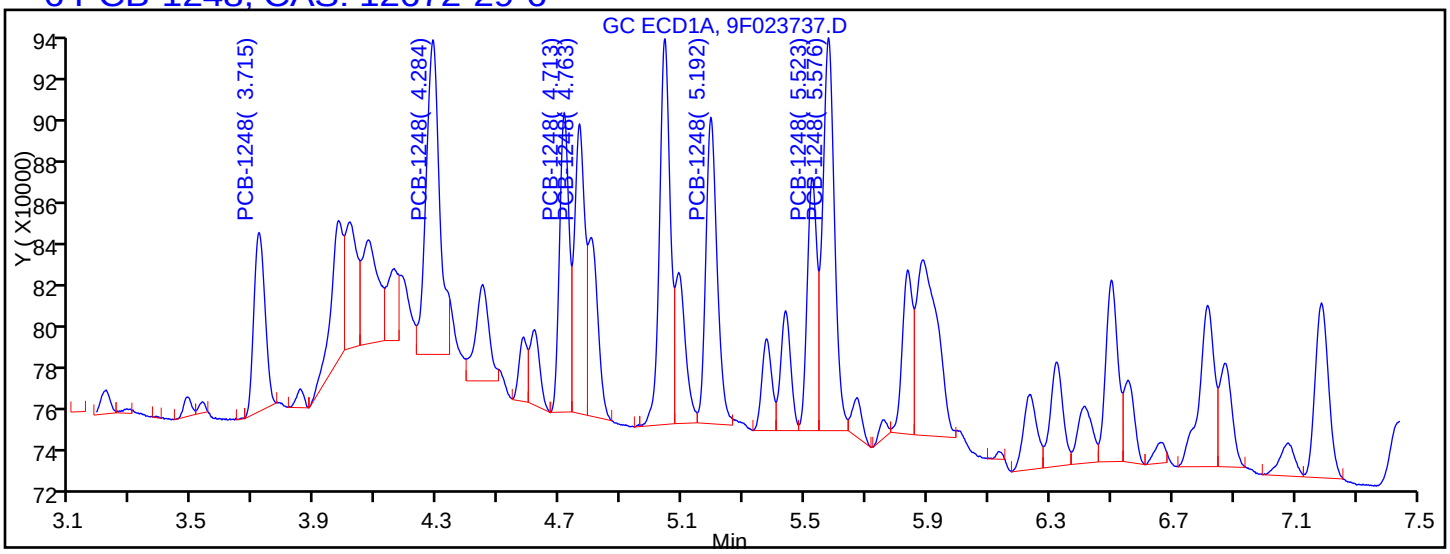
Report Date: 13-Jun-2016 08:53:35 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023737.D

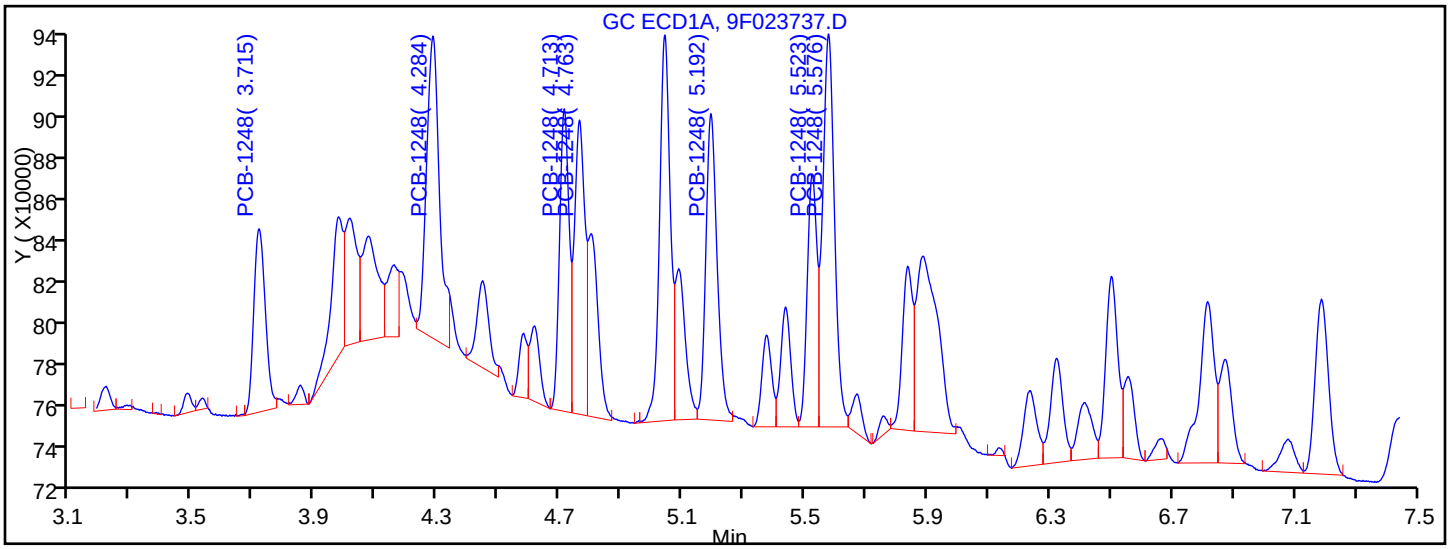
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 11-Jun-2016 15:18:09 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | 460-114699-A-2-A | Lab Sample ID: | 460-114699-2 | | |
| Client ID: | Manhole 1-2 | | | | |
| Operator ID: | | ALS Bottle#: | 8 | Worklist Smp#: | 8 |
| Injection Vol: | 1.0 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 | |



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

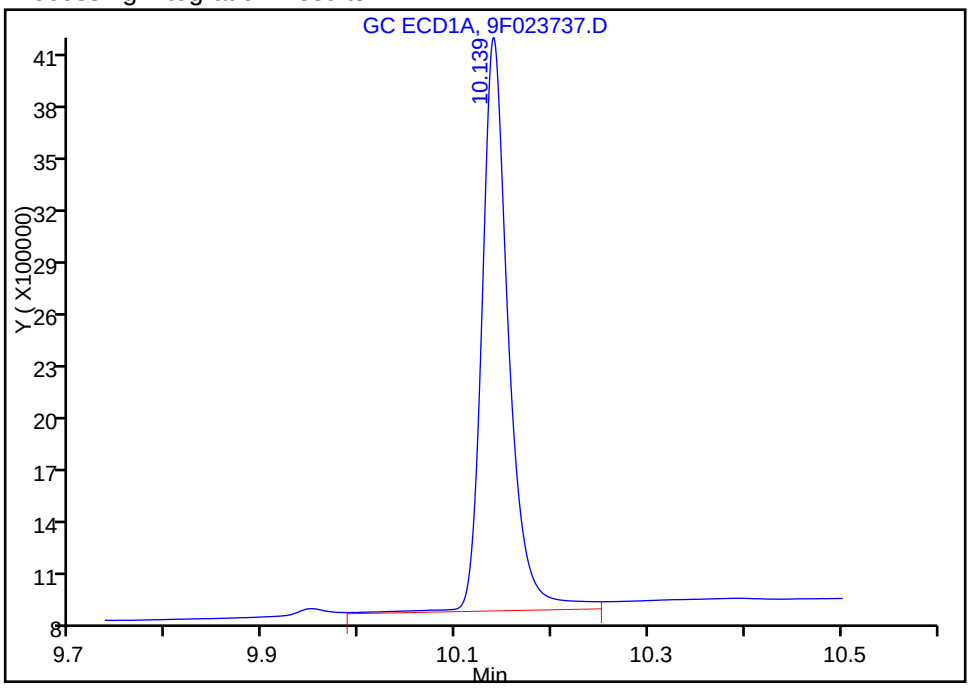
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023737.D | | | | |
| Injection Date: | 11-Jun-2016 15:18:09 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | 460-114699-A-2-A | Lab Sample ID: | 460-114699-2 | | |
| Client ID: | Manhole 1-2 | | | | |
| 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 | | |

## $ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

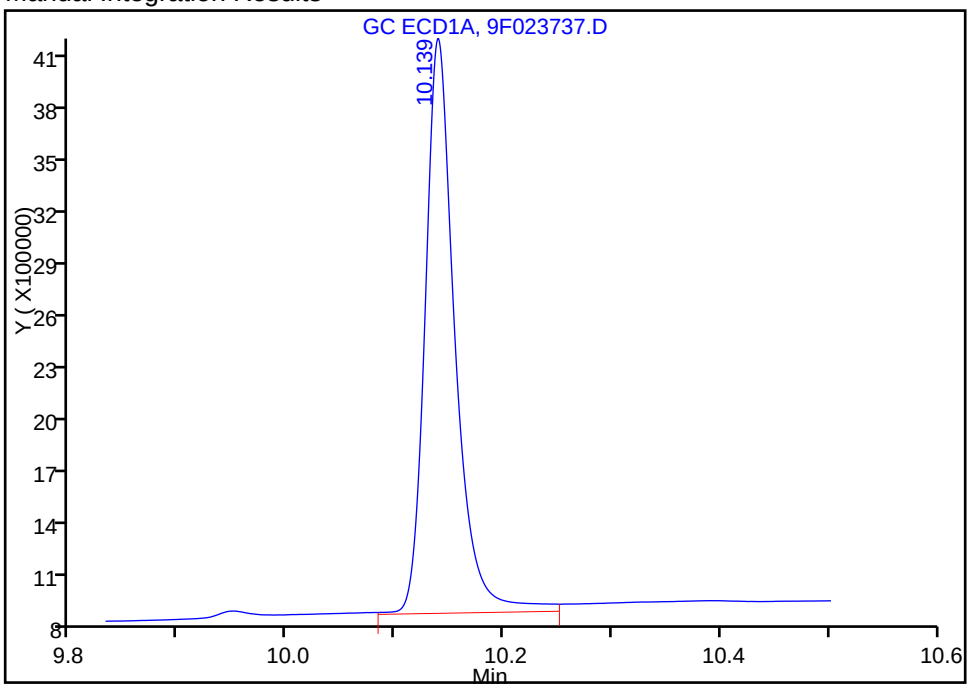
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

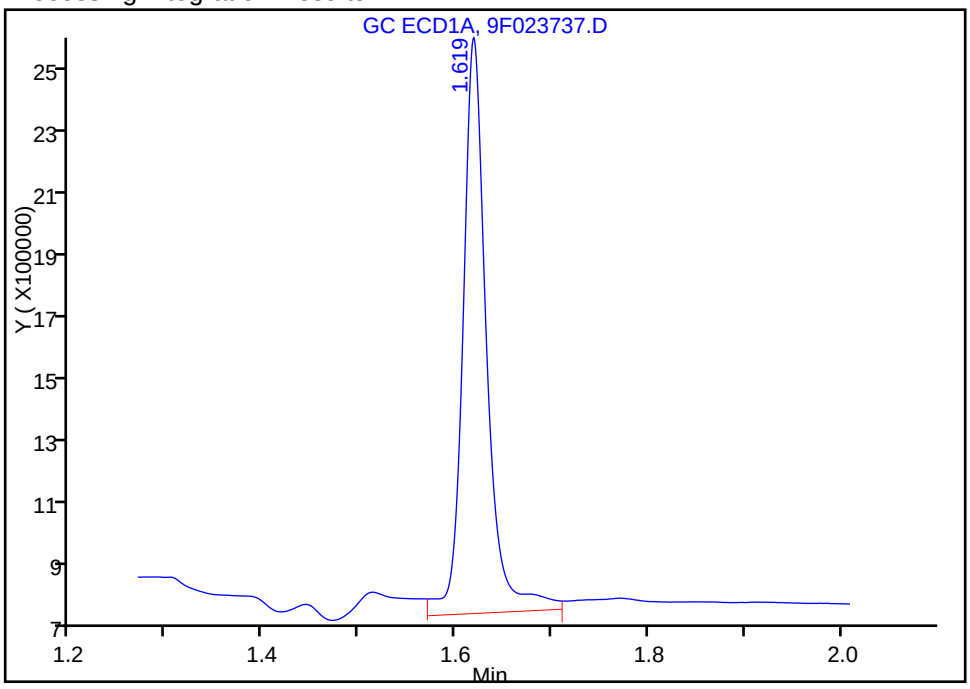
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023737.D | | | | |
| Injection Date: | 11-Jun-2016 15:18:09 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | 460-114699-A-2-A | Lab Sample ID: | 460-114699-2 | | |
| Client ID: | Manhole 1-2 | | | | |
| 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

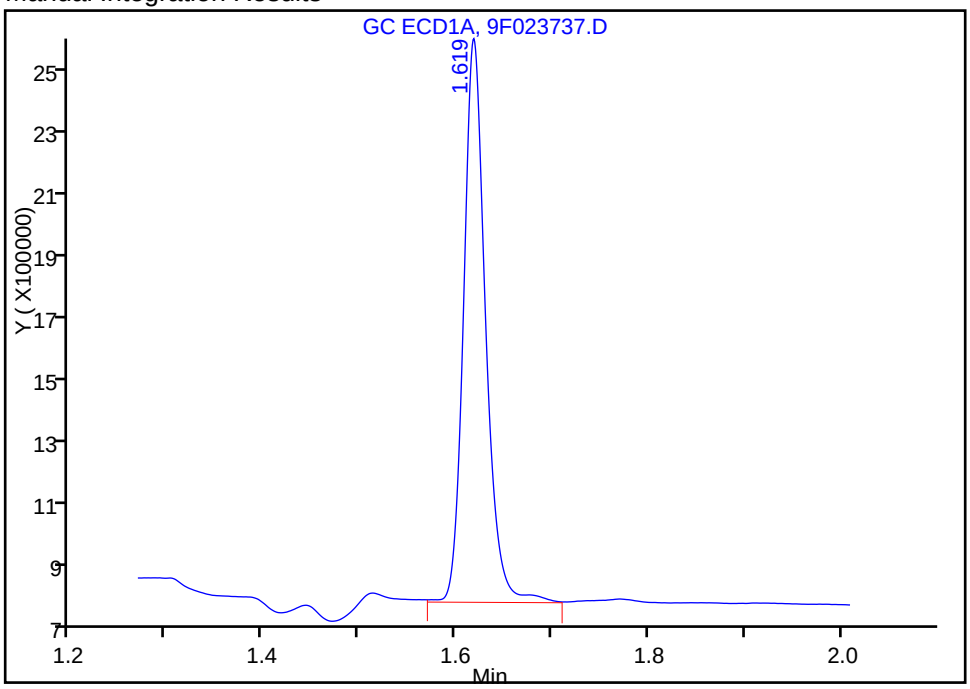
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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 |

US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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

US EPA ARCHIVE DOCUMENT

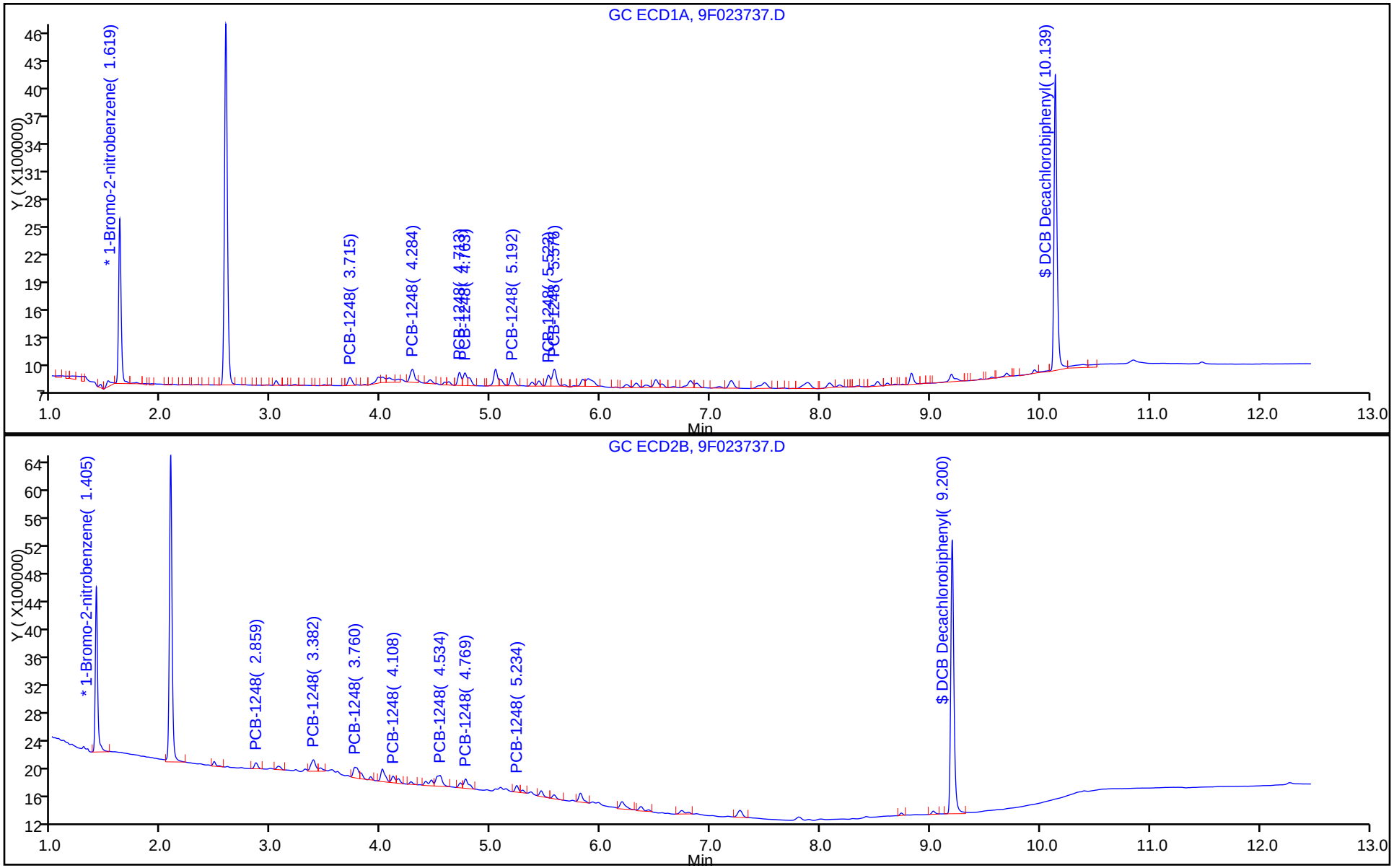
US EPA ARCHIVE DOCUMENT

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 | | |



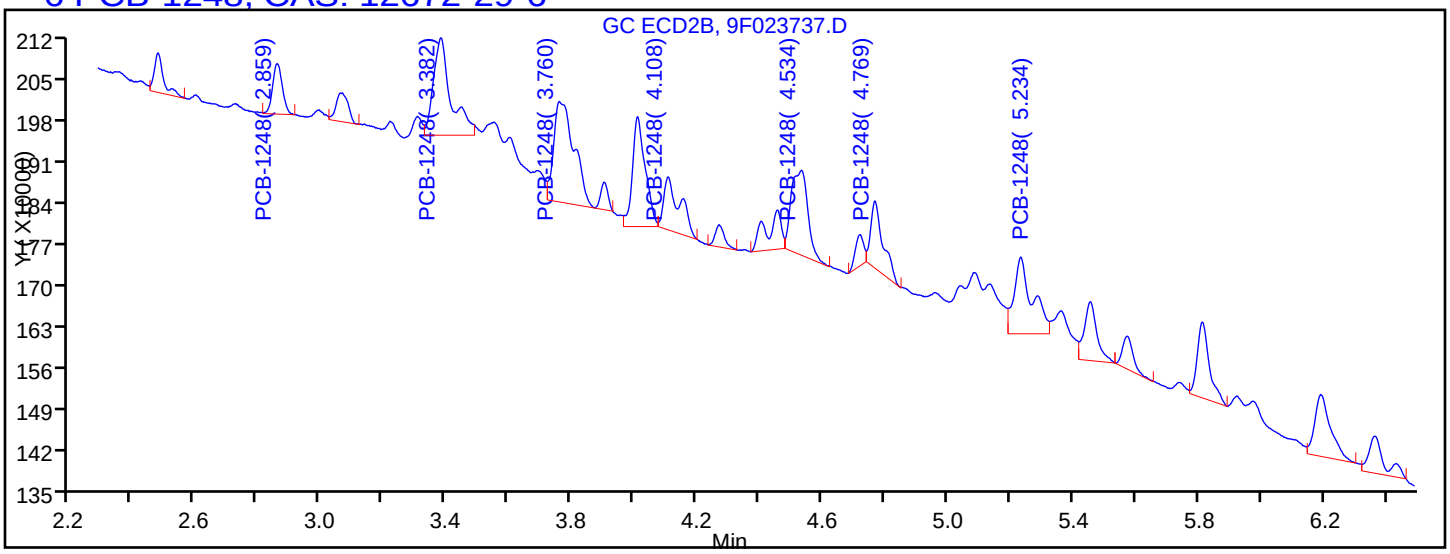
Report Date: 13-Jun-2016 08:53:35 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023737.D

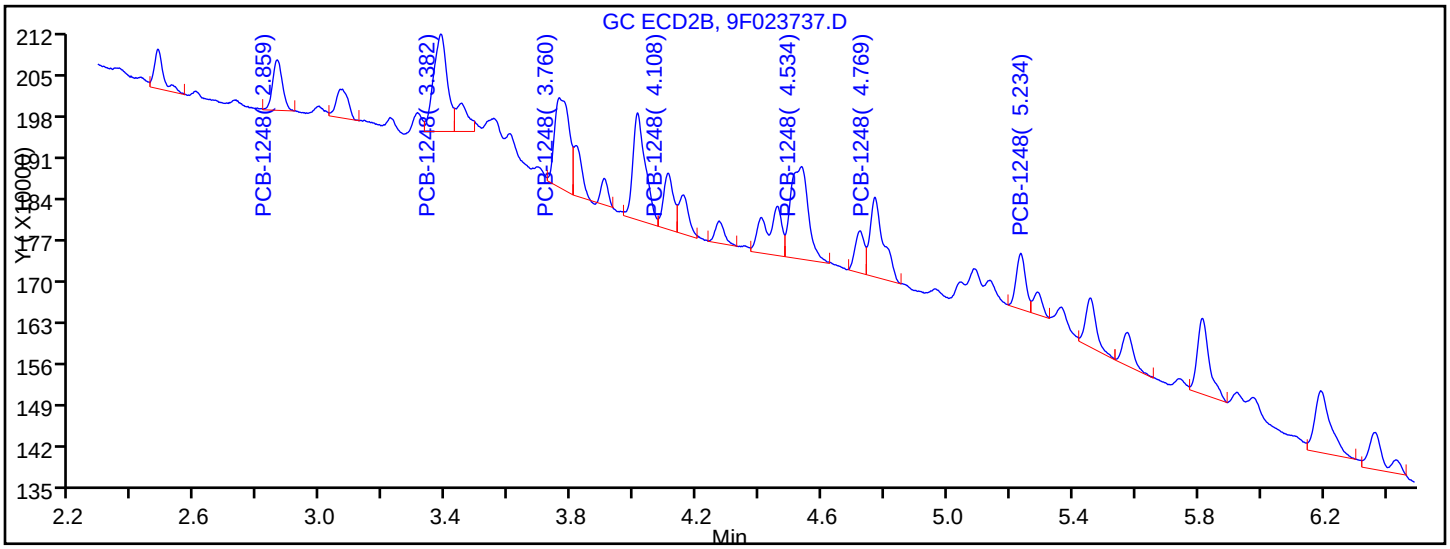
| | | | |
|---|---|---|---|
| Injection Date: | 11-Jun-2016 15:18:09 | Instrument ID: | CPESTGC9 |
| Lims ID: | 460-114699-A-2-A | Lab Sample ID: | 460-114699-2 |
| Client ID: | Manhole 1-2 | | |
| Operator ID: | | ALS Bottle#: | 8 Worklist Smp#: 8 |
| Injection Vol: | 1.0 ul | Dil. Factor: | 1.0000 |
| 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 |



US EPA ARCHIVE DOCUMENT

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 |

US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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

US EPA ARCHIVE DOCUMENT

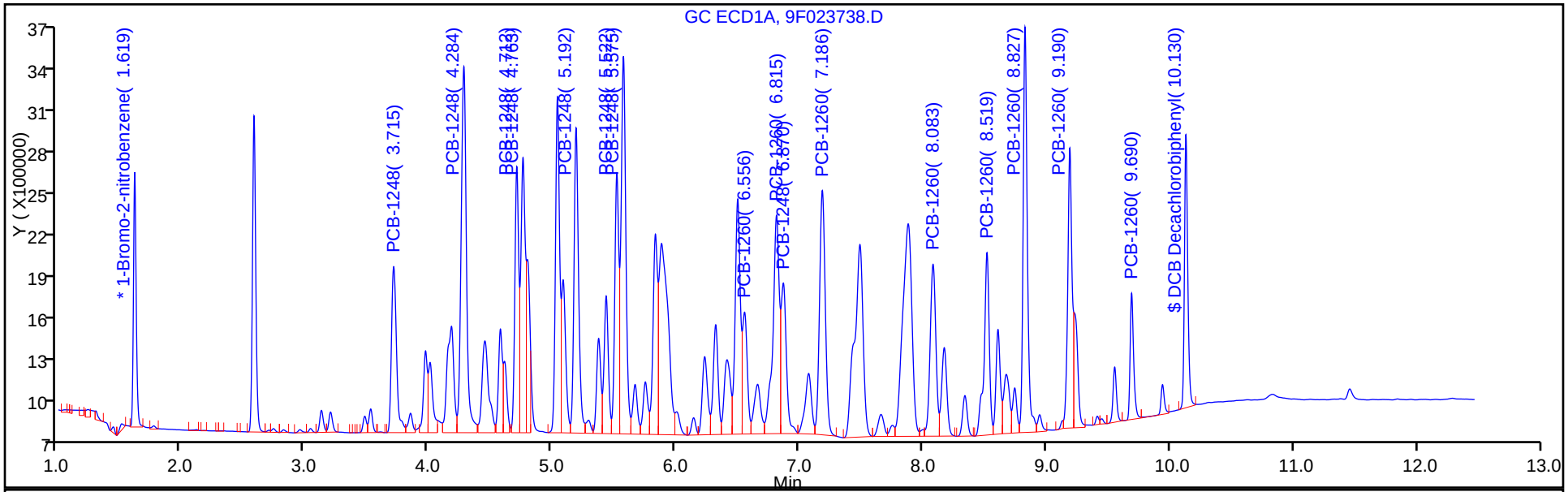
US EPA ARCHIVE DOCUMENT

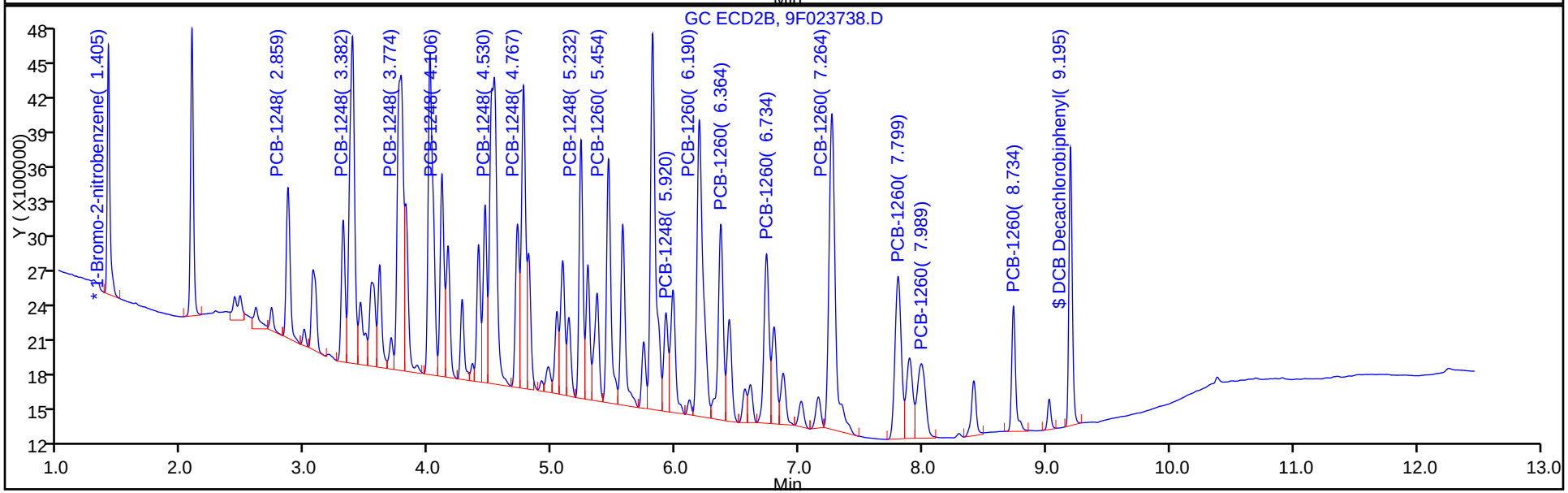
Report Date: 13-Jun-2016 08:53:37 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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 | | |



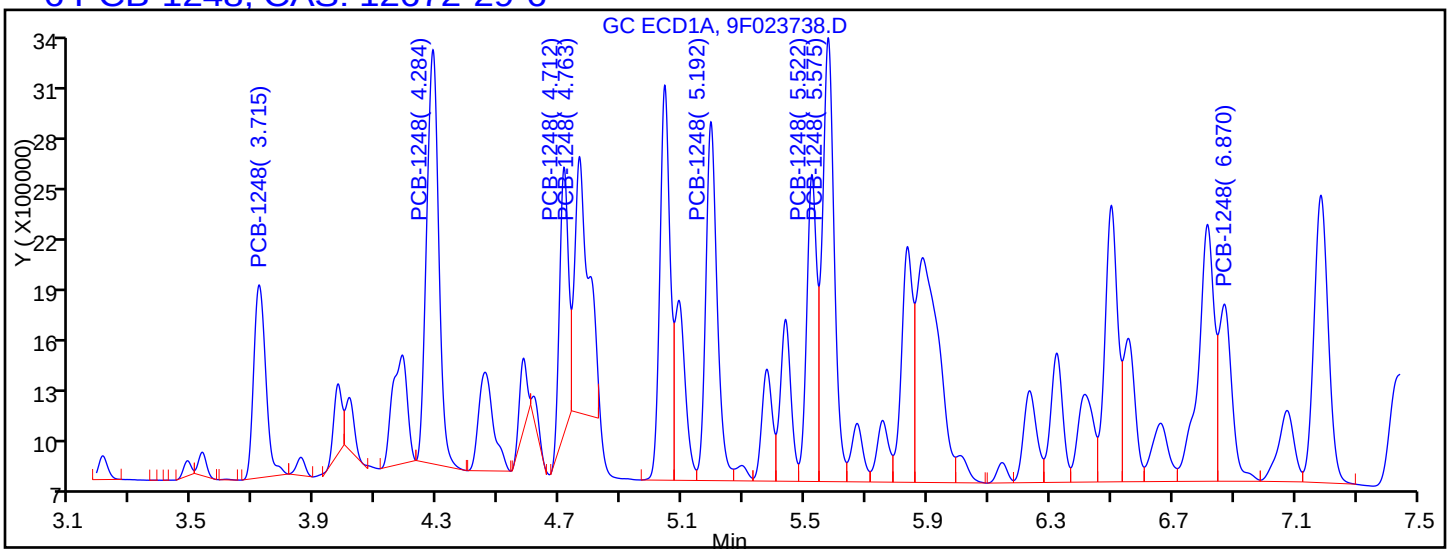
Report Date: 13-Jun-2016 08:53:37 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023738.D

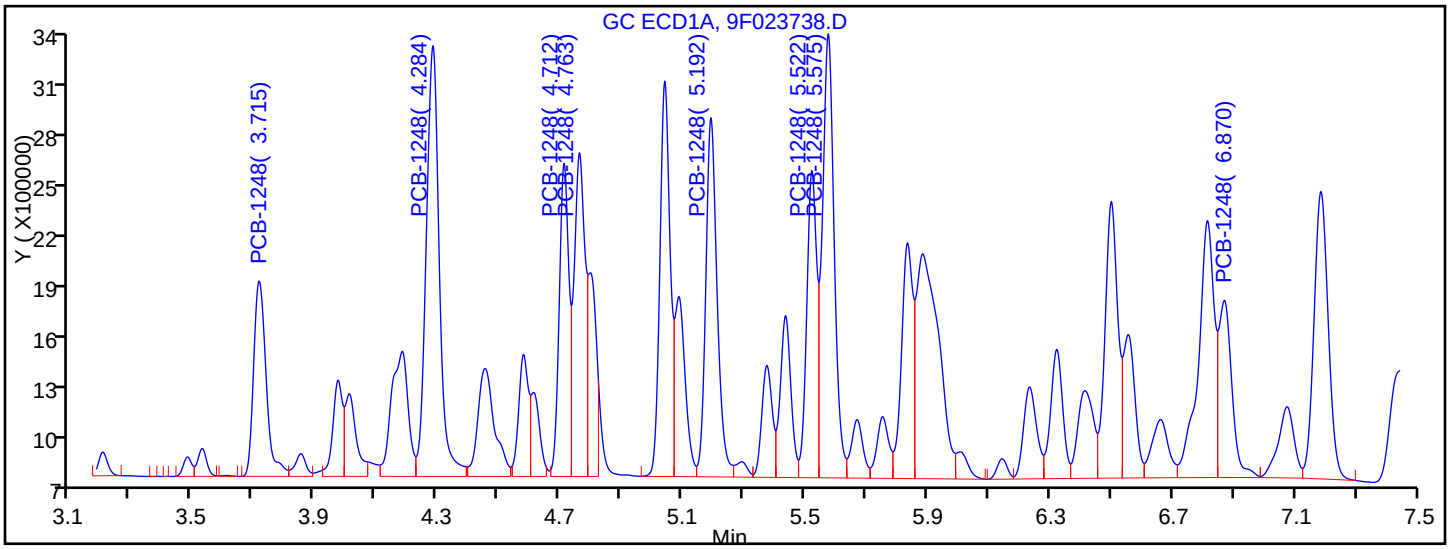
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 11-Jun-2016 15:36:11 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | 460-114699-A-3-A | Lab Sample ID: | 460-114699-3 | | |
| Client ID: | Manhole 2-2 | | | | |
| Operator ID: | | ALS Bottle#: | 9 | Worklist Smp#: | 9 |
| Injection Vol: | 1.0 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 | |



US EPA ARCHIVE DOCUMENT

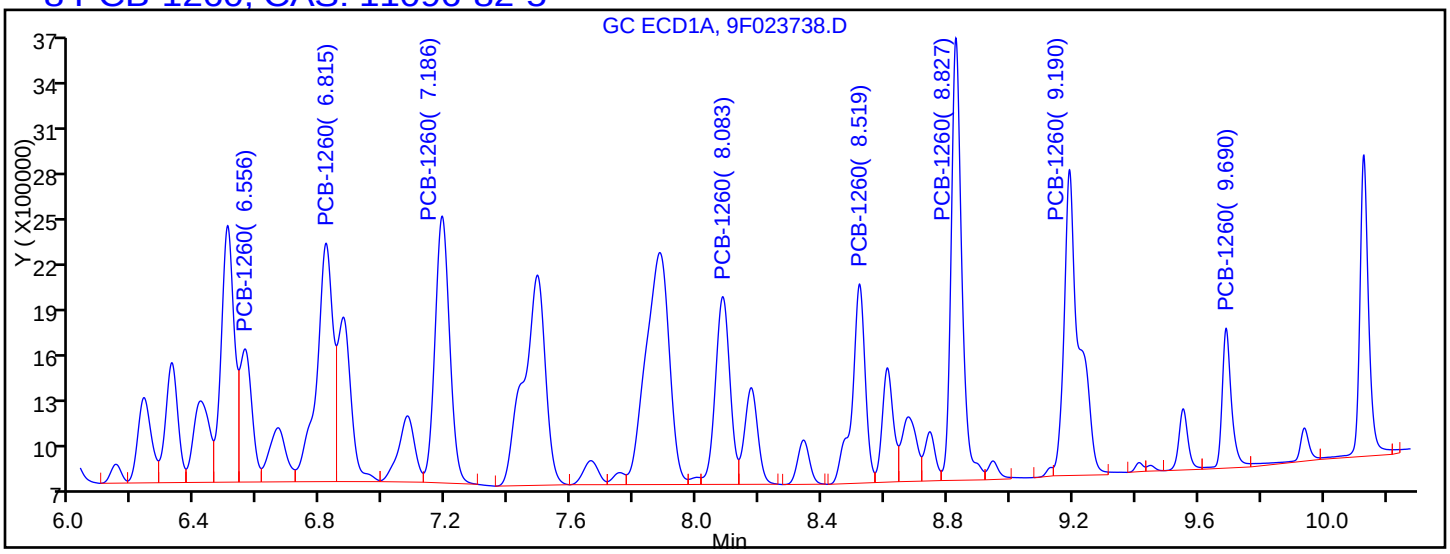
Report Date: 13-Jun-2016 08:53:38 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023738.D

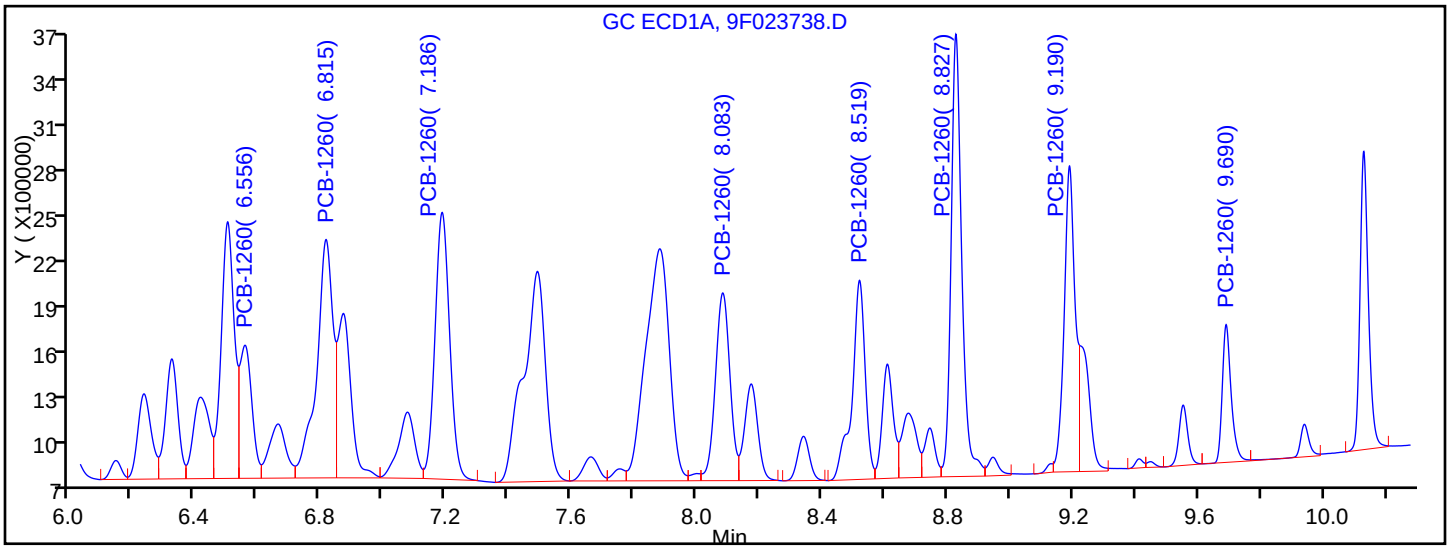
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 11-Jun-2016 15:36:11 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | 460-114699-A-3-A | Lab Sample ID: | 460-114699-3 | | |
| Client ID: | Manhole 2-2 | | | | |
| Operator ID: | | ALS Bottle#: | 9 | Worklist Smp#: | 9 |
| Injection Vol: | 1.0 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 |



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

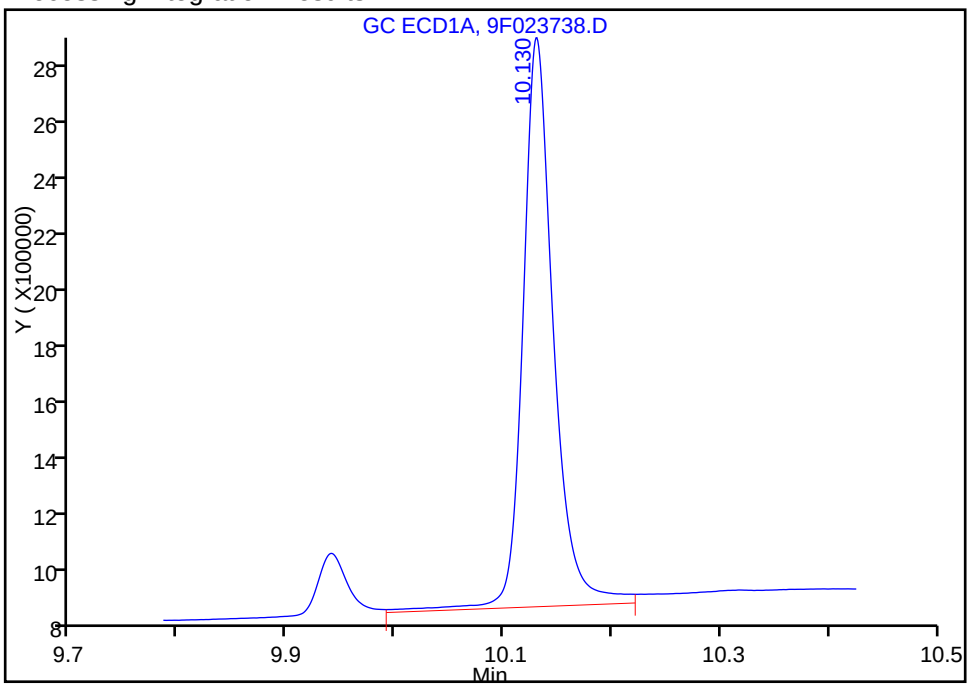
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023738.D | | | | |
| Injection Date: | 11-Jun-2016 15:36:11 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | 460-114699-A-3-A | Lab Sample ID: | 460-114699-3 | | |
| Client ID: | Manhole 2-2 | | | | |
| 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

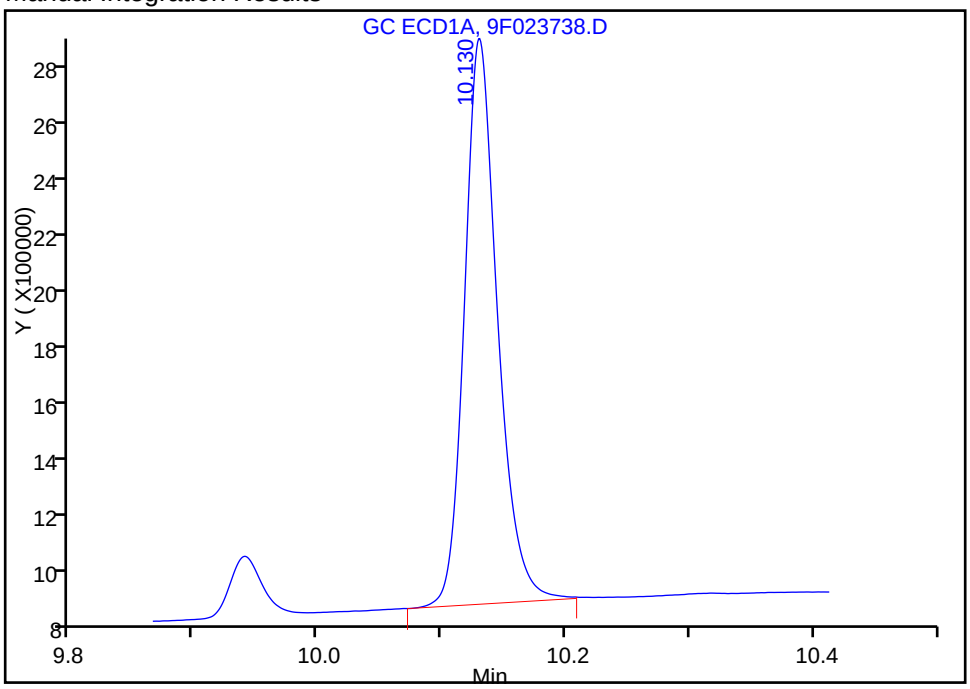
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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 |



US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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

US EPA ARCHIVE DOCUMENT

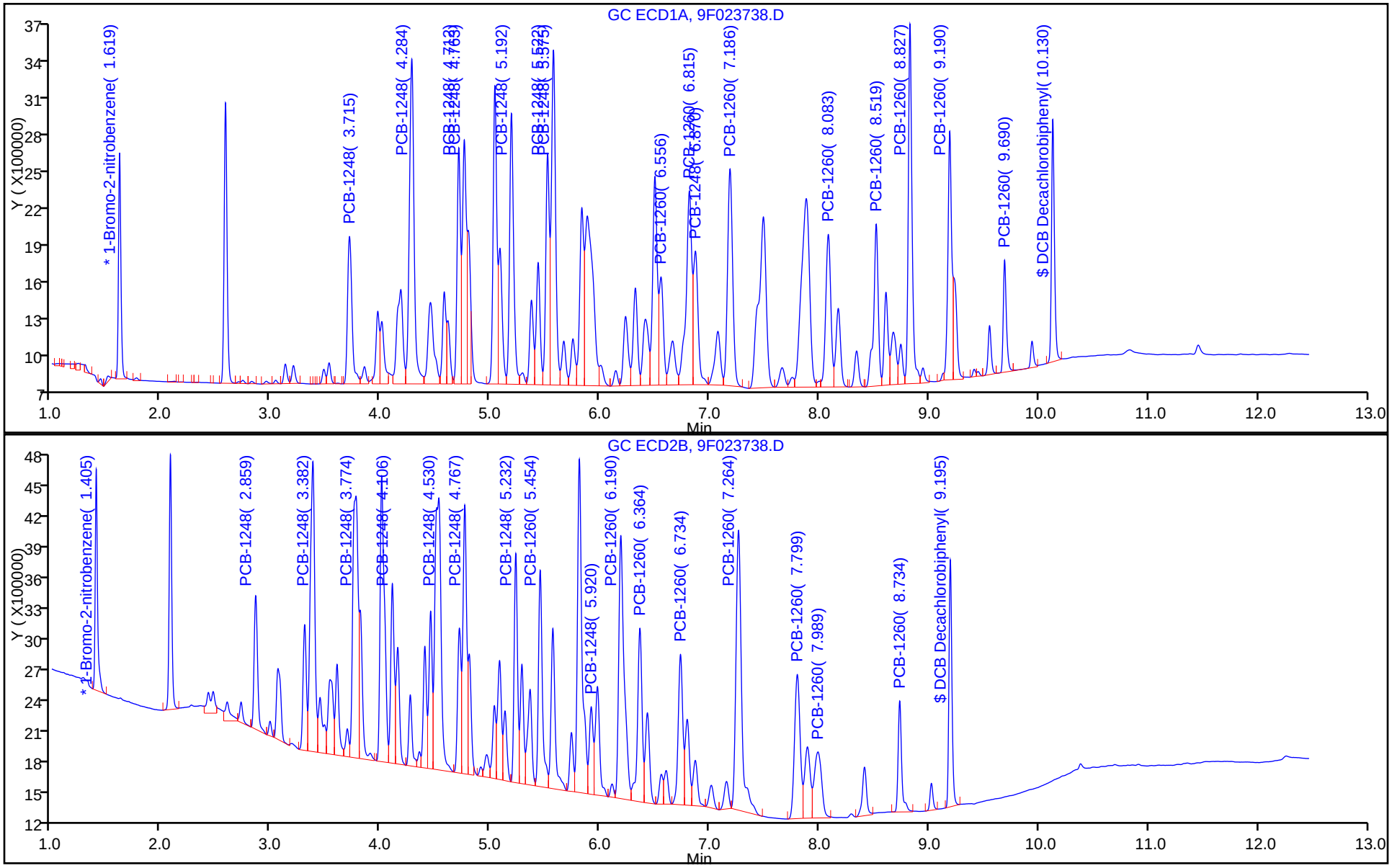
US EPA ARCHIVE DOCUMENT

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 | | |



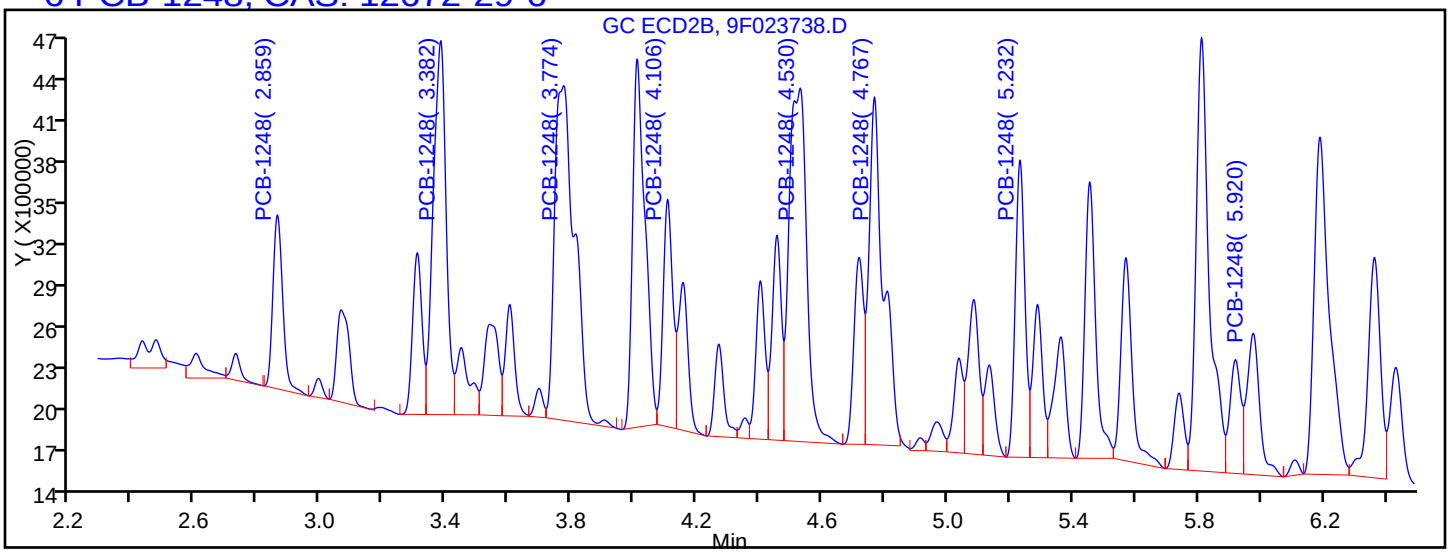
Report Date: 13-Jun-2016 08:53:38 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023738.D

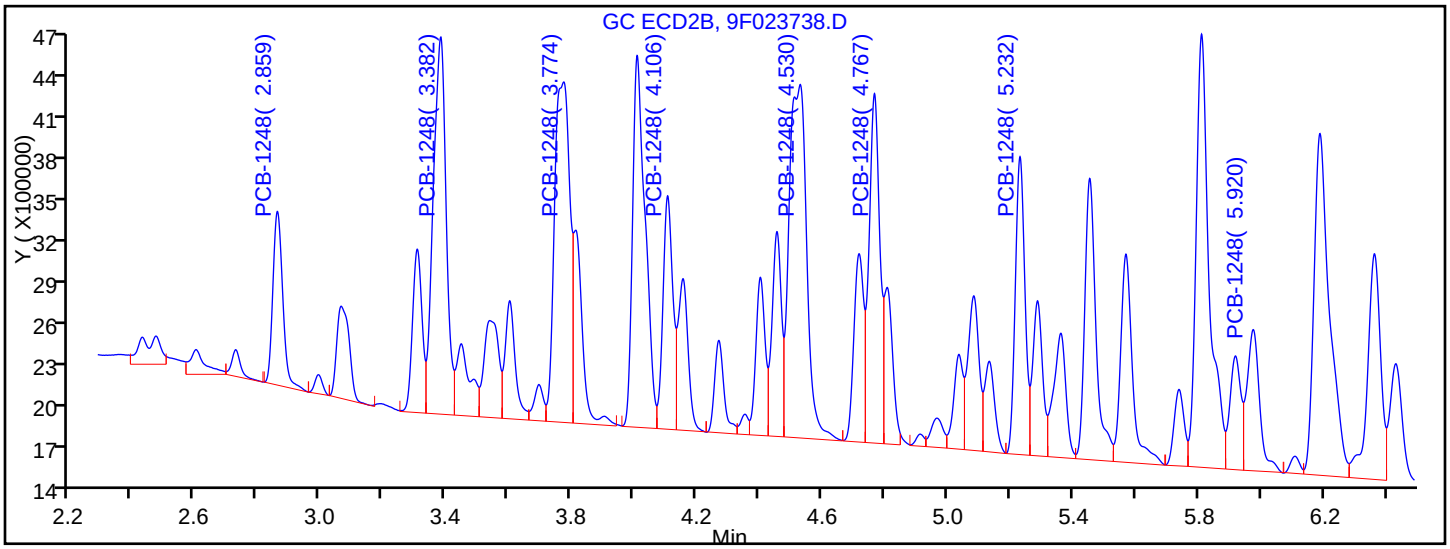
| | | | |
|---|---|---|---|
| Injection Date: | 11-Jun-2016 15:36:11 | Instrument ID: | CPESTGC9 |
| Lims ID: | 460-114699-A-3-A | Lab Sample ID: | 460-114699-3 |
| Client ID: | Manhole 2-2 | | |
| Operator ID: | | ALS Bottle#: | 9 Worklist Smp#: 9 |
| Injection Vol: | 1.0 ul | Dil. Factor: | 2.0000 |
| 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 |



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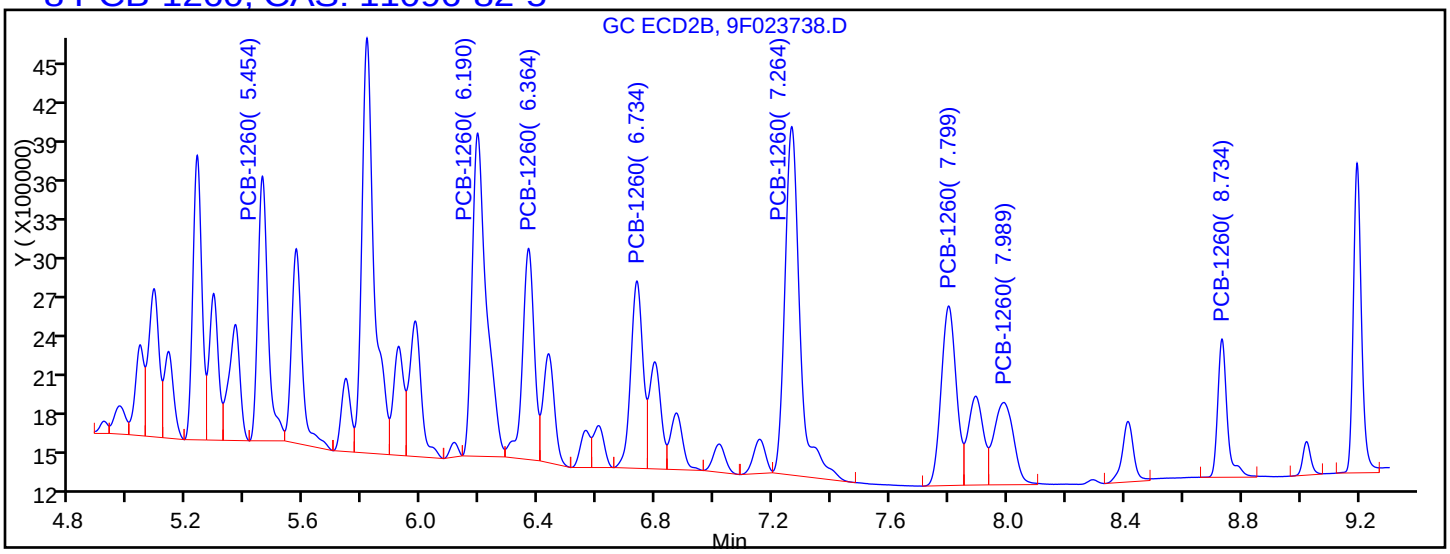
Report Date: 13-Jun-2016 08:53:39 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023738.D

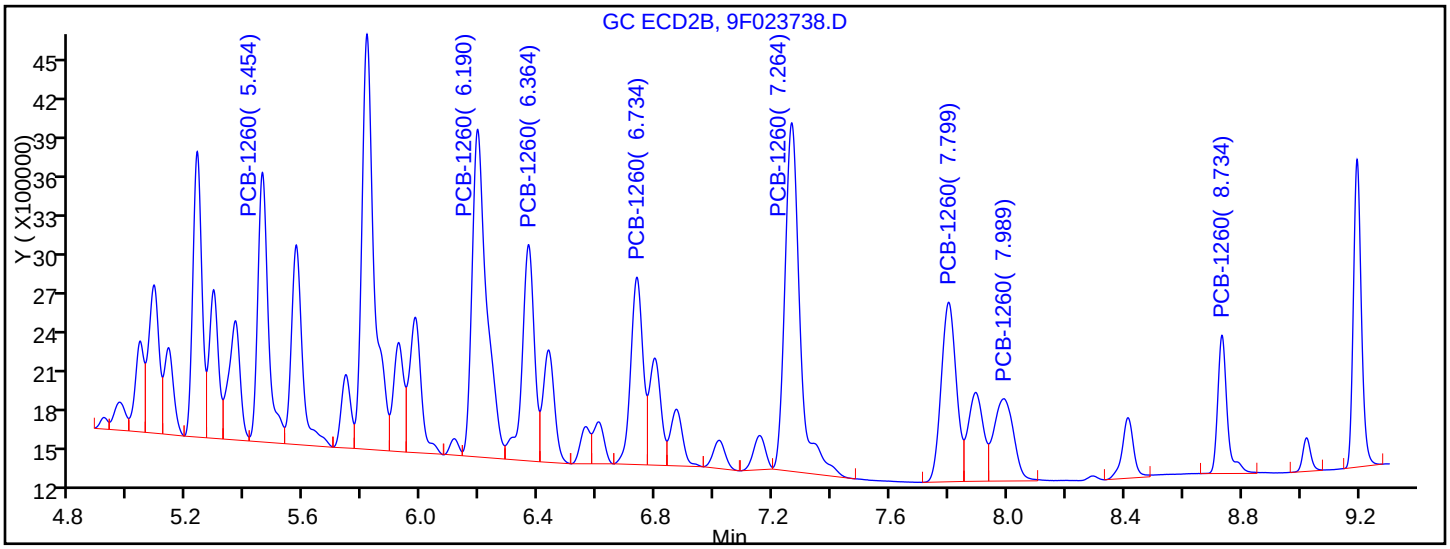
| | | | |
|---|---|---|---|
| Injection Date: | 11-Jun-2016 15:36:11 | Instrument ID: | CPESTGC9 |
| Lims ID: | 460-114699-A-3-A | Lab Sample ID: | 460-114699-3 |
| Client ID: | Manhole 2-2 | | |
| Operator ID: | | ALS Bottle#: | 9 Worklist Smp#: 9 |
| Injection Vol: | 1.0 ul | Dil. Factor: | 2.0000 |
| 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 | |



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

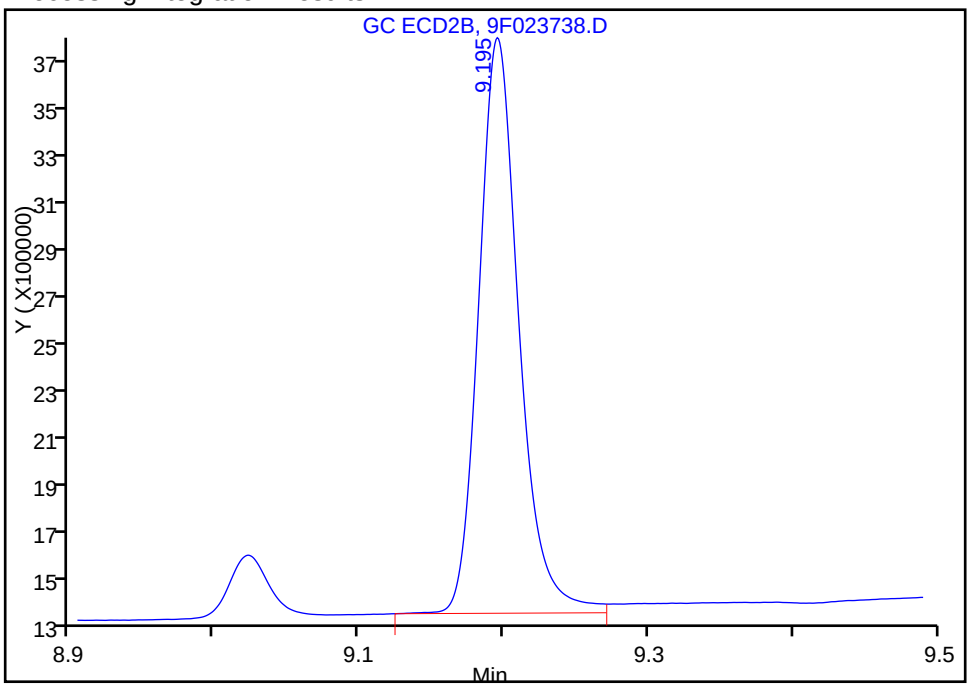
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023738.D | | | | |
| Injection Date: | 11-Jun-2016 15:36:11 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | 460-114699-A-3-A | Lab Sample ID: | 460-114699-3 | | |
| Client ID: | Manhole 2-2 | | | | |
| 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 ECD2B | | |

## $ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 2

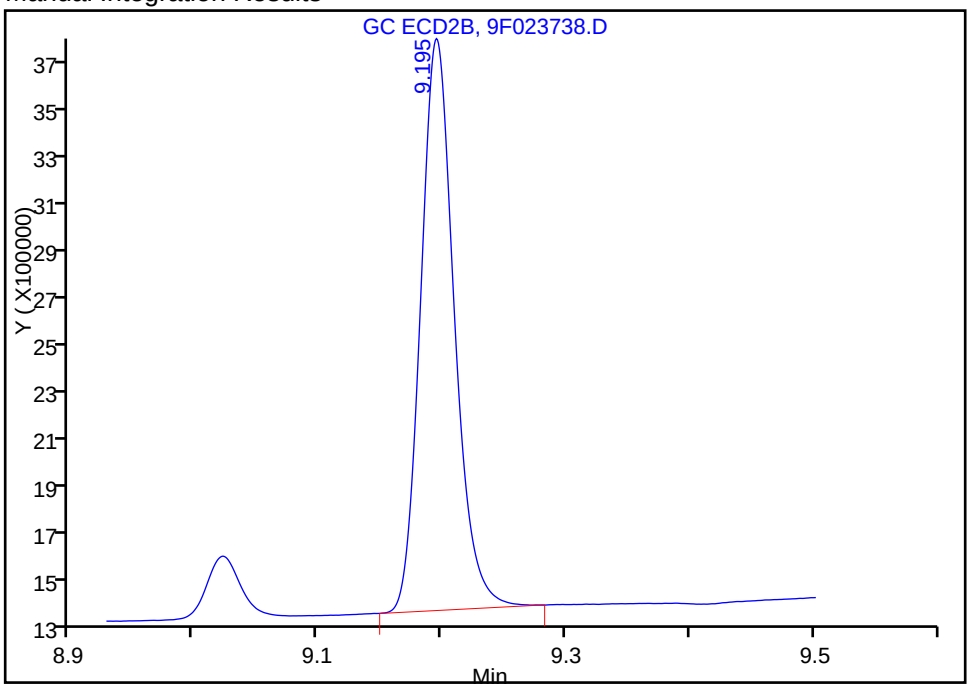
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

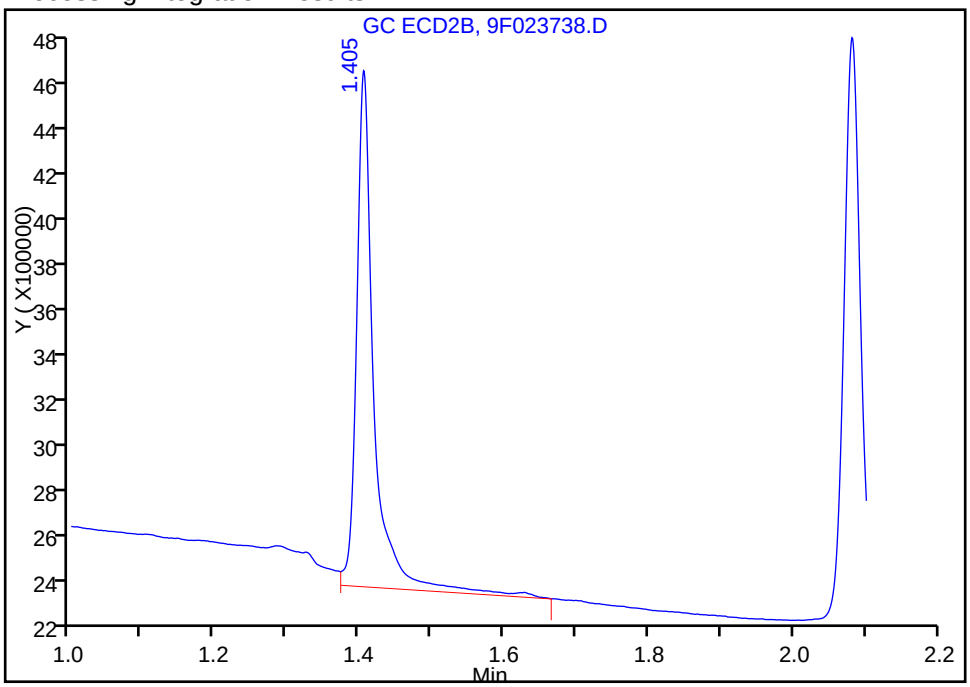
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023738.D | | | | |
| Injection Date: | 11-Jun-2016 15:36:11 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | 460-114699-A-3-A | Lab Sample ID: | 460-114699-3 | | |
| Client ID: | Manhole 2-2 | | | | |
| 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 ECD2B | | |

## * 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

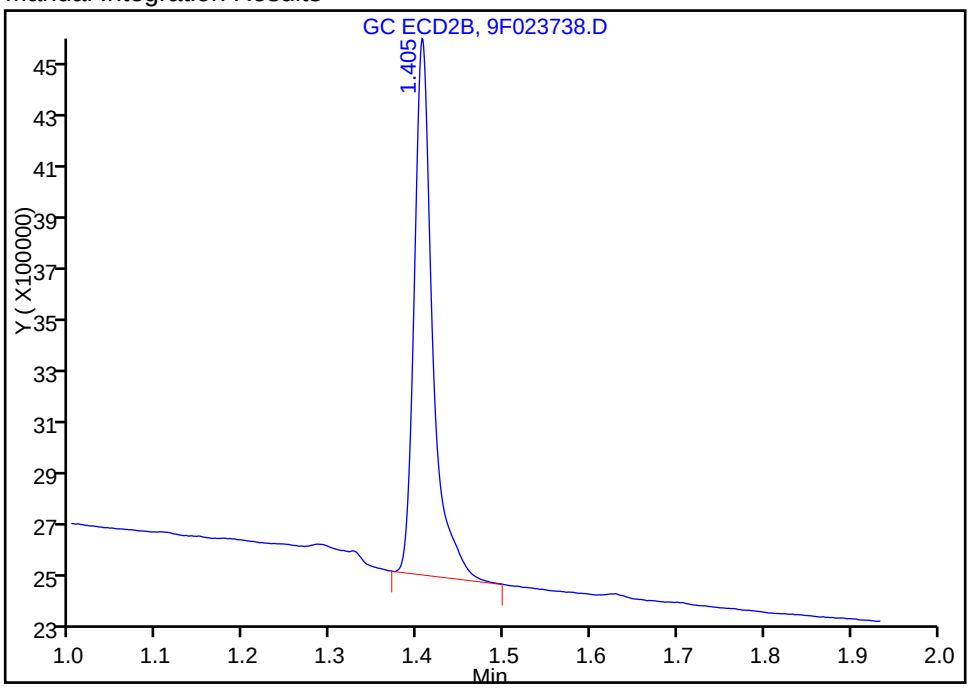
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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 |

US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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

US EPA ARCHIVE DOCUMENT

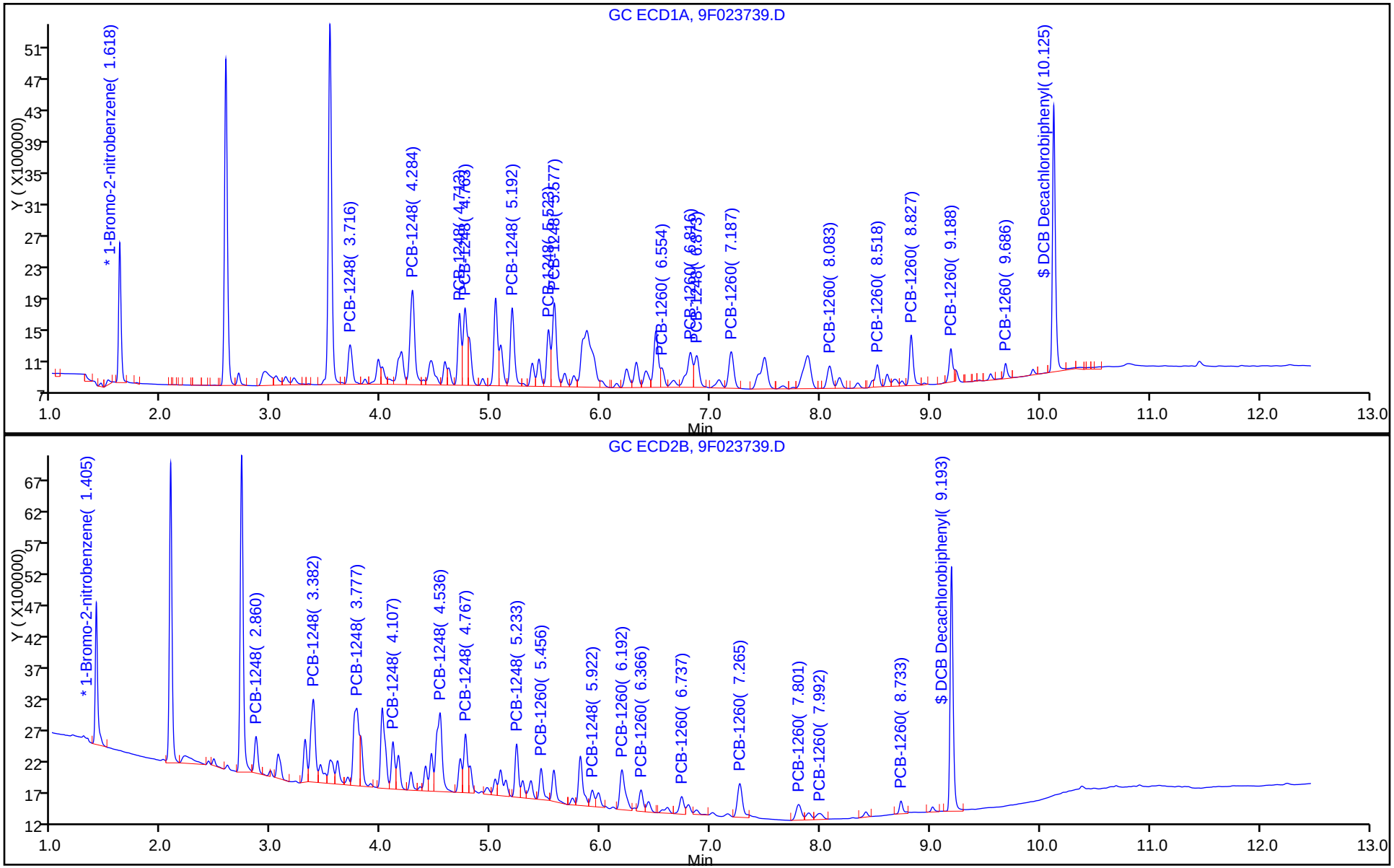
US EPA ARCHIVE DOCUMENT

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 | | |



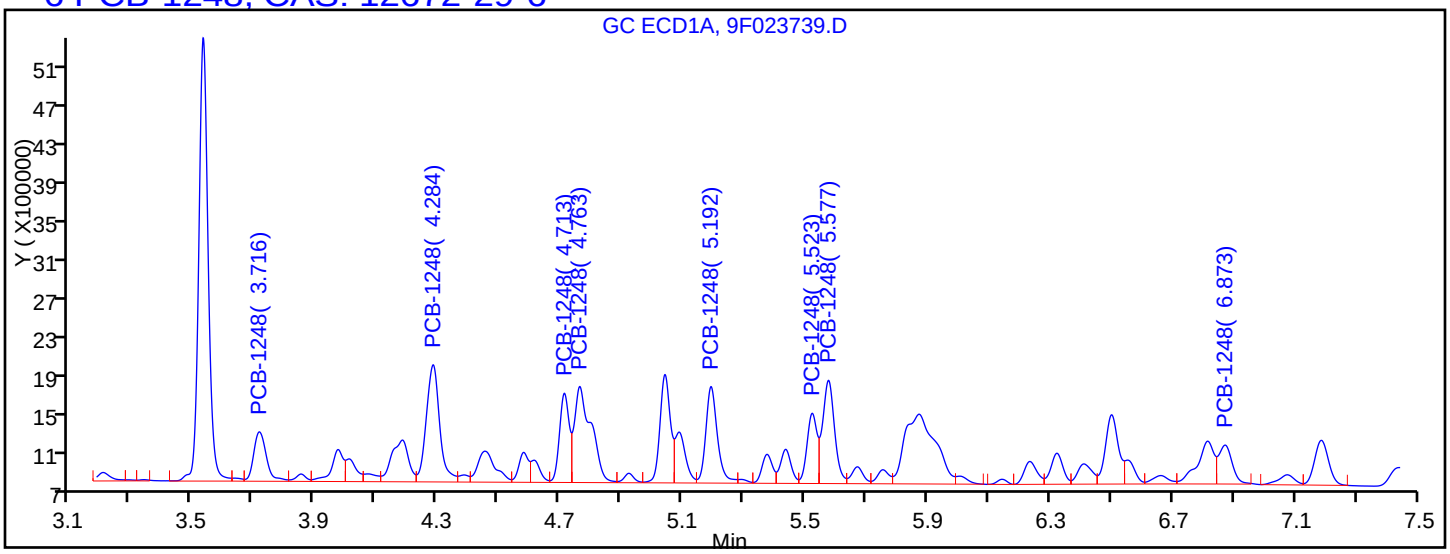
Report Date: 13-Jun-2016 08:53:40 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023739.D

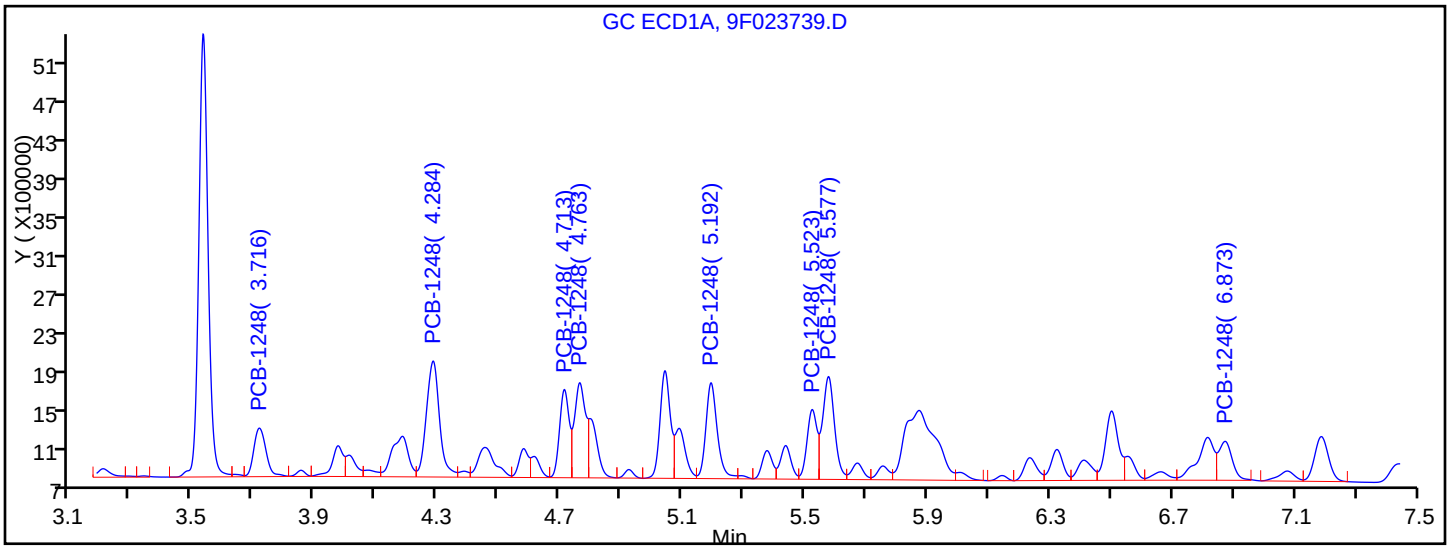
| | | | |
|---|---|---|---|
| Injection Date: | 11-Jun-2016 15:54:15 | Instrument ID: | CPESTGC9 |
| Lims ID: | 460-114699-A-4-A | Lab Sample ID: | 460-114699-4 |
| Client ID: | Manhole 2-1 | | |
| Operator ID: | | ALS Bottle#: | 10 Worklist Smp#: 10 |
| Injection Vol: | 1.0 ul | Dil. Factor: | 1.0000 |
| 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 |



US EPA ARCHIVE DOCUMENT

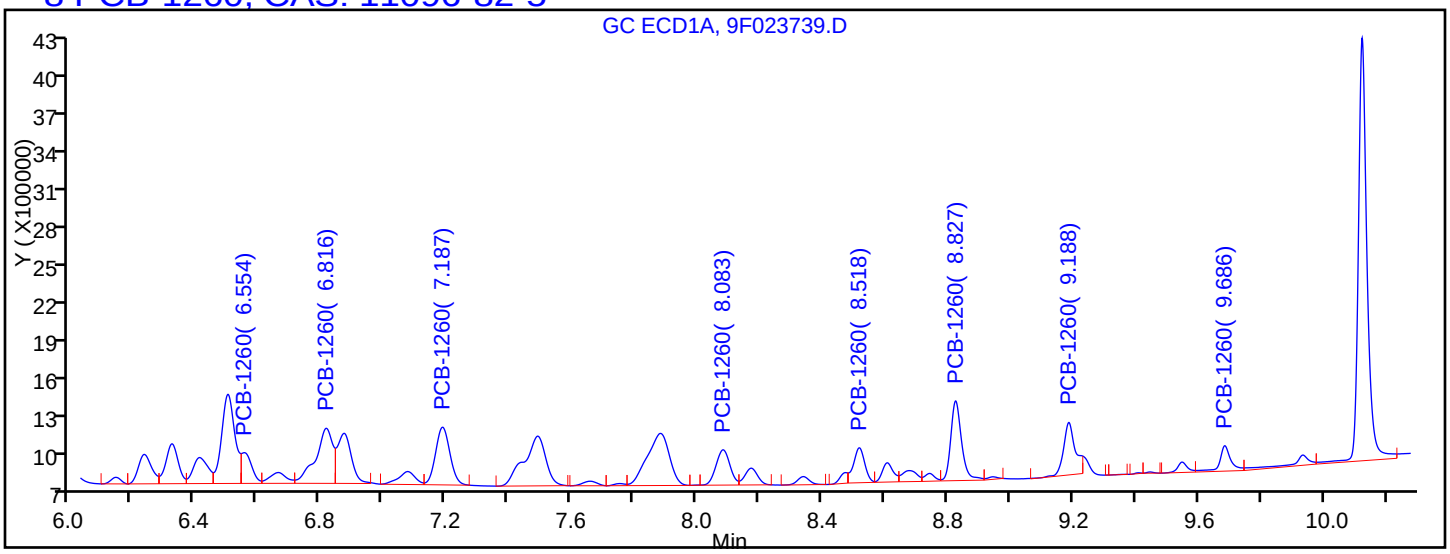
Report Date: 13-Jun-2016 08:53:41 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023739.D

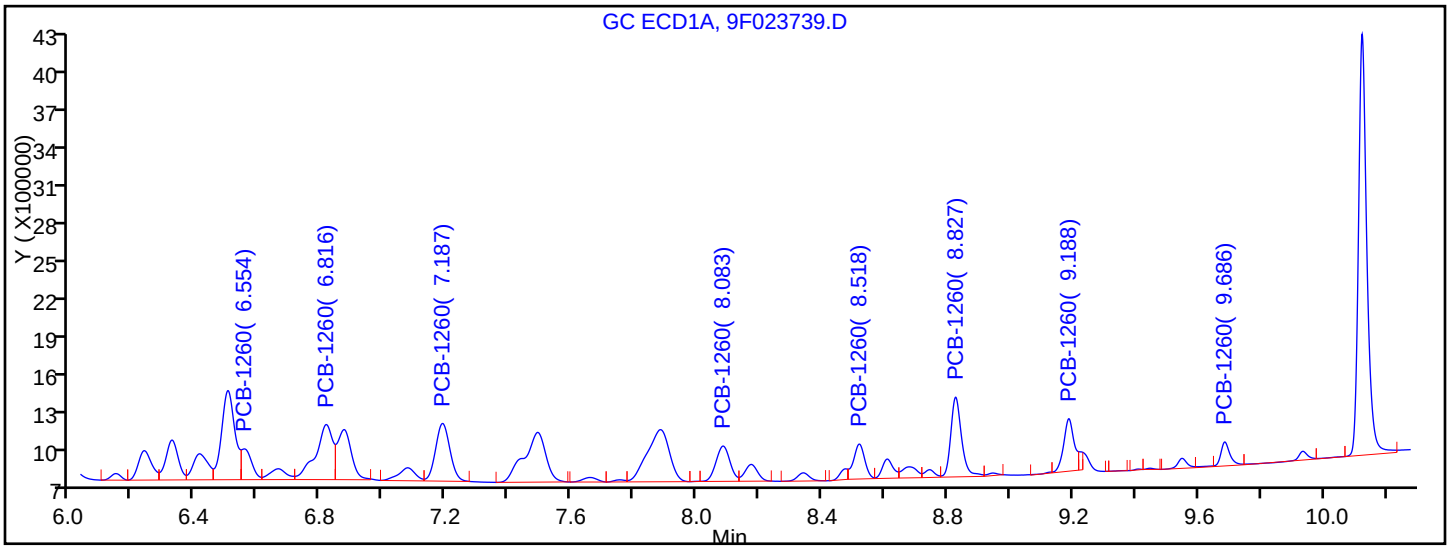
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 11-Jun-2016 15:54:15 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | 460-114699-A-4-A | Lab Sample ID: | 460-114699-4 | | |
| Client ID: | Manhole 2-1 | | | | |
| Operator ID: | | ALS Bottle#: | 10 | Worklist Smp#: | 10 |
| Injection Vol: | 1.0 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 |



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

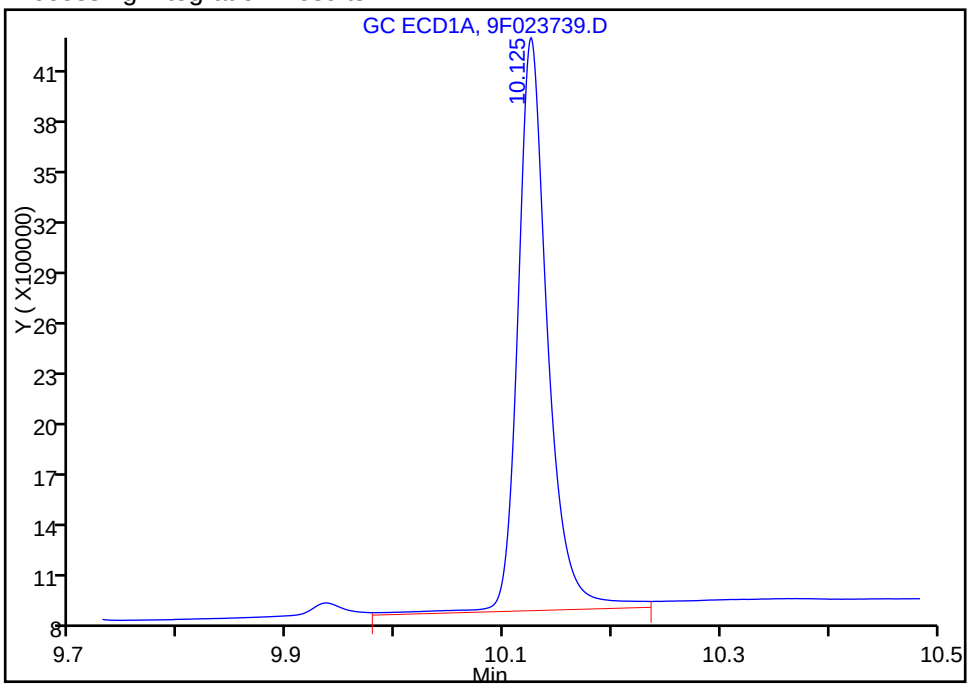
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023739.D | | | | |
| Injection Date: | 11-Jun-2016 15:54:15 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | 460-114699-A-4-A | Lab Sample ID: | 460-114699-4 | | |
| Client ID: | Manhole 2-1 | | | | |
| 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

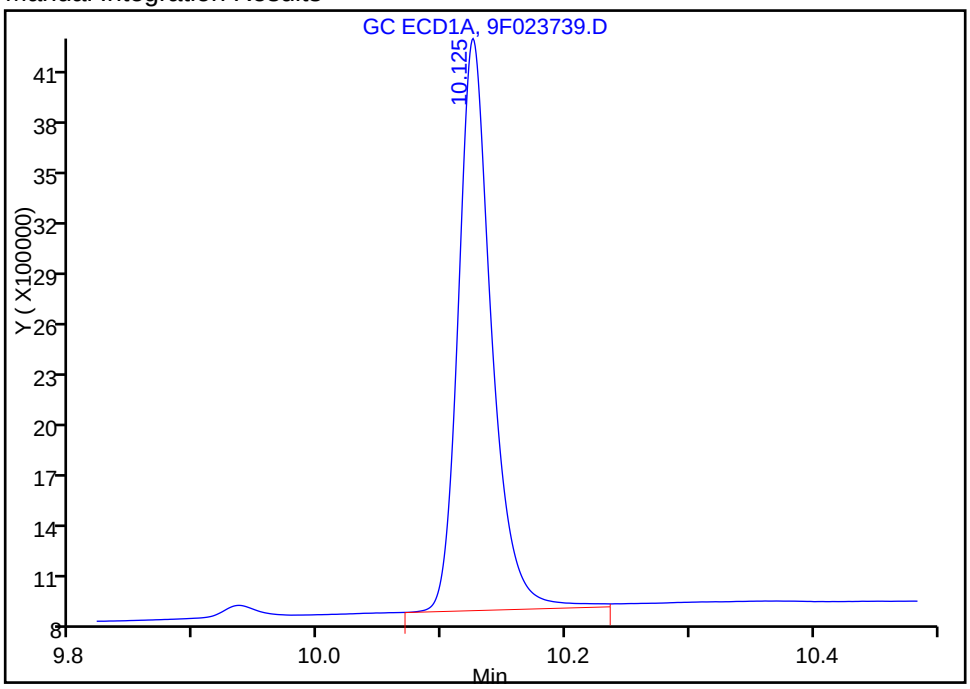
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

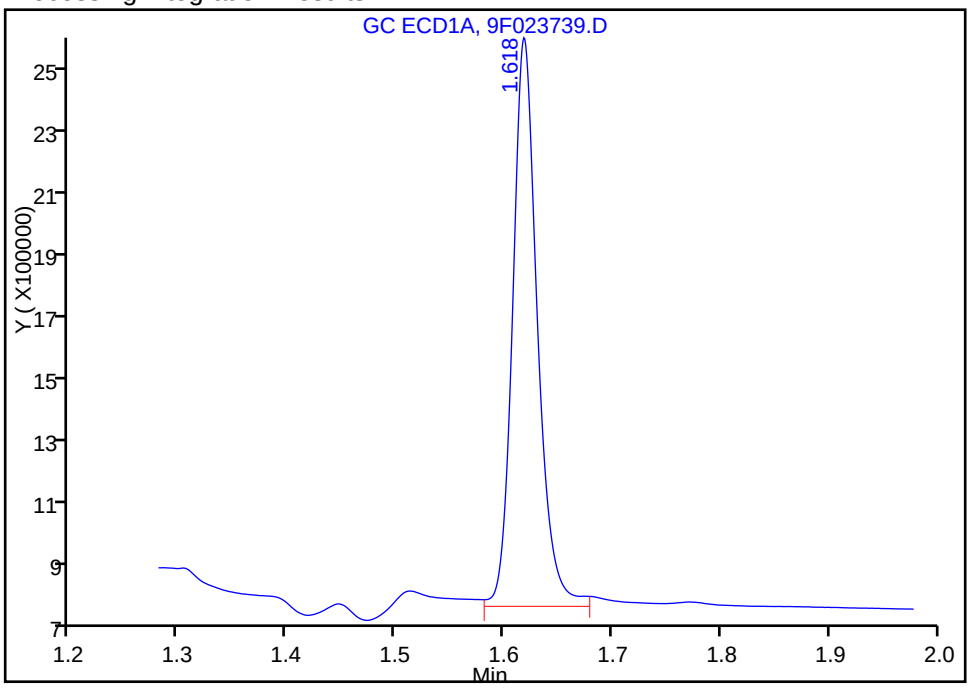
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023739.D | | | | |
| Injection Date: | 11-Jun-2016 15:54:15 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | 460-114699-A-4-A | Lab Sample ID: | 460-114699-4 | | |
| Client ID: | Manhole 2-1 | | | | |
| 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 | | |

## * 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 1

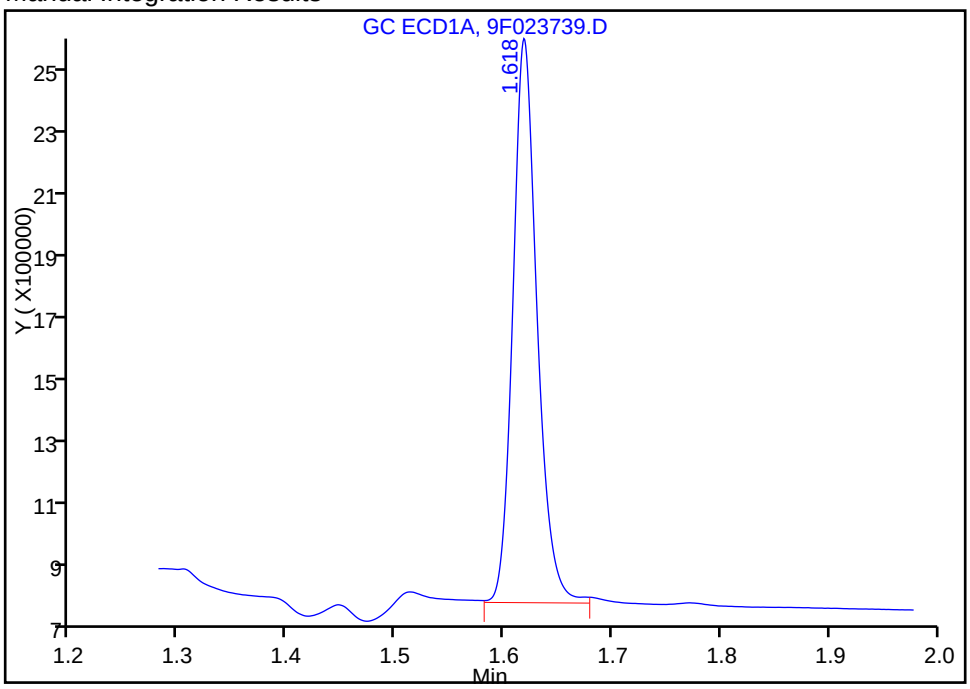
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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 |

US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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

US EPA ARCHIVE DOCUMENT

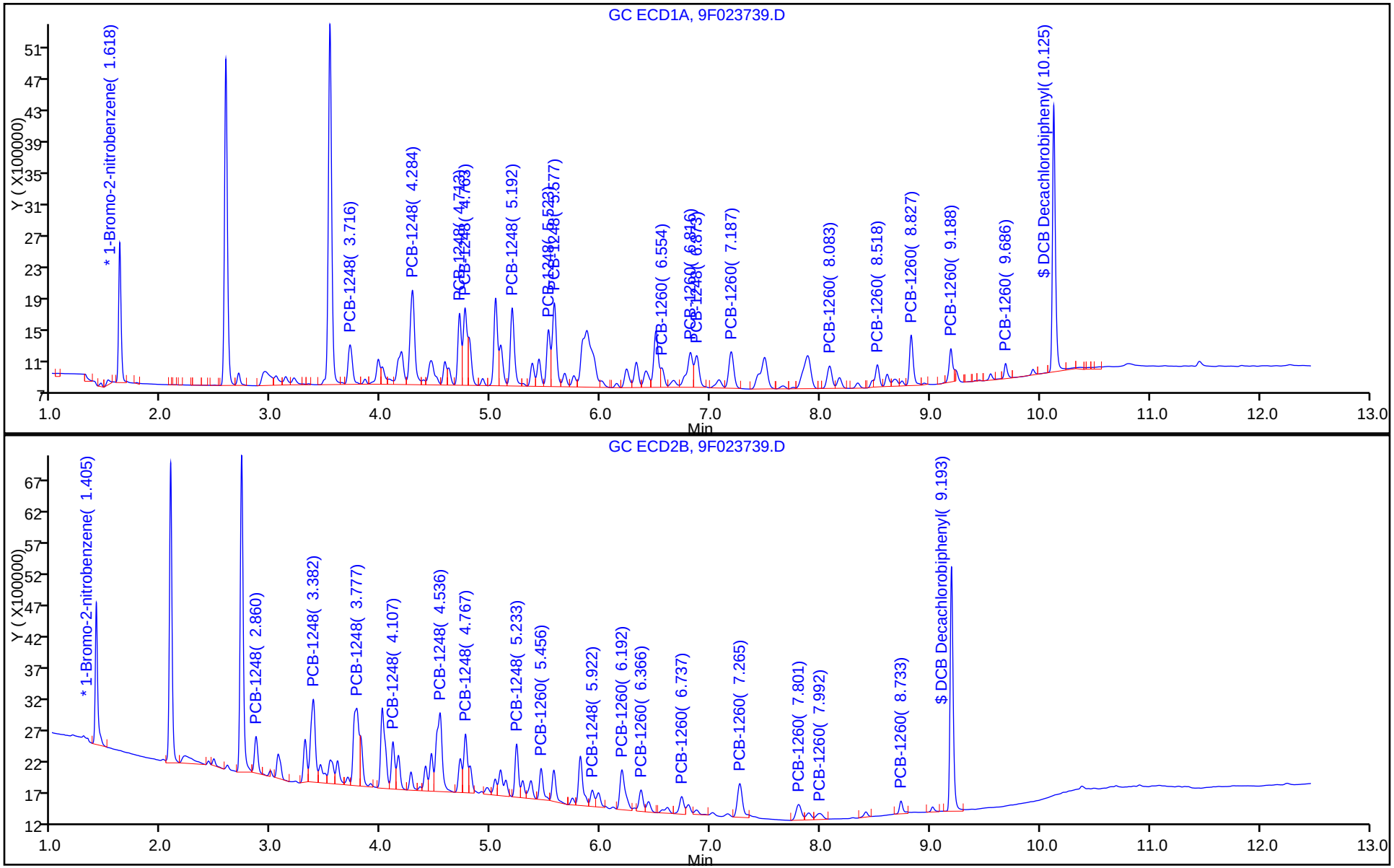
US EPA ARCHIVE DOCUMENT

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 | | |



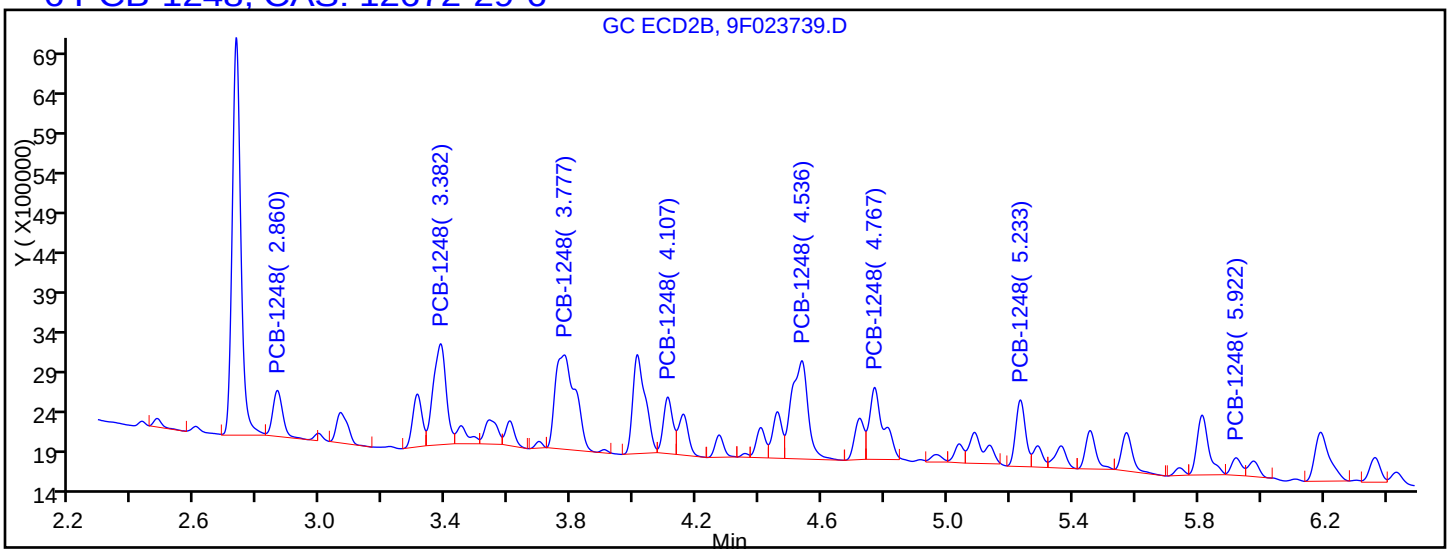
Report Date: 13-Jun-2016 08:53:42 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023739.D

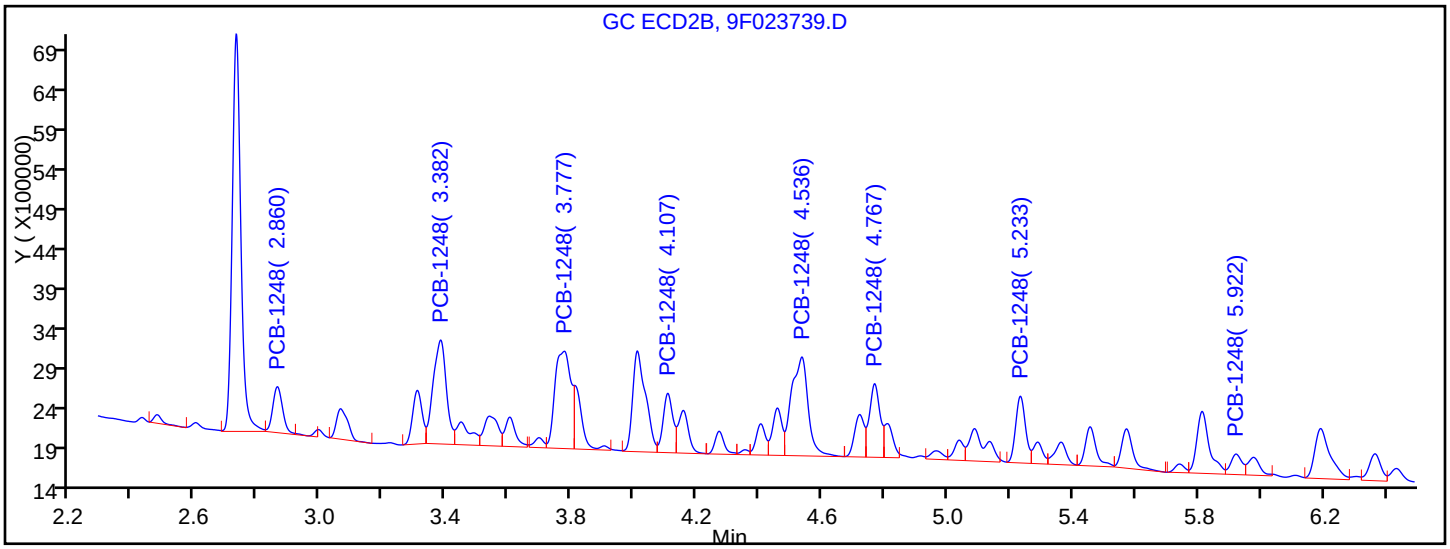
| | | | |
|---|---|---|---|
| Injection Date: | 11-Jun-2016 15:54:15 | Instrument ID: | CPESTGC9 |
| Lims ID: | 460-114699-A-4-A | Lab Sample ID: | 460-114699-4 |
| Client ID: | Manhole 2-1 | | |
| Operator ID: | | ALS Bottle#: | 10 Worklist Smp#: 10 |
| Injection Vol: | 1.0 ul | Dil. Factor: | 1.0000 |
| 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 |



US EPA ARCHIVE DOCUMENT

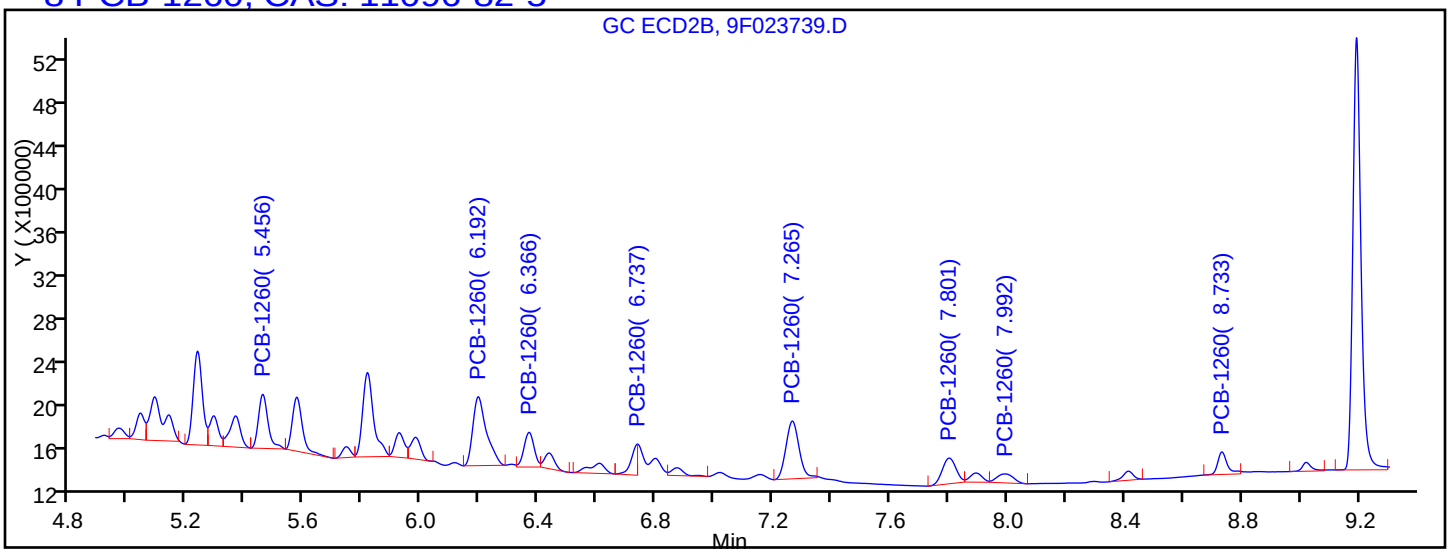
Report Date: 13-Jun-2016 08:53:42 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023739.D

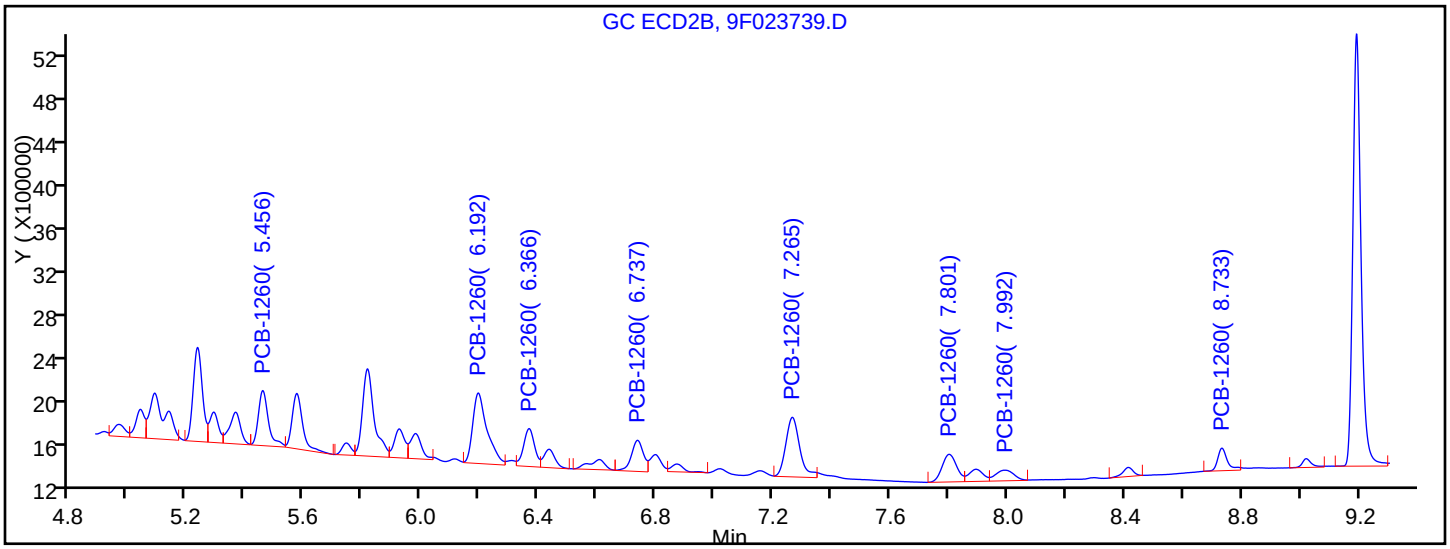
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 11-Jun-2016 15:54:15 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | 460-114699-A-4-A | Lab Sample ID: | 460-114699-4 | | |
| Client ID: | Manhole 2-1 | | | | |
| Operator ID: | | ALS Bottle#: | 10 | Worklist Smp#: | 10 |
| Injection Vol: | 1.0 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 |



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Manual Integration/User Assign Peak Report

TestAmerica Edison

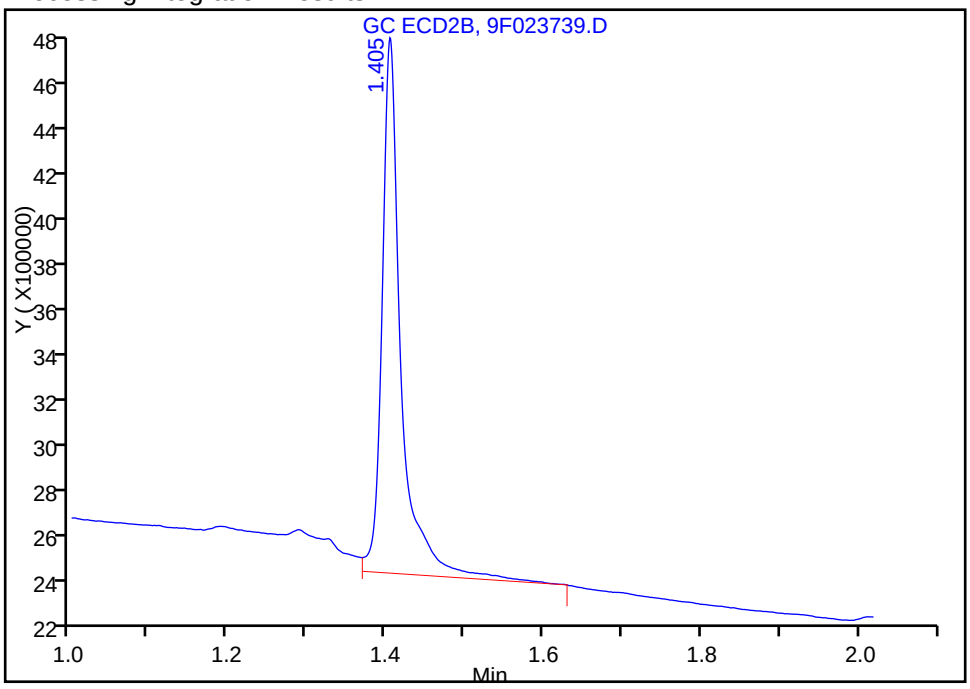
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023739.D | | | | |
| Injection Date: | 11-Jun-2016 15:54:15 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | 460-114699-A-4-A | Lab Sample ID: | 460-114699-4 | | |
| Client ID: | Manhole 2-1 | | | | |
| 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 ECD2B | | |

## * 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

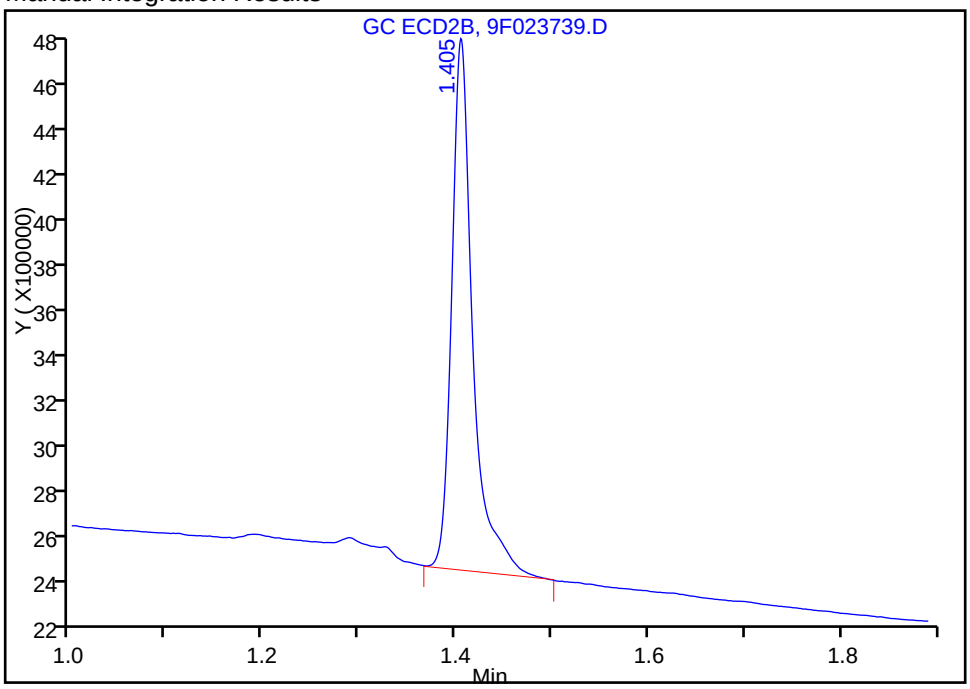
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

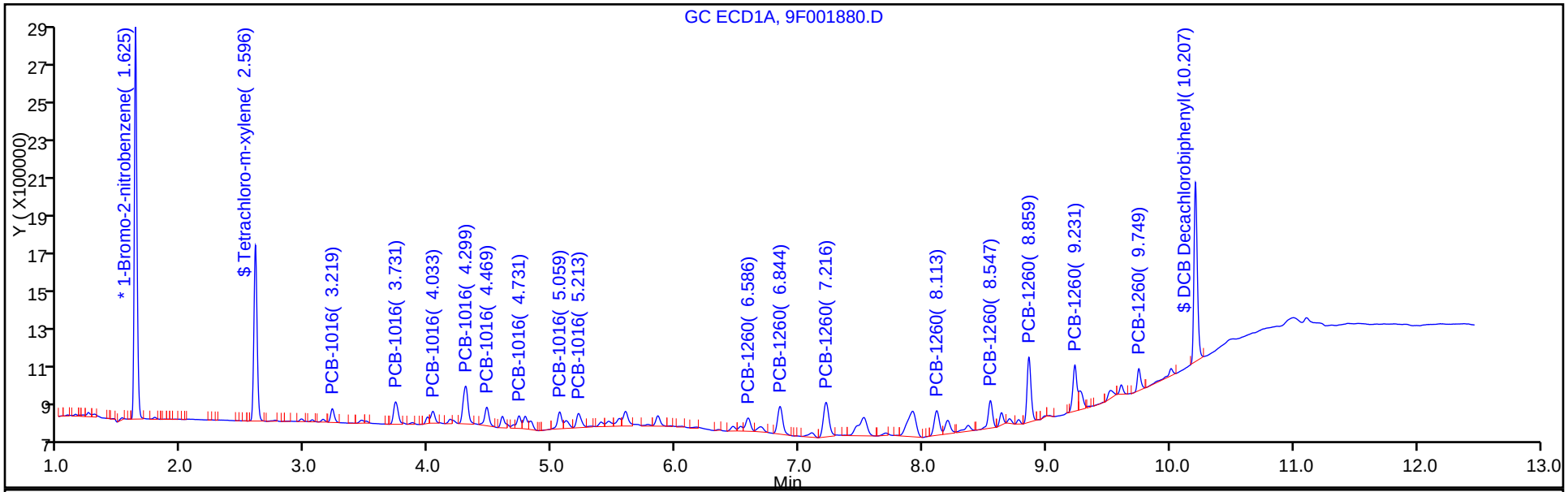
US EPA ARCHIVE DOCUMENT

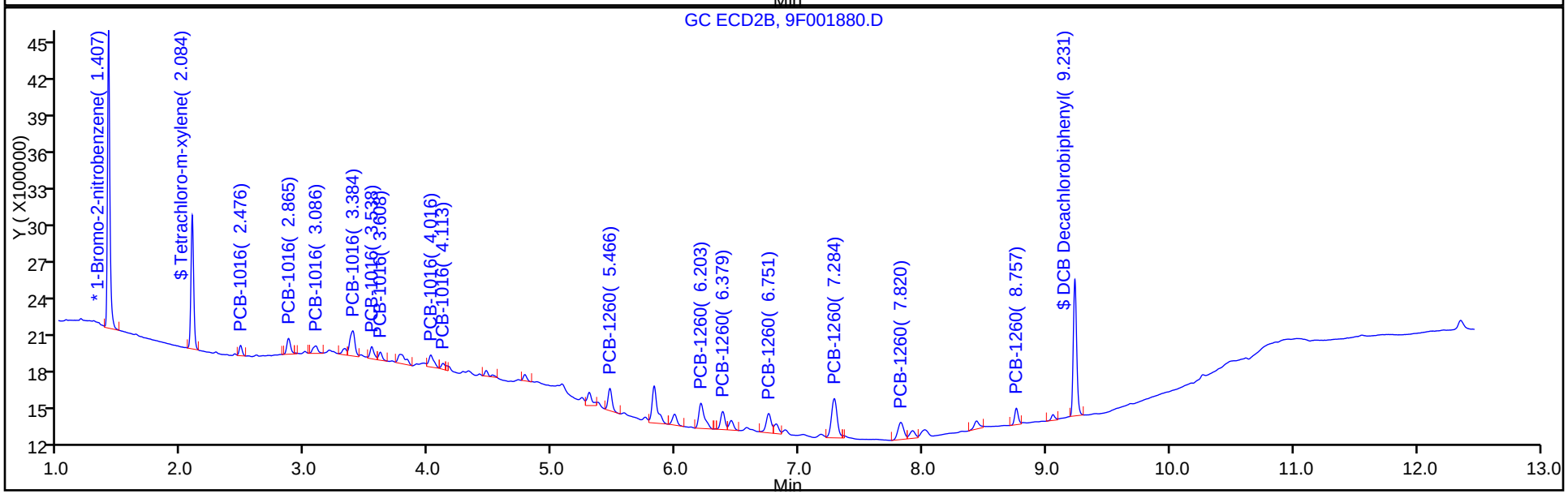
Report Date: 12-May-2016 15:20:54 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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:

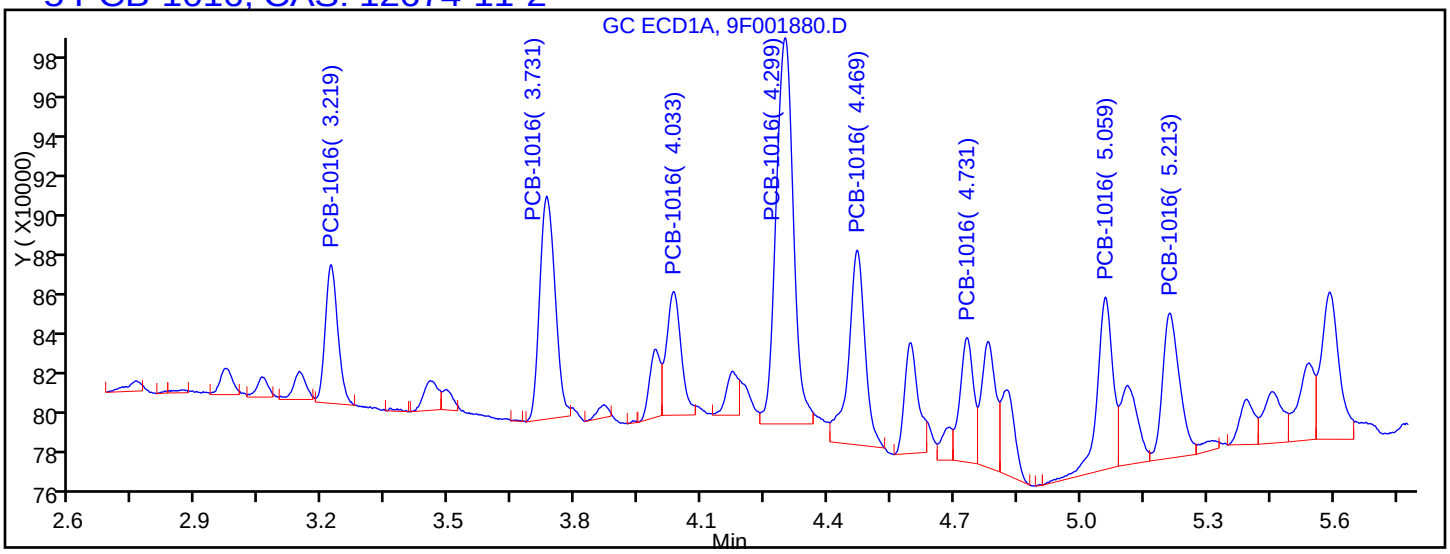
Operator ID: ALS Bottle#: 2 Worklist Smp#: 2

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

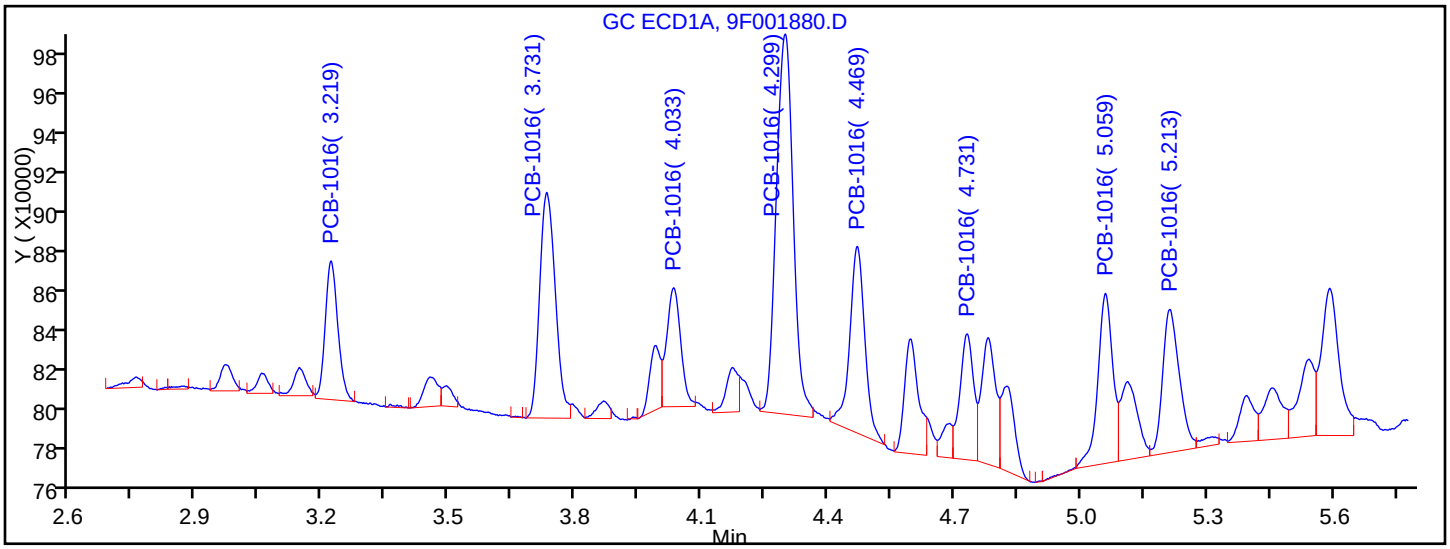
Column: Detector GC ECD1A

## 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 |



US EPA ARCHIVE DOCUMENT

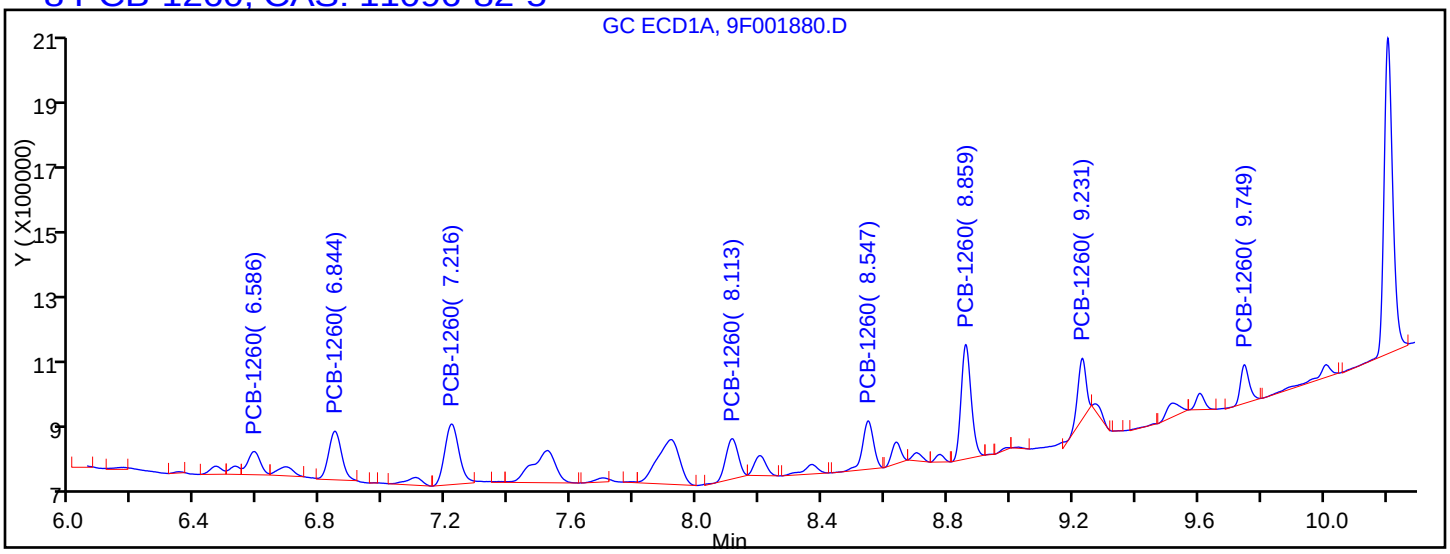
Report Date: 12-May-2016 15:20:55 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D

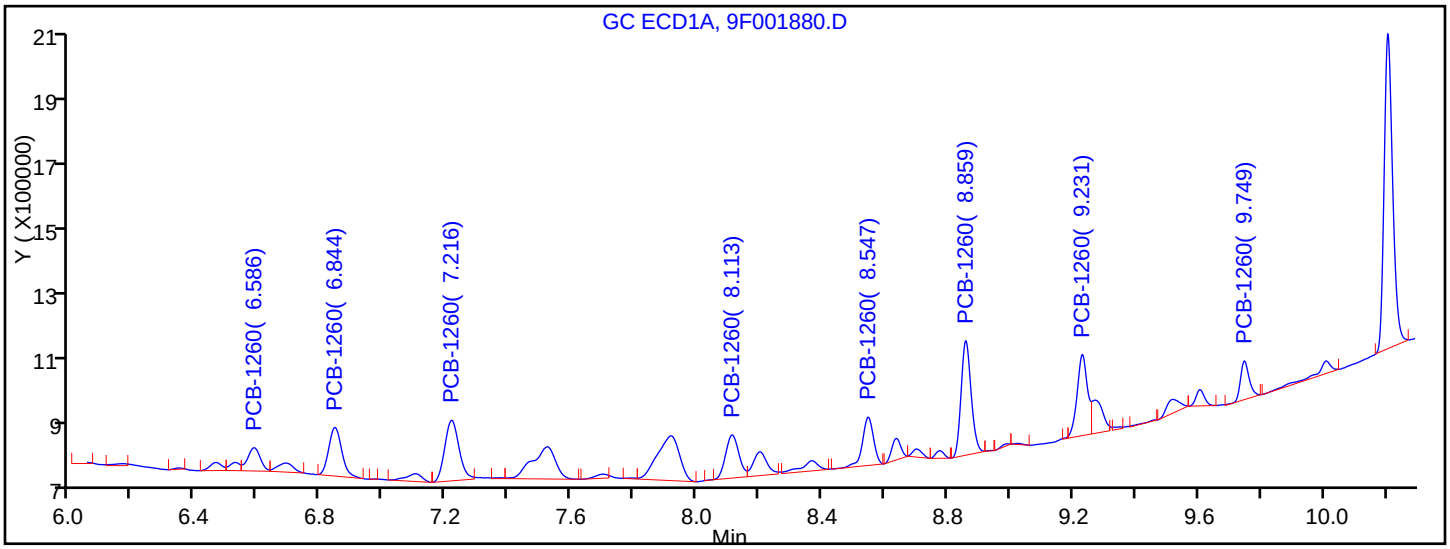
| | | | |
|---|---|---|---|
| Injection Date: | 12-May-2016 10:14:48 | Instrument ID: | CPESTGC9 |
| Lims ID: | IC PCB 1 | | |
| Client ID: | | | |
| Operator ID: | | ALS Bottle#: | 2 Worklist Smp#: 2 |
| Injection Vol: | 1.0 ul | Dil. Factor: | 1.0000 |
| Method: | 8082-ISTD | Limit Group: | GC 8082A 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 | |



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Manual Integration/User Assign Peak Report

TestAmerica Edison

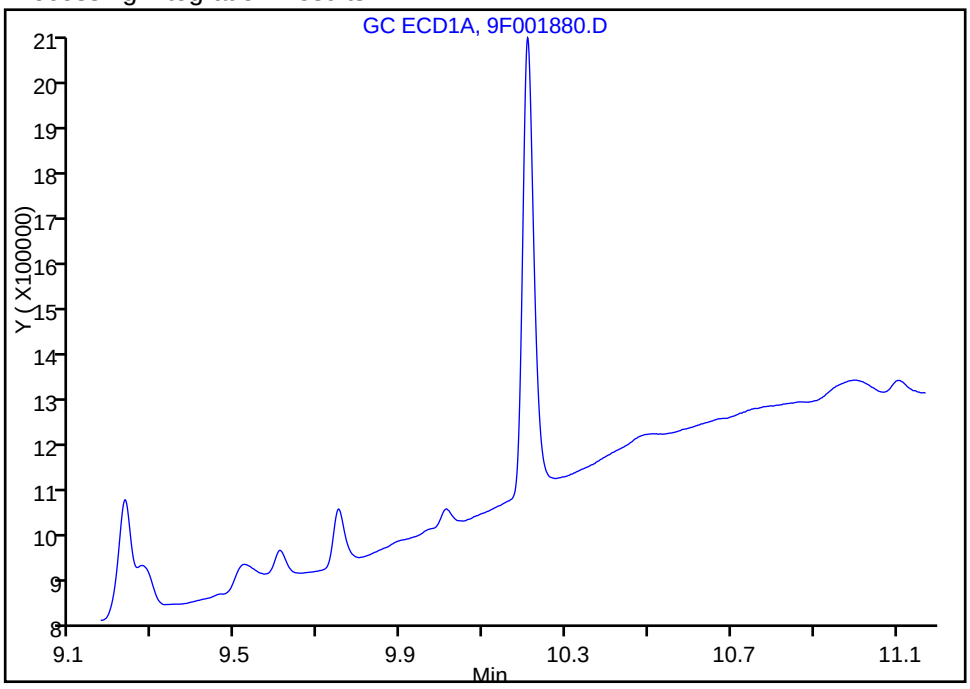
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D
Injection Date: 12-May-2016 10:14:48 Instrument ID: CPESTGC9
Lims ID: IC PCB 1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD1A

## $ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

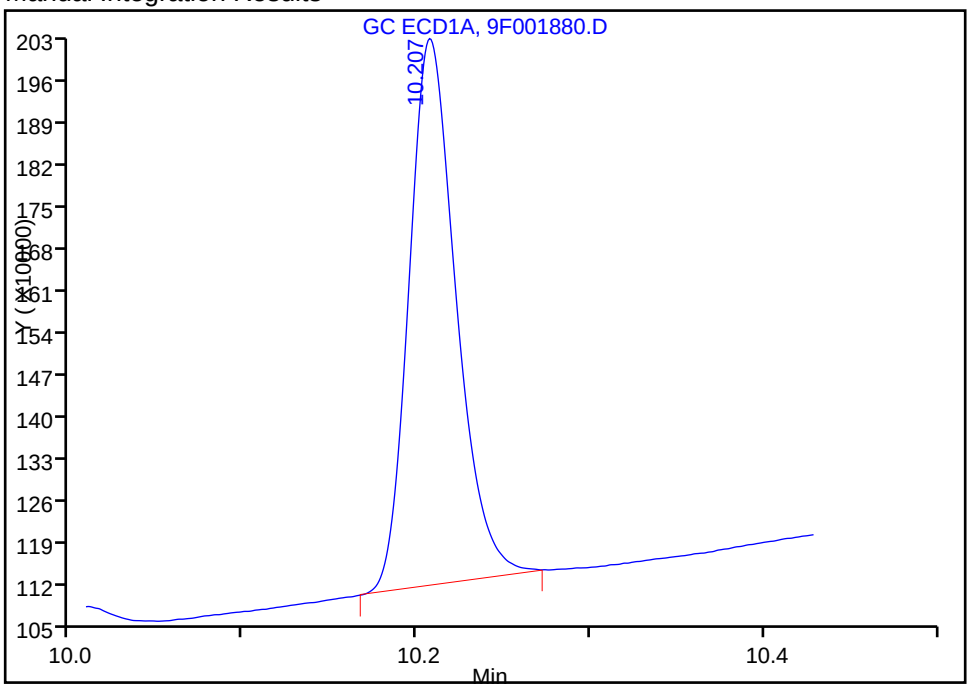
Not Detected
Expected RT: 10.17

Processing Integration Results




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:



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D

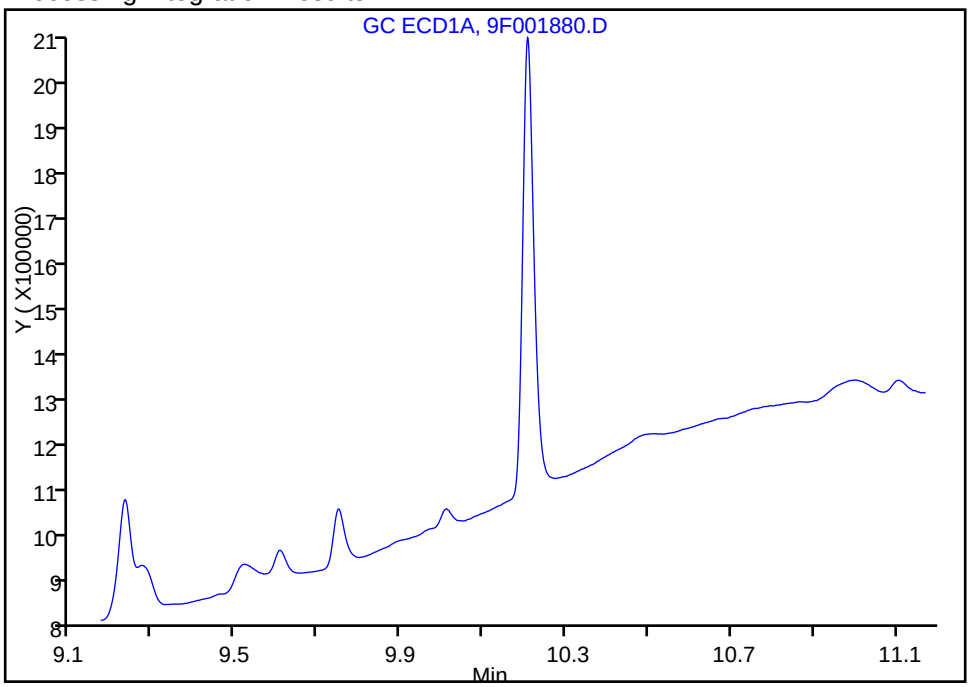
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 12-May-2016 10:14:48 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | IC PCB 1 | | | | |
| Client ID: | | | | | |
| Operator ID: | | ALS Bottle#: | 2 | Worklist Smp#: | 2 |
| Injection Vol: | 1.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | 8082-ISTD | Limit Group: | GC 8082A PCB ISTD | | |
| Column: | | Detector | GC ECD1A | | |

## $ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

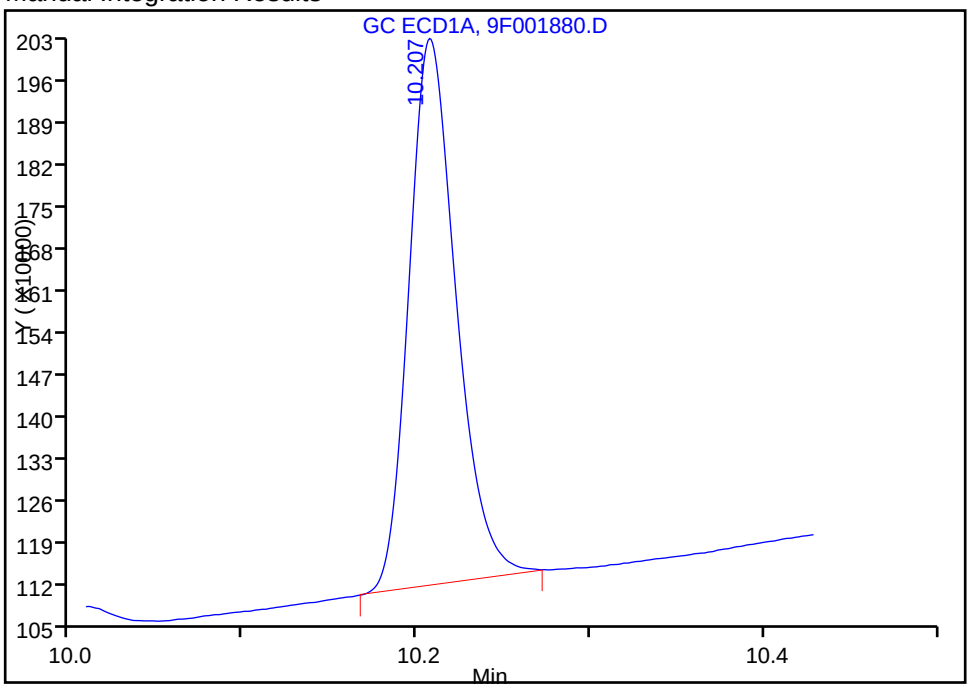
Not Detected
Expected RT: 10.17

Processing Integration Results




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



US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

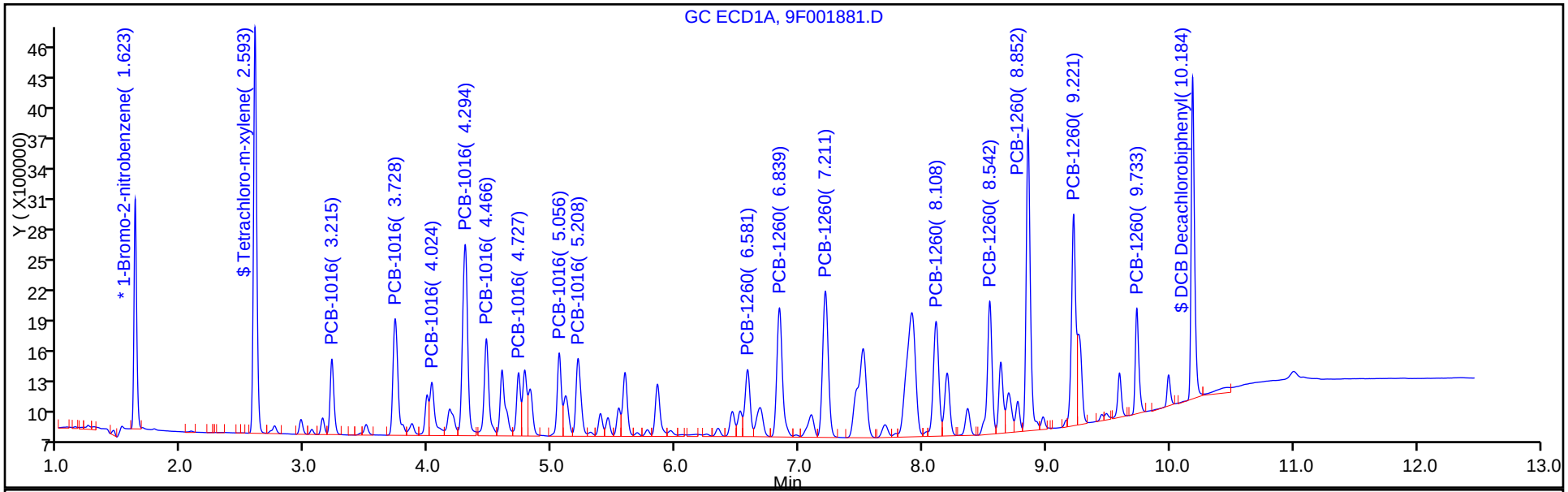
US EPA ARCHIVE DOCUMENT

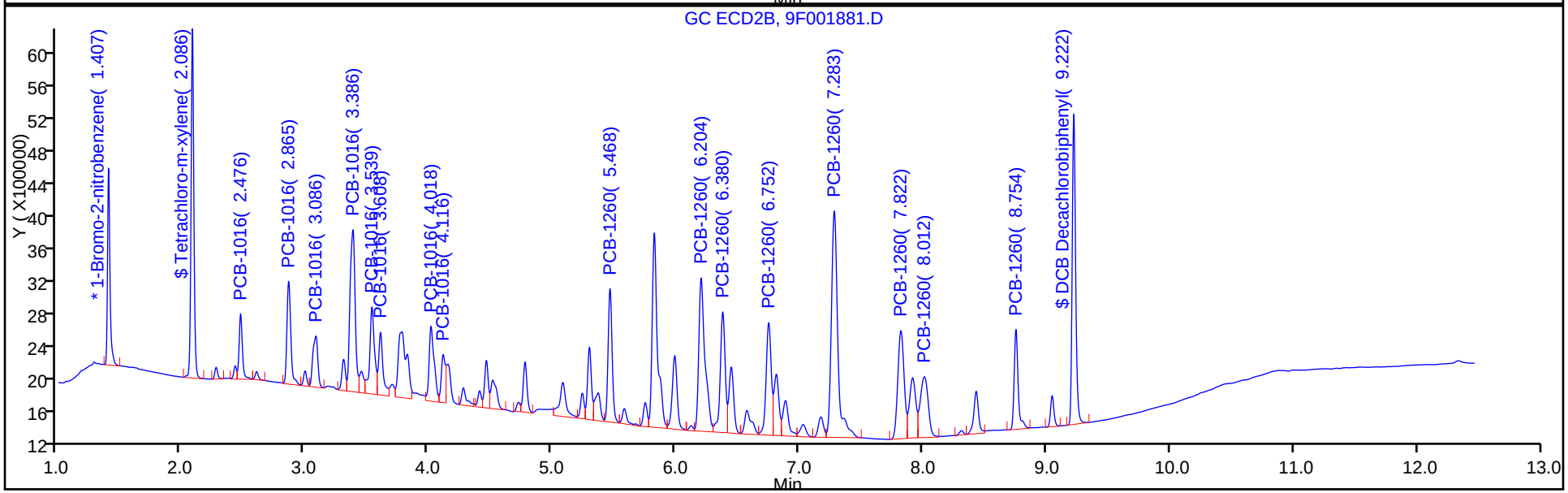
Report Date: 12-May-2016 15:21:08 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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

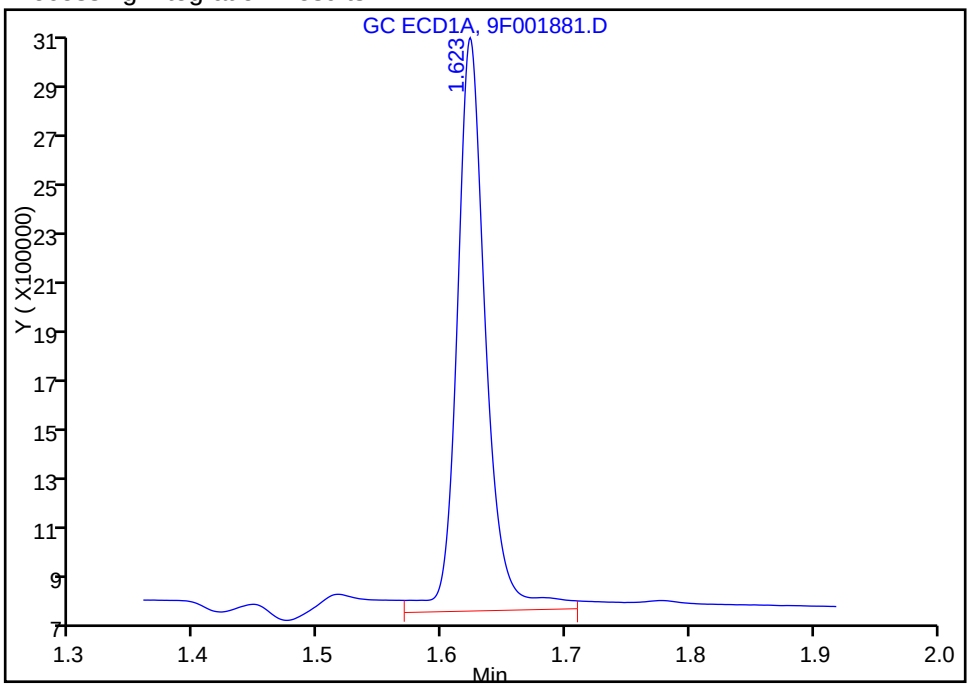
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001881.D
Injection Date: 12-May-2016 10:32:48 Instrument ID: CPESTGC9
Lims ID: IC PCB 2
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD1A

## * 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 1

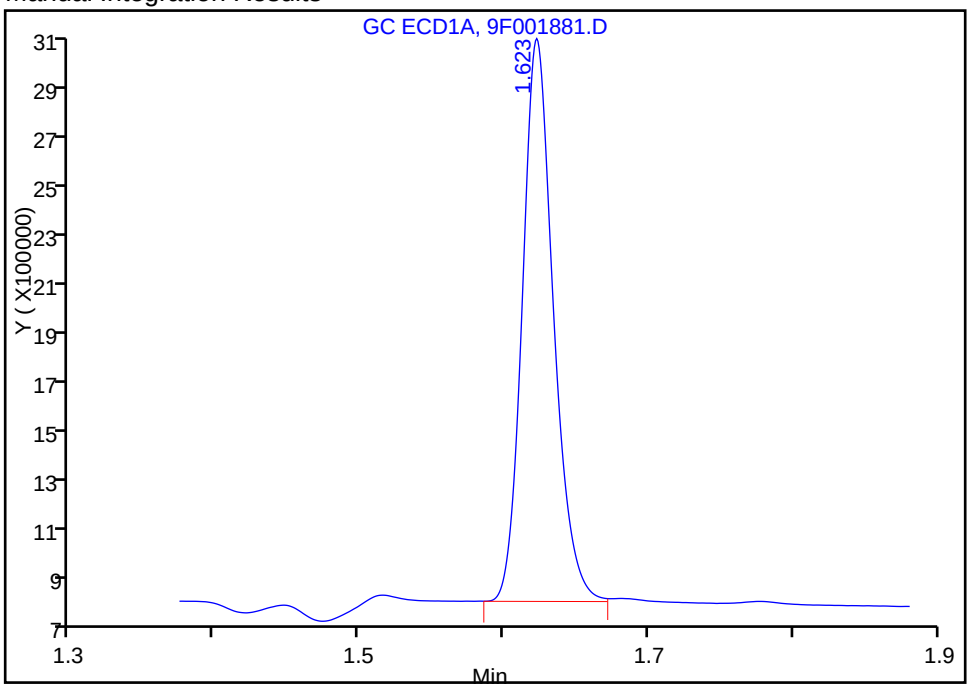
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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:

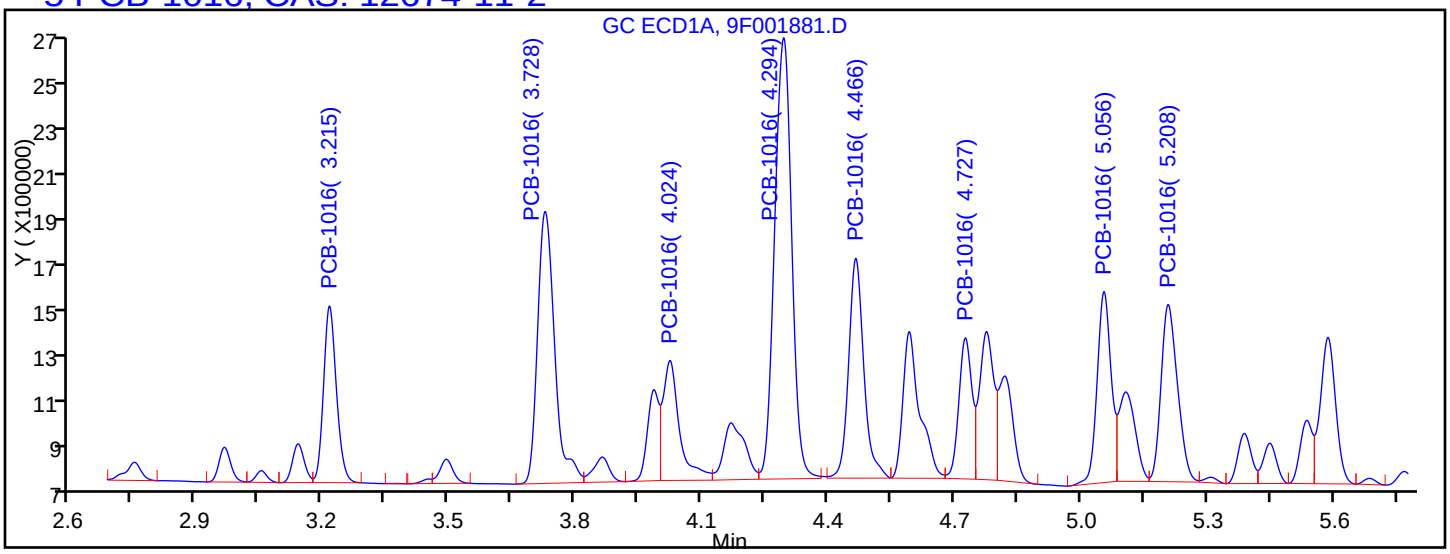
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

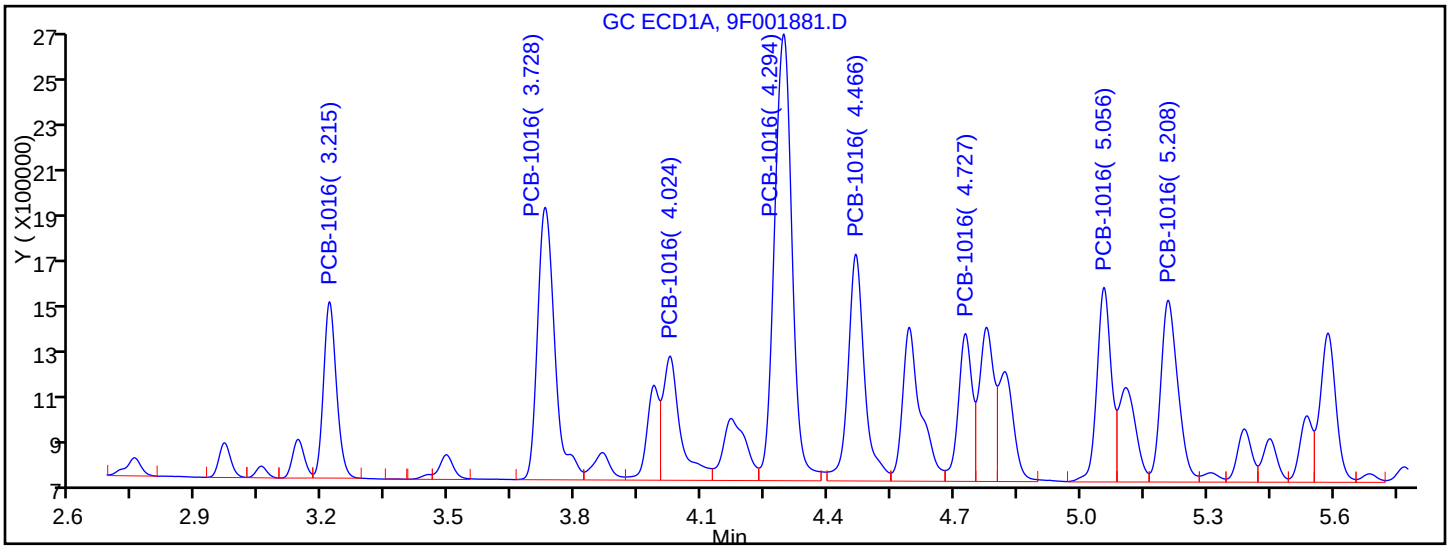
Column: Detector GC ECD1A

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 |



US EPA ARCHIVE DOCUMENT

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:

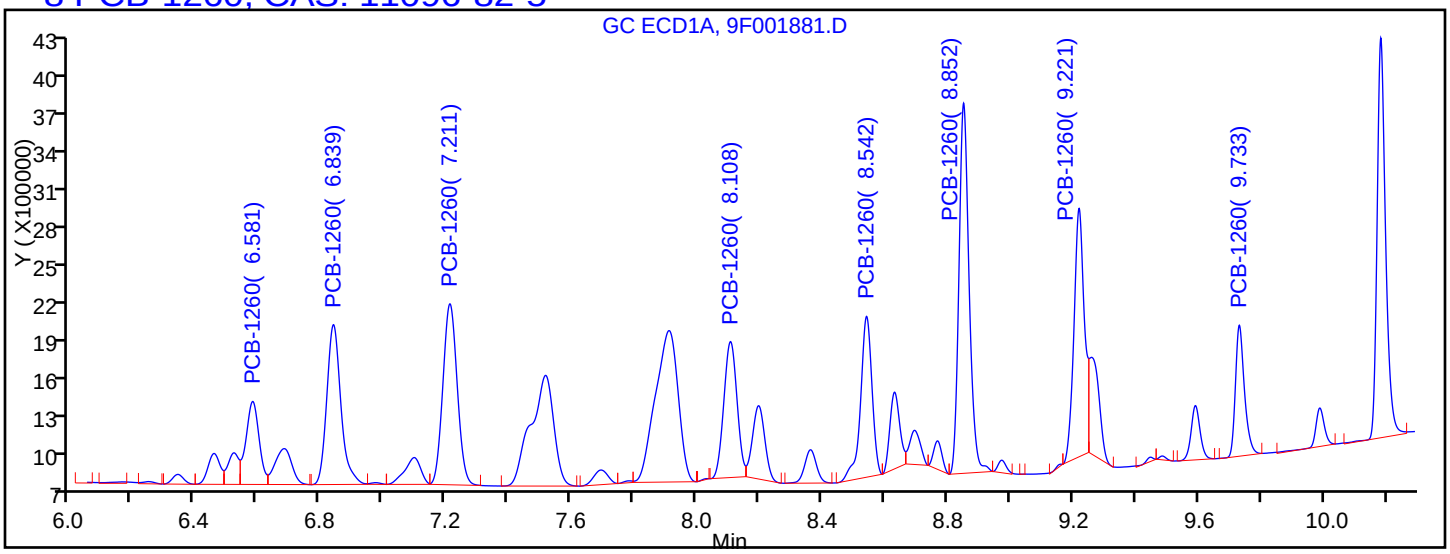
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

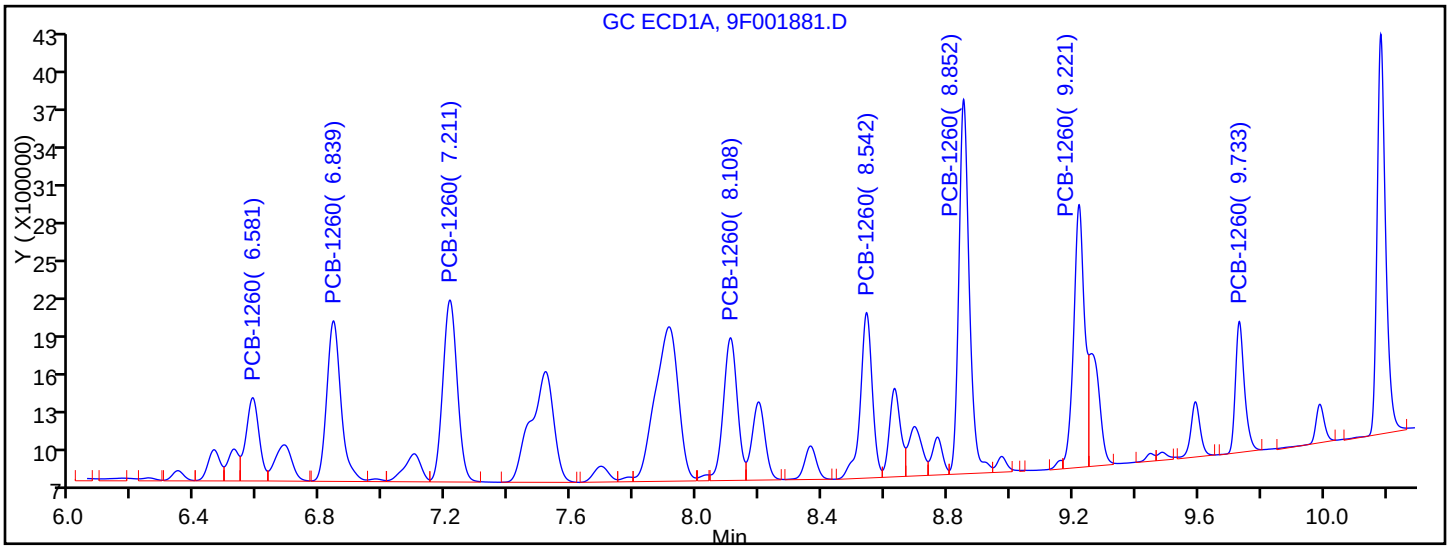
Column: Detector GC ECD1A

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 |



US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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 | |

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## 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 |

US EPA ARCHIVE DOCUMENT

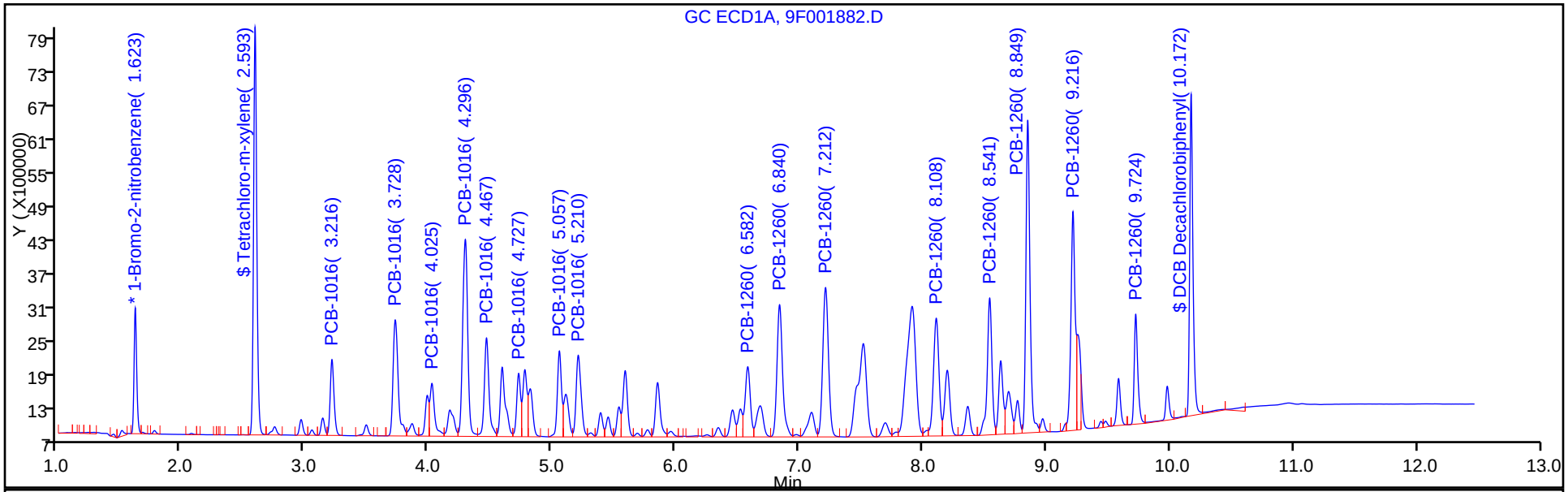
US EPA ARCHIVE DOCUMENT

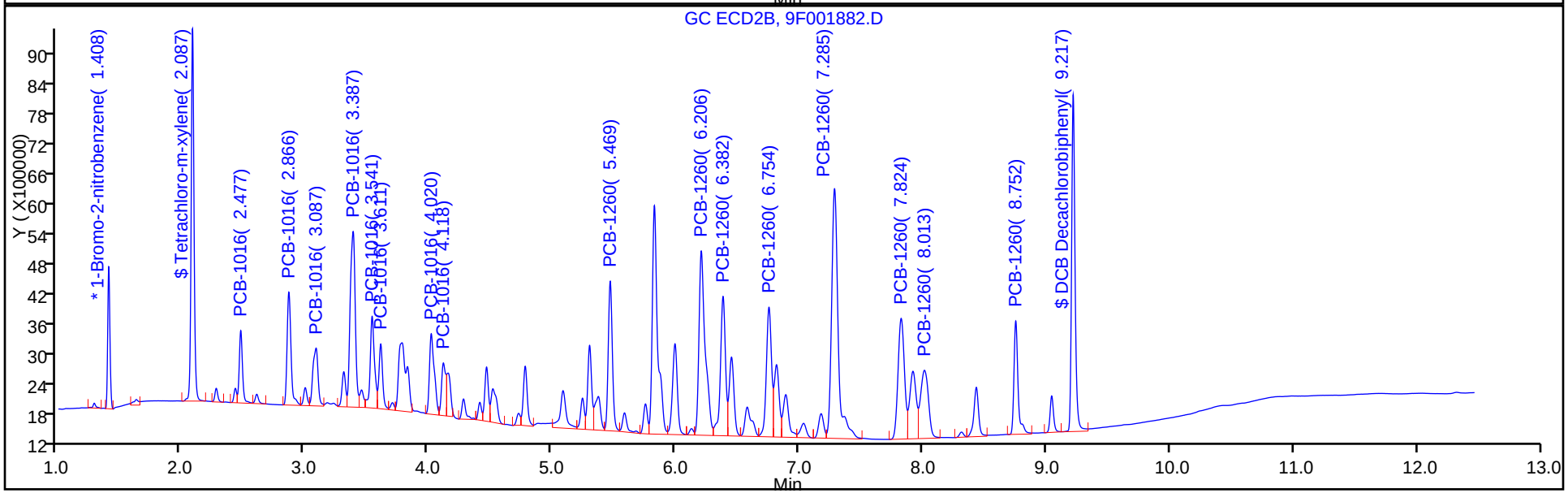
Report Date: 12-May-2016 15:21:17 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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

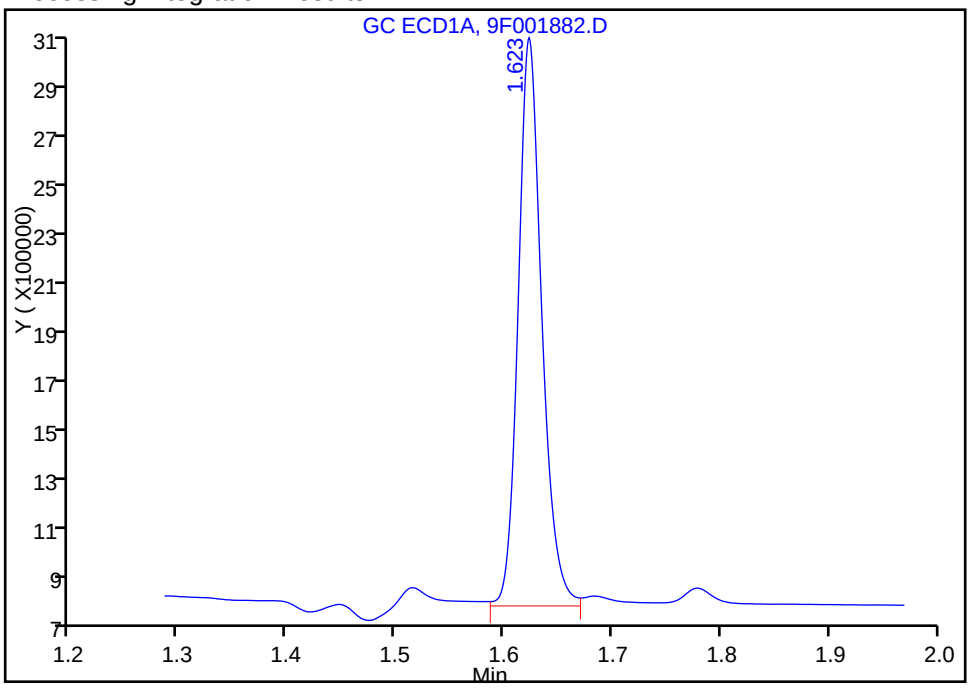
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001882.D | | | | |
| Injection Date: | 12-May-2016 10:50:51 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | IC PCB 3 | | | | |
| Client ID: | | | | | |
| Operator ID: | | ALS Bottle#: | 4 | Worklist 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

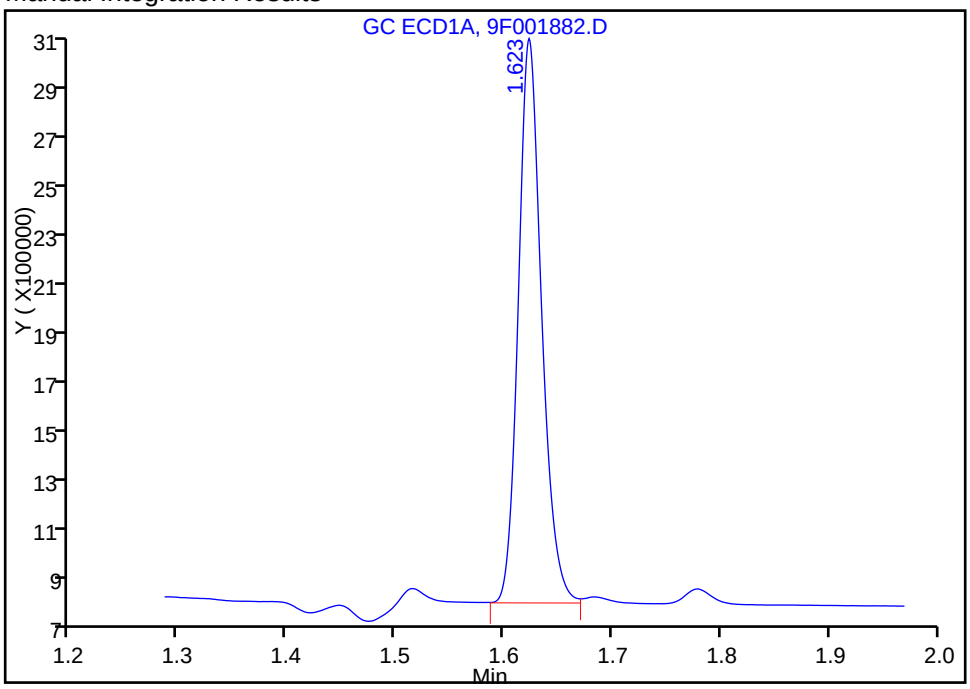
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

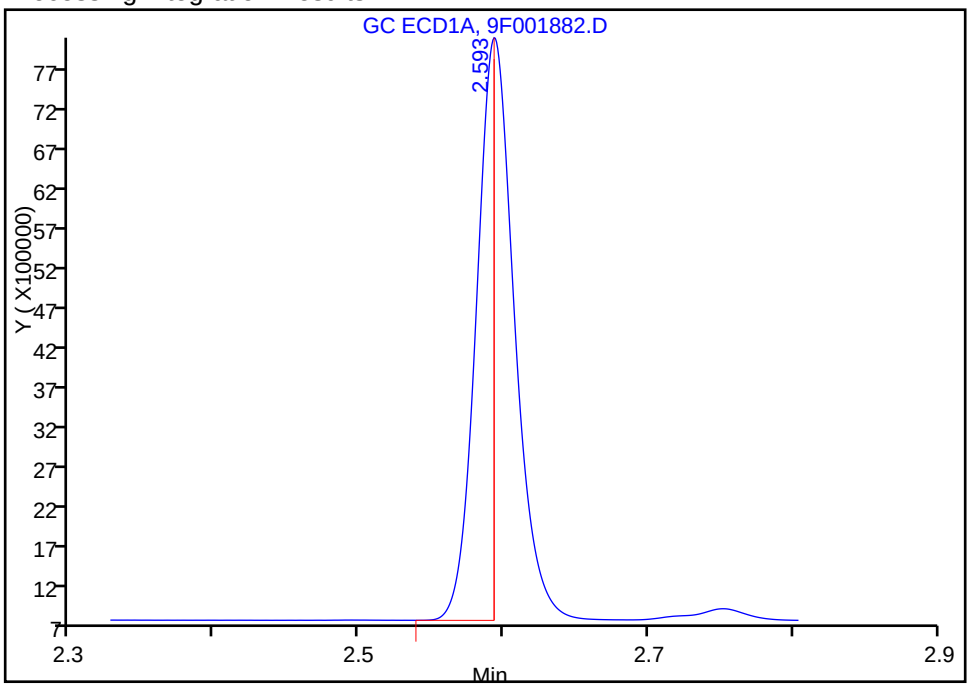
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001882.D | | | | |
| Injection Date: | 12-May-2016 10:50:51 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | IC PCB 3 | | | | |
| Client ID: | | | | | |
| Operator ID: | | ALS Bottle#: | 4 | Worklist 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

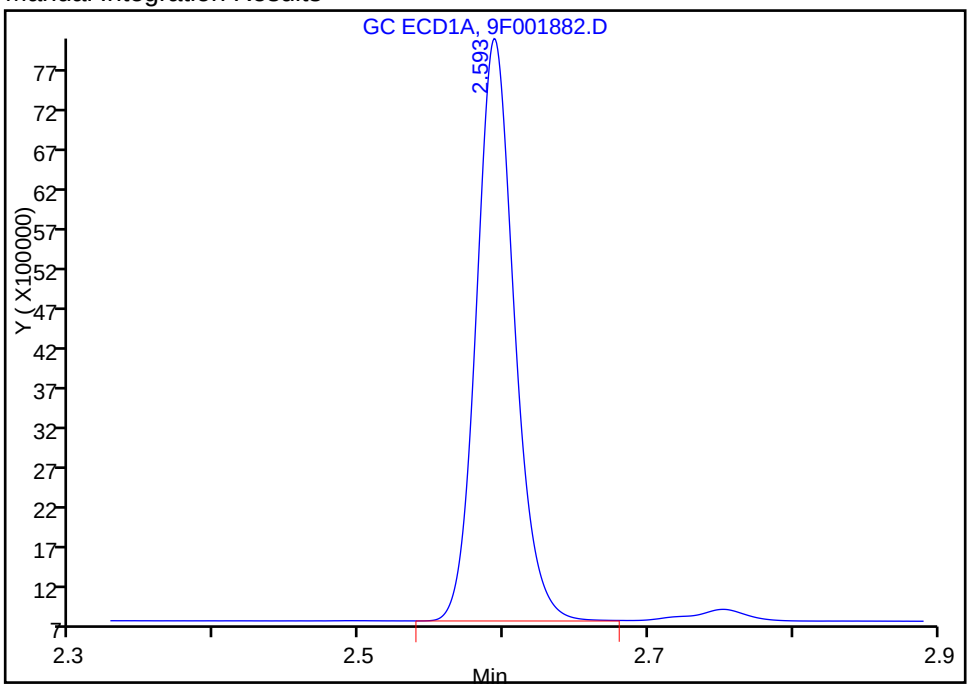
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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:

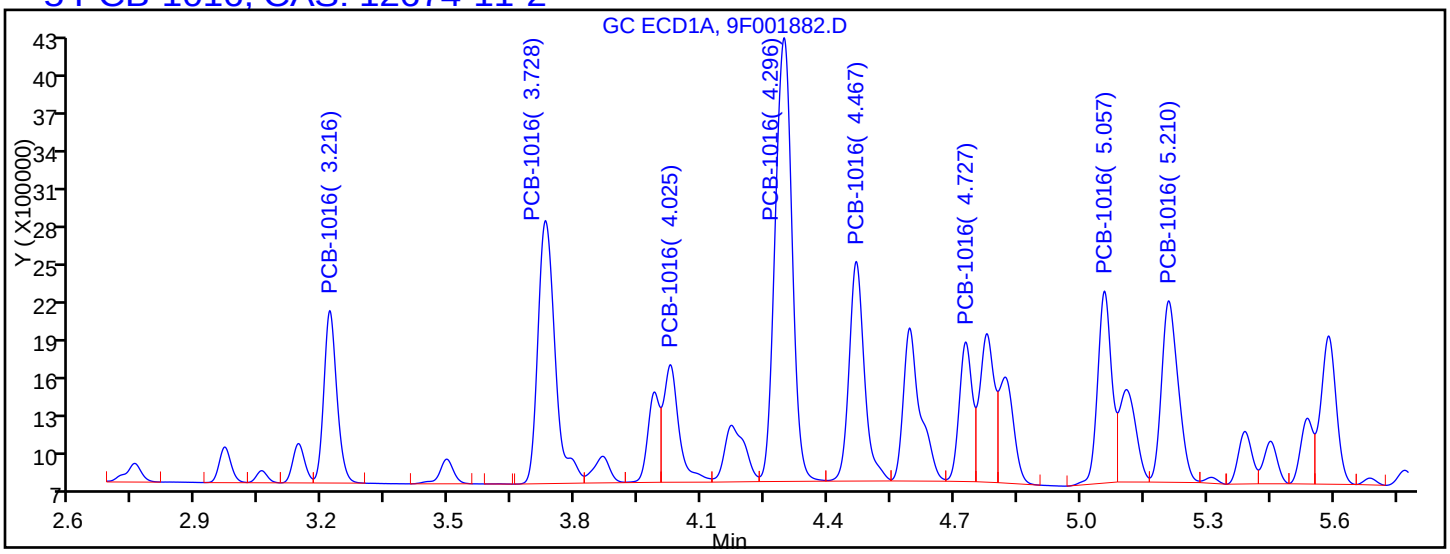
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

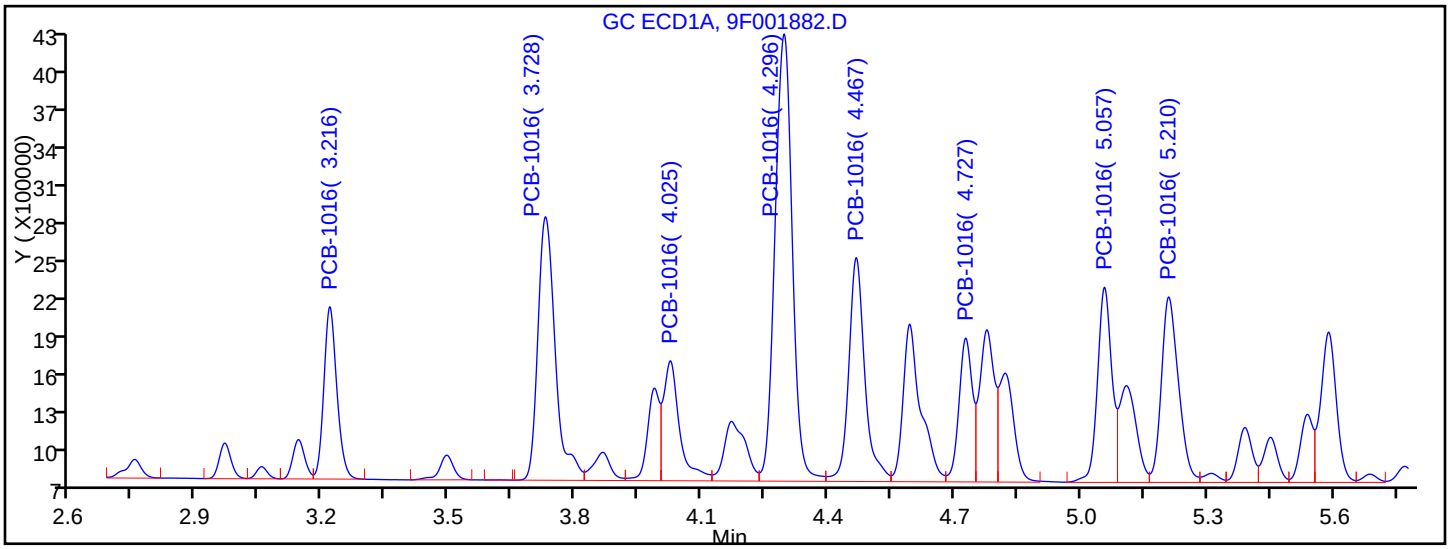
Column: Detector GC ECD1A

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 |



US EPA ARCHIVE DOCUMENT

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:

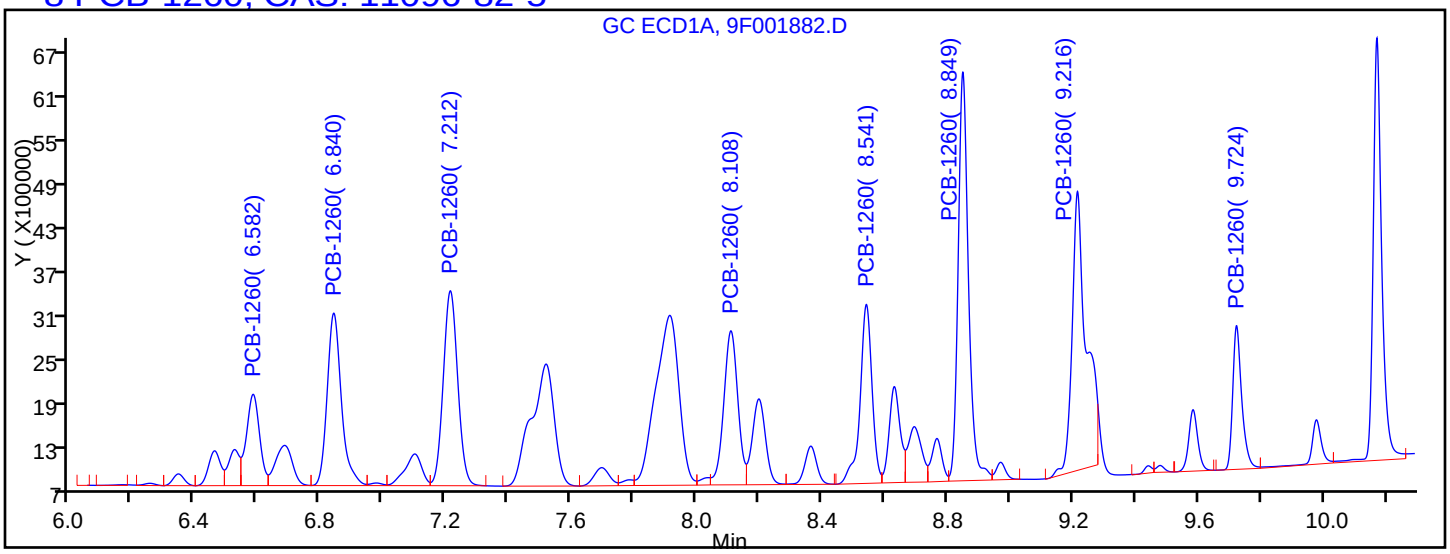
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

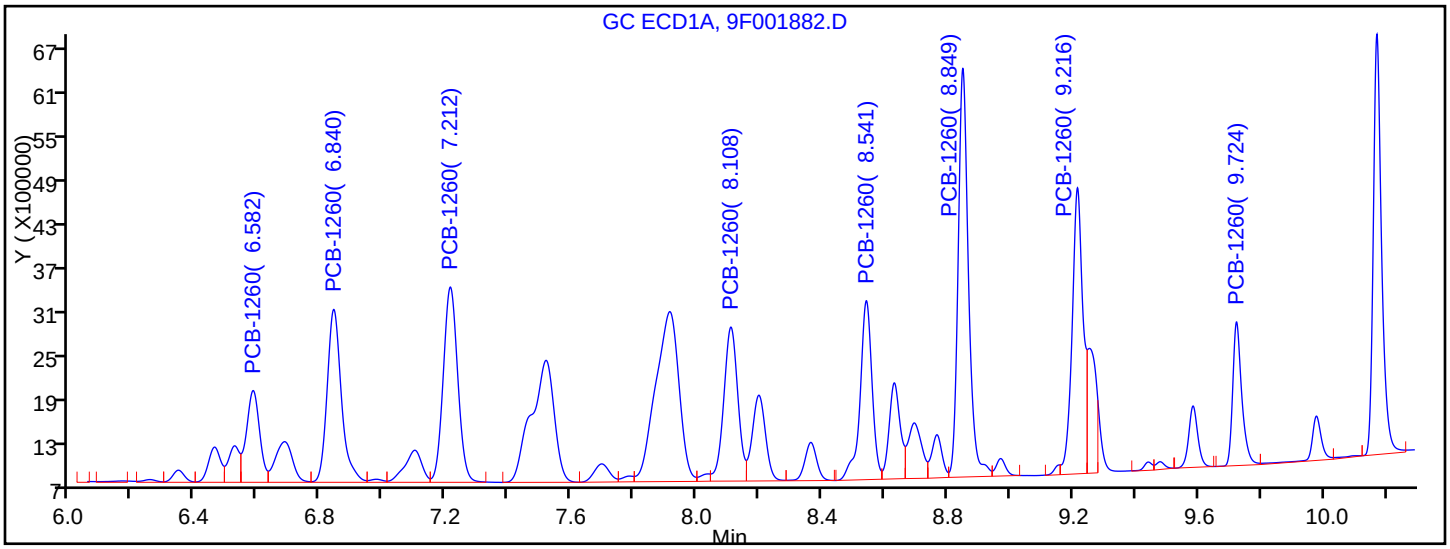
Column: Detector GC ECD1A

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 | |



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

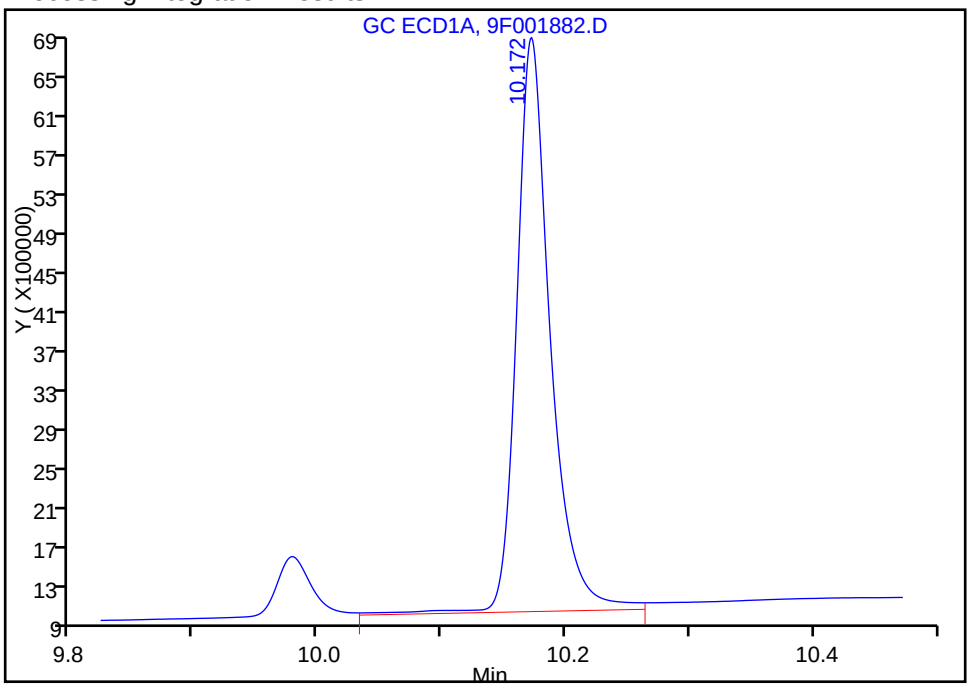
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001882.D
Injection Date: 12-May-2016 10:50:51 Instrument ID: CPESTGC9
Lims ID: IC PCB 3
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD1A

## $ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

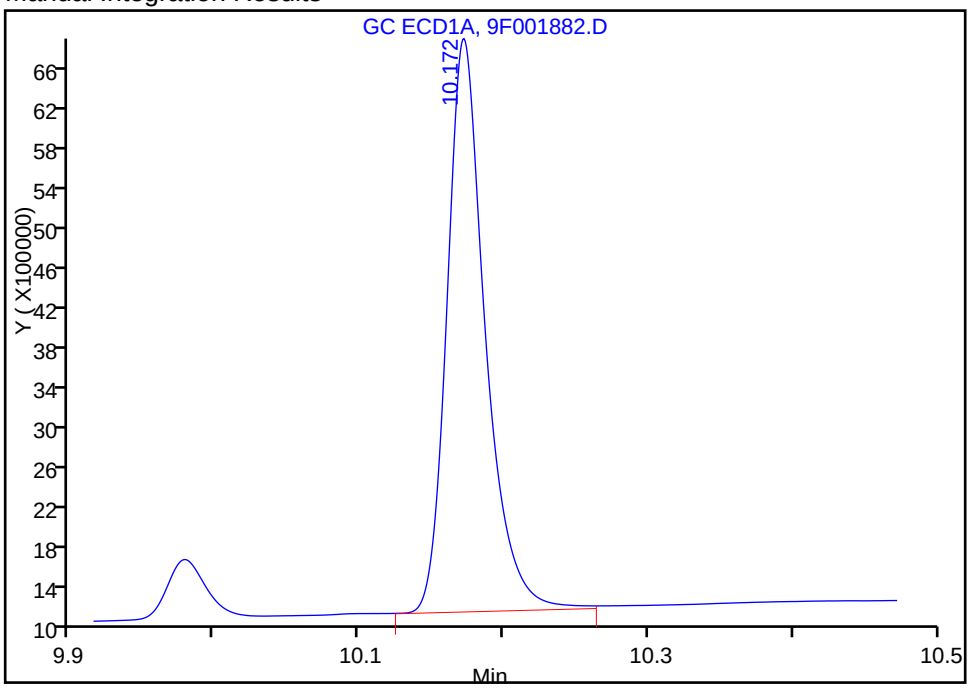
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

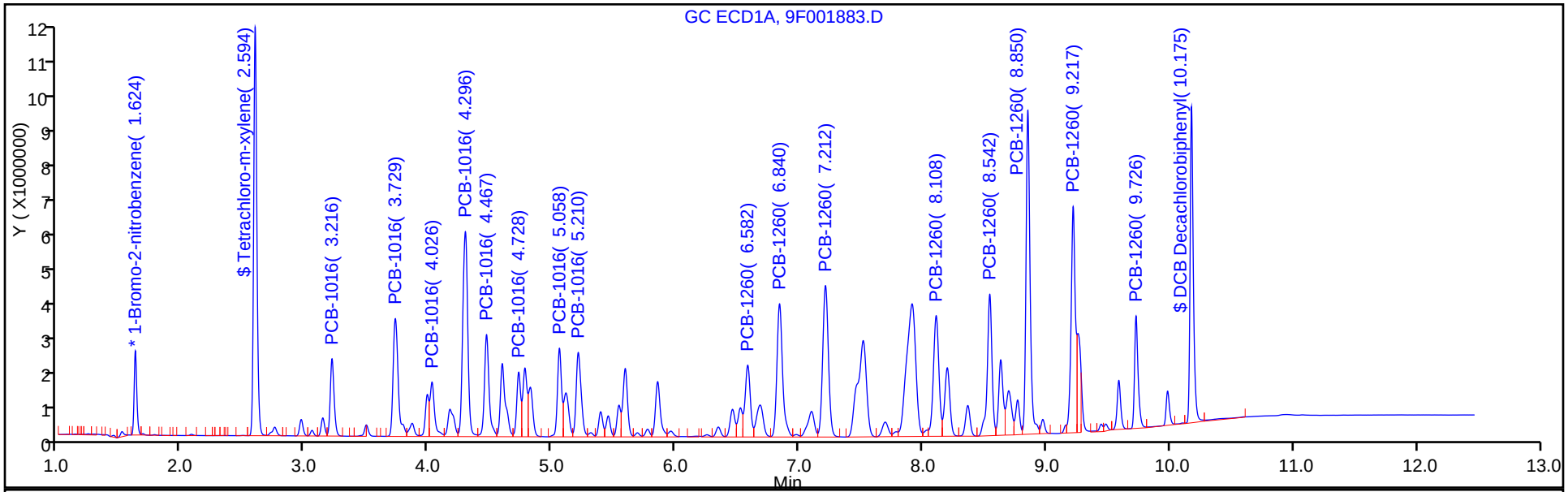
US EPA ARCHIVE DOCUMENT

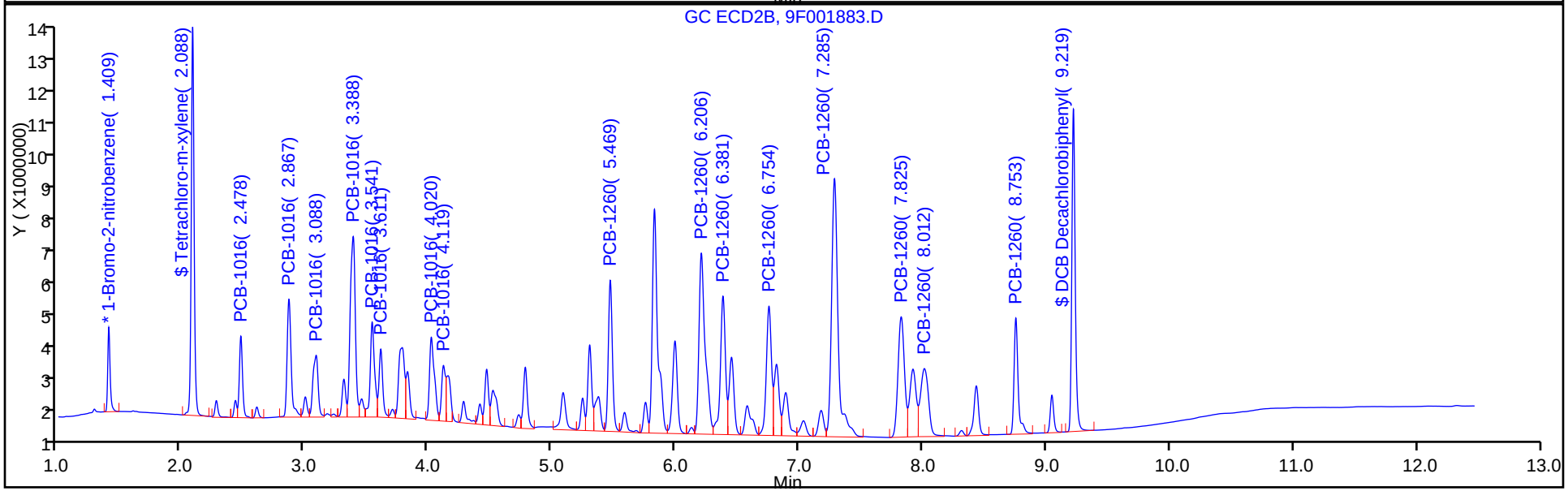
Report Date: 12-May-2016 15:21:28 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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

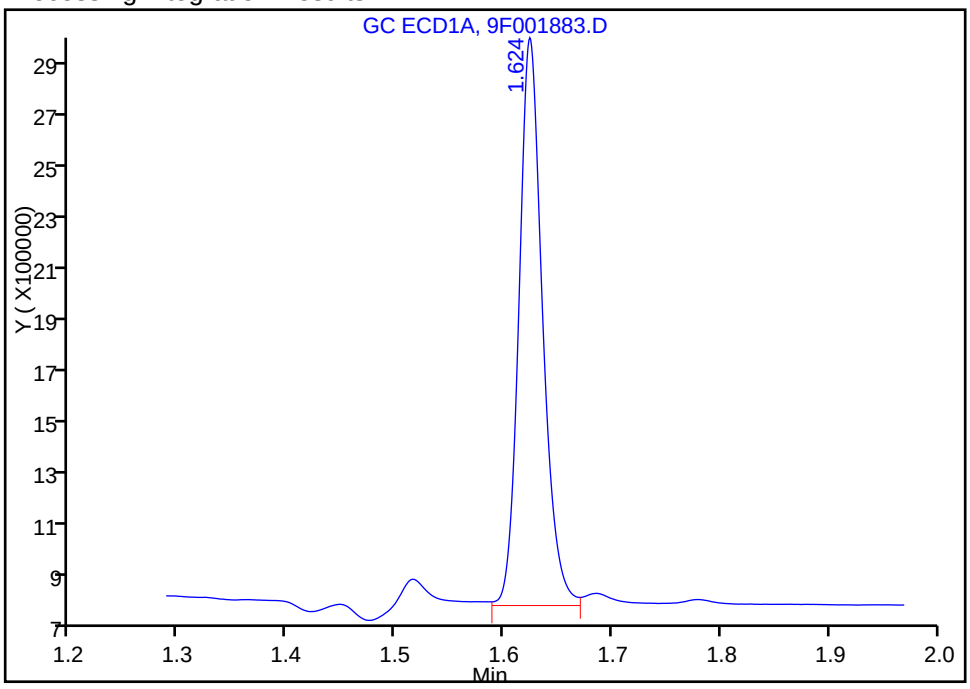
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001883.D
Injection Date: 12-May-2016 11:08:53 Instrument ID: CPESTGC9
Lims ID: IC PCB 4
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD1A

## * 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 1

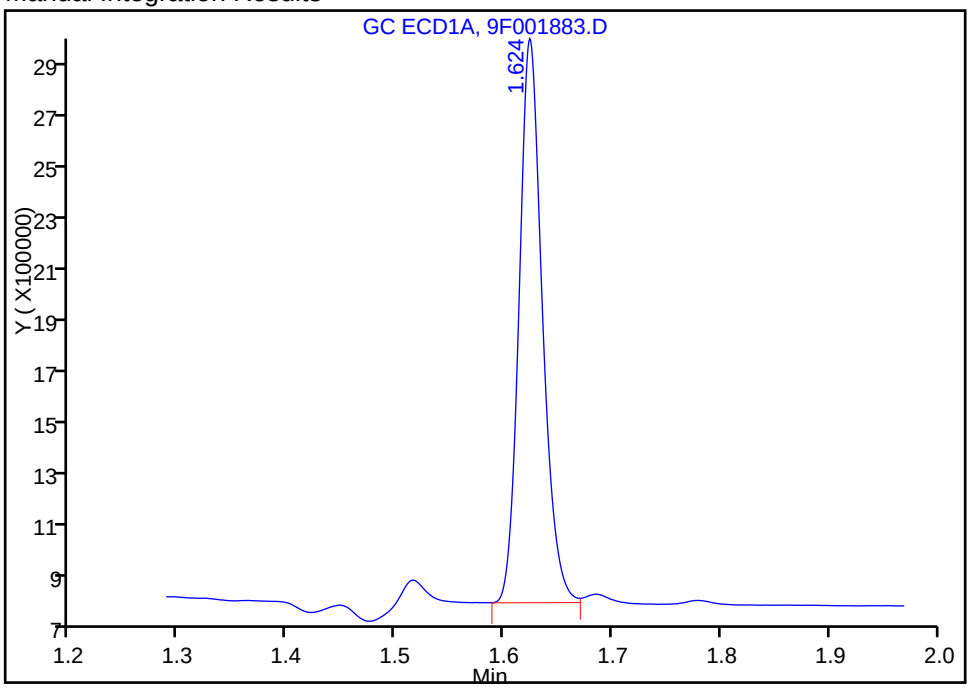
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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:

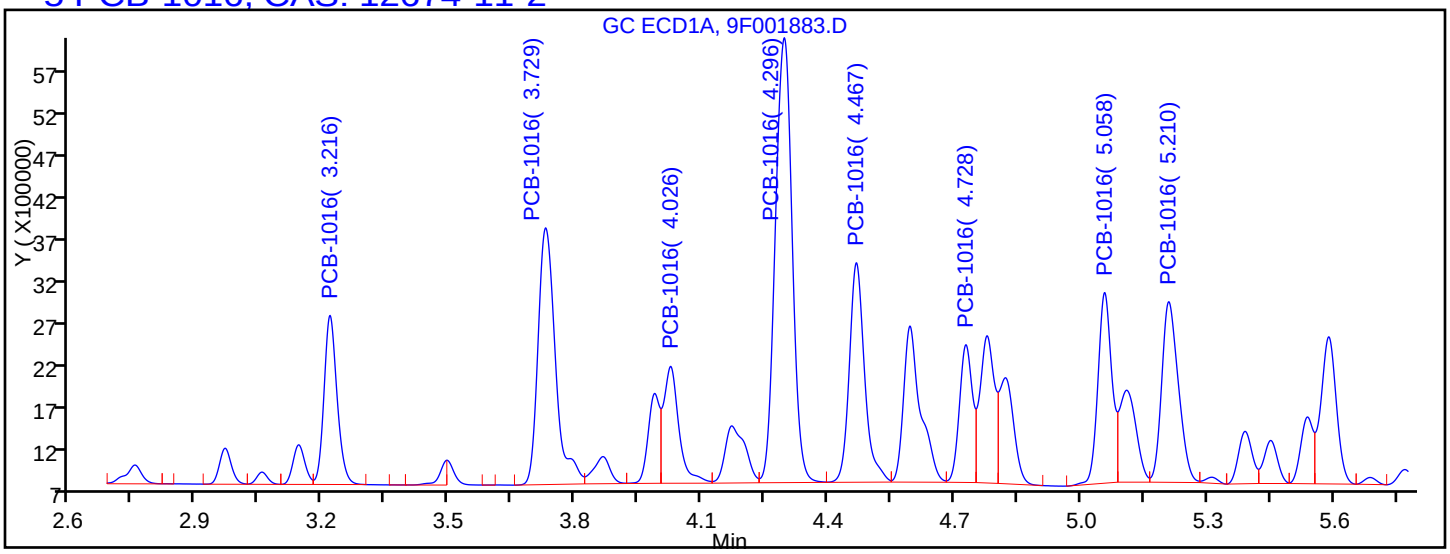
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

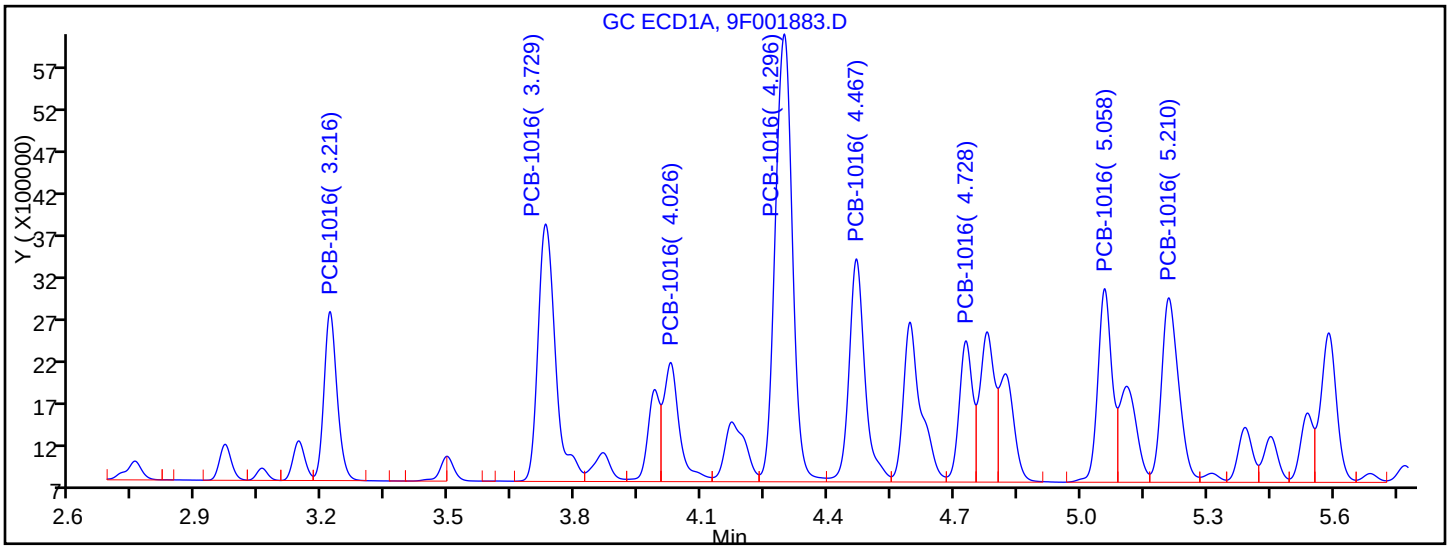
Column: Detector GC ECD1A

## 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 |



US EPA ARCHIVE DOCUMENT

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:

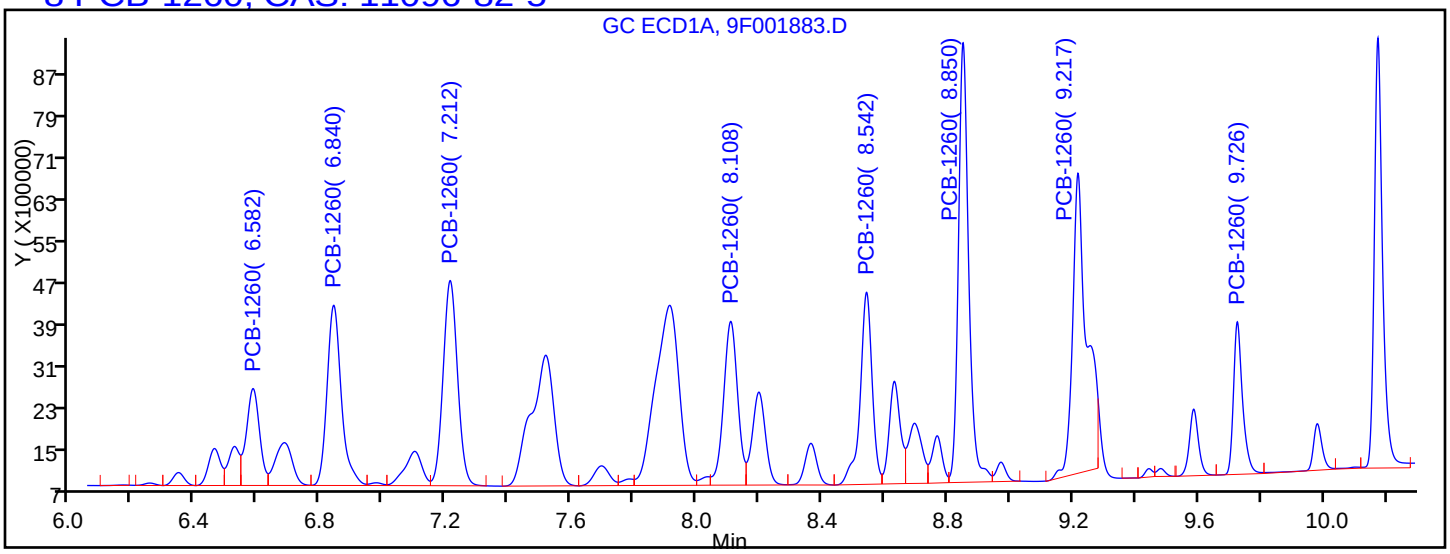
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

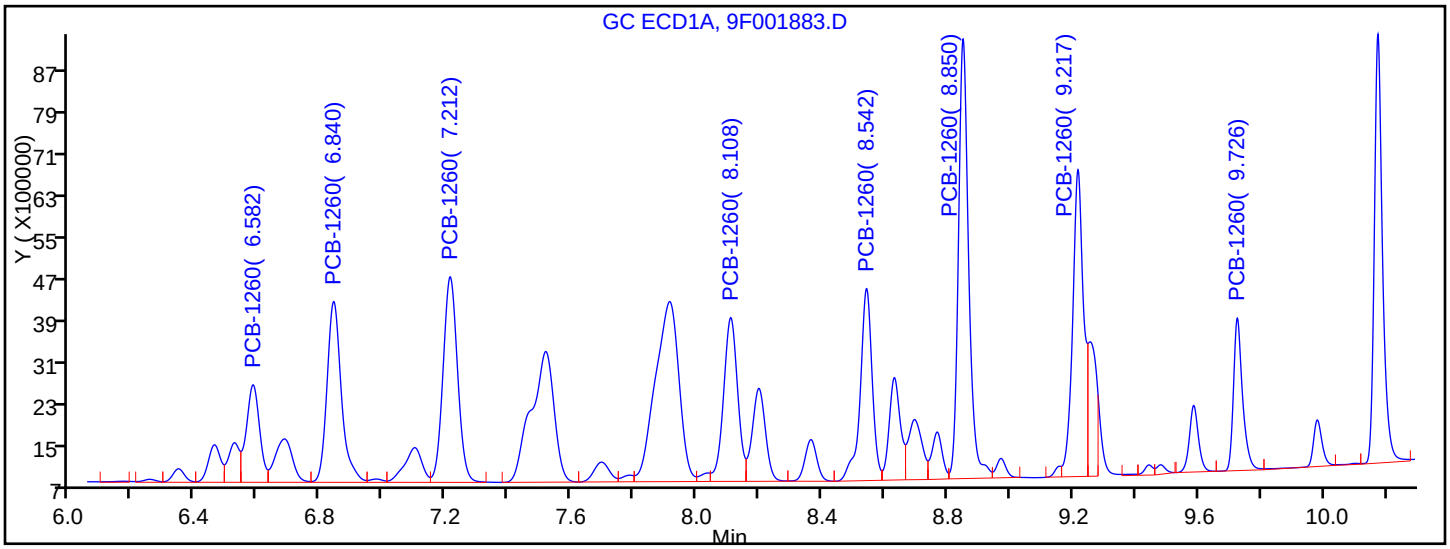
Column: Detector GC ECD1A

## 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 | |



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

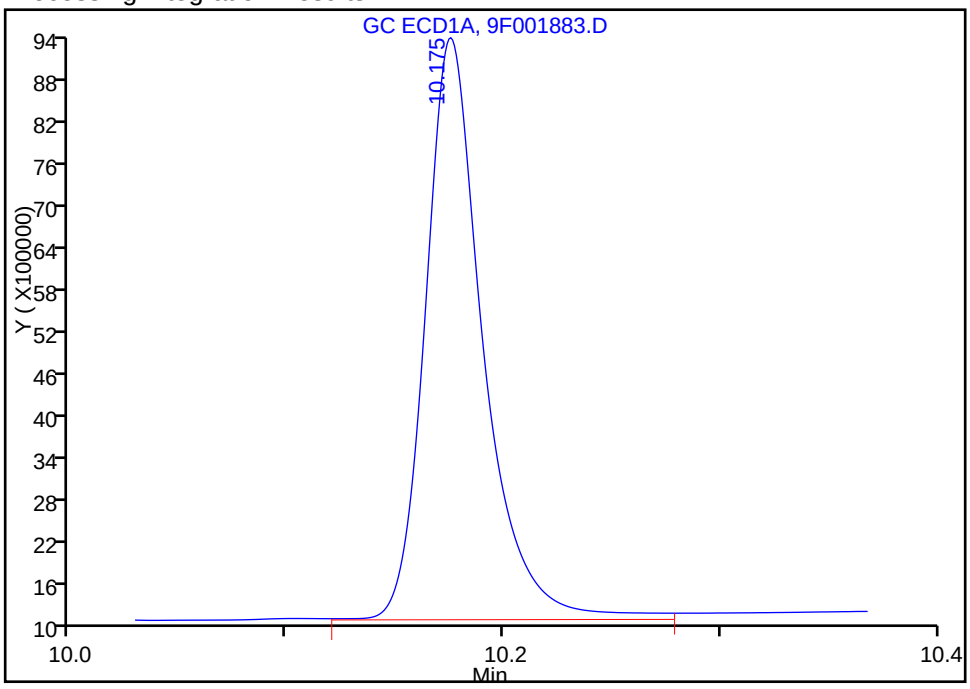
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001883.D
Injection Date: 12-May-2016 11:08:53 Instrument ID: CPESTGC9
Lims ID: IC PCB 4
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD1A

## $ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

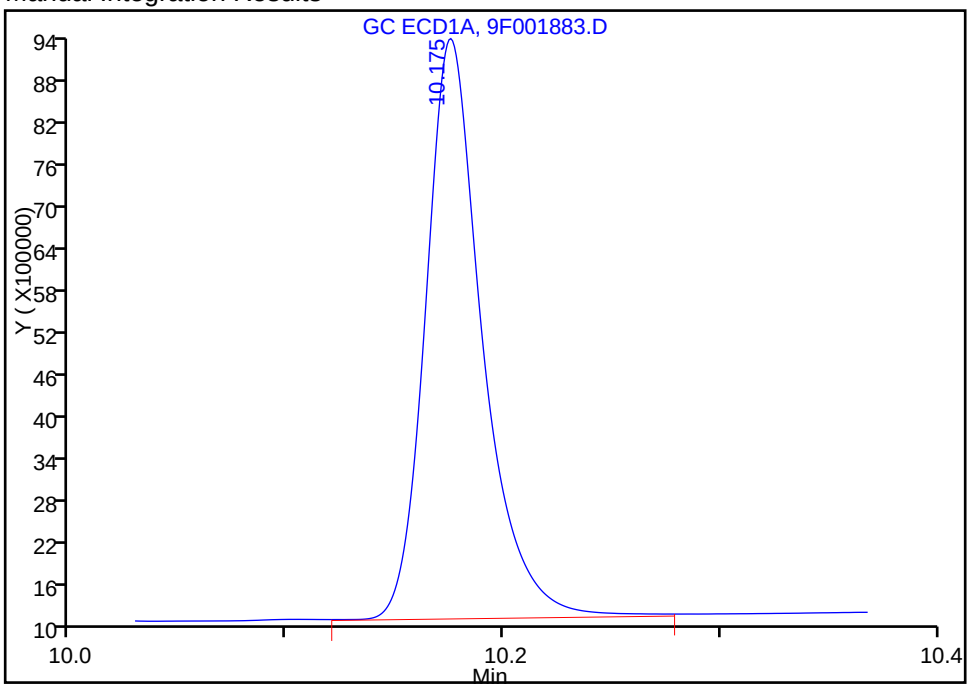
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

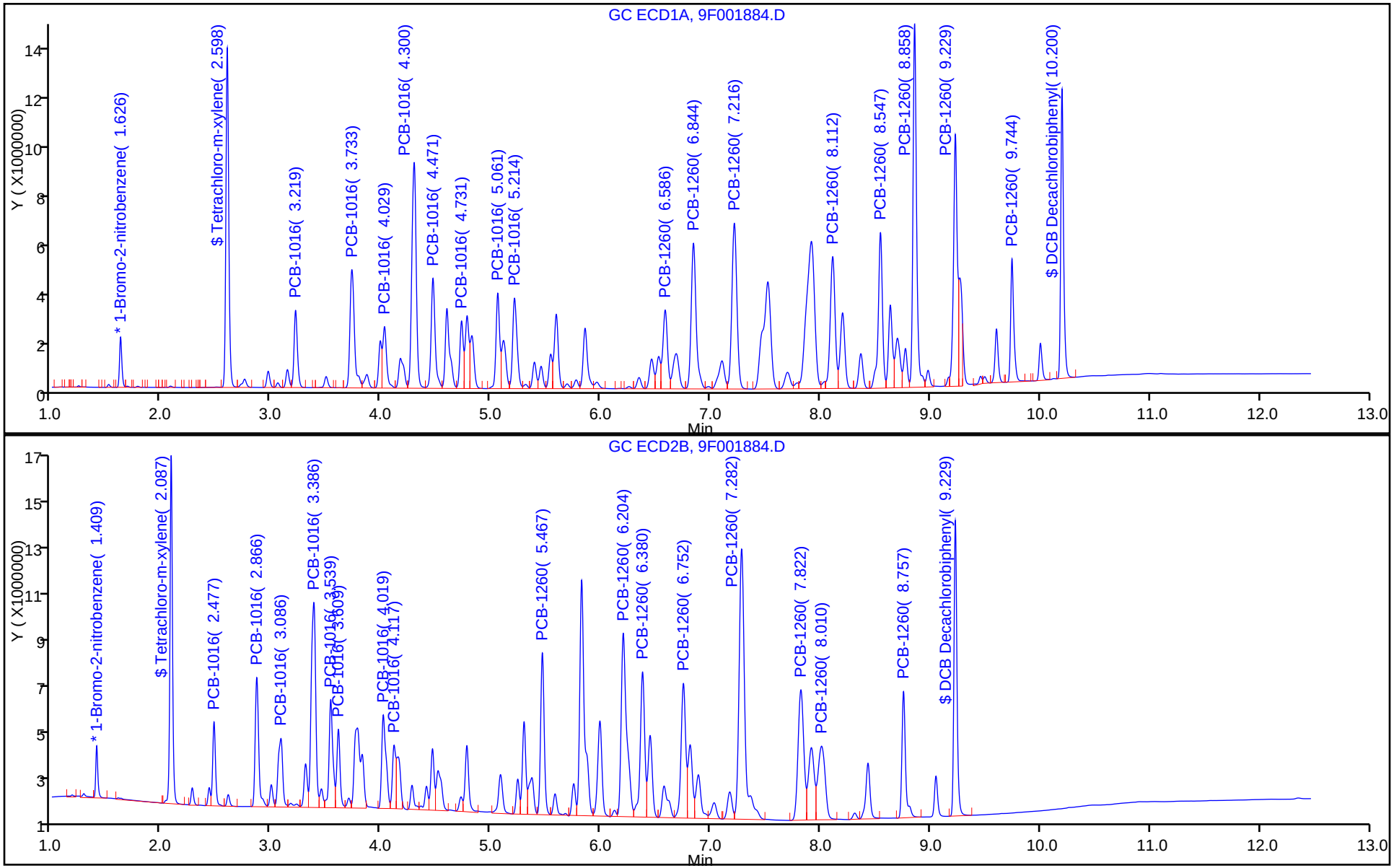
US EPA ARCHIVE DOCUMENT

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:

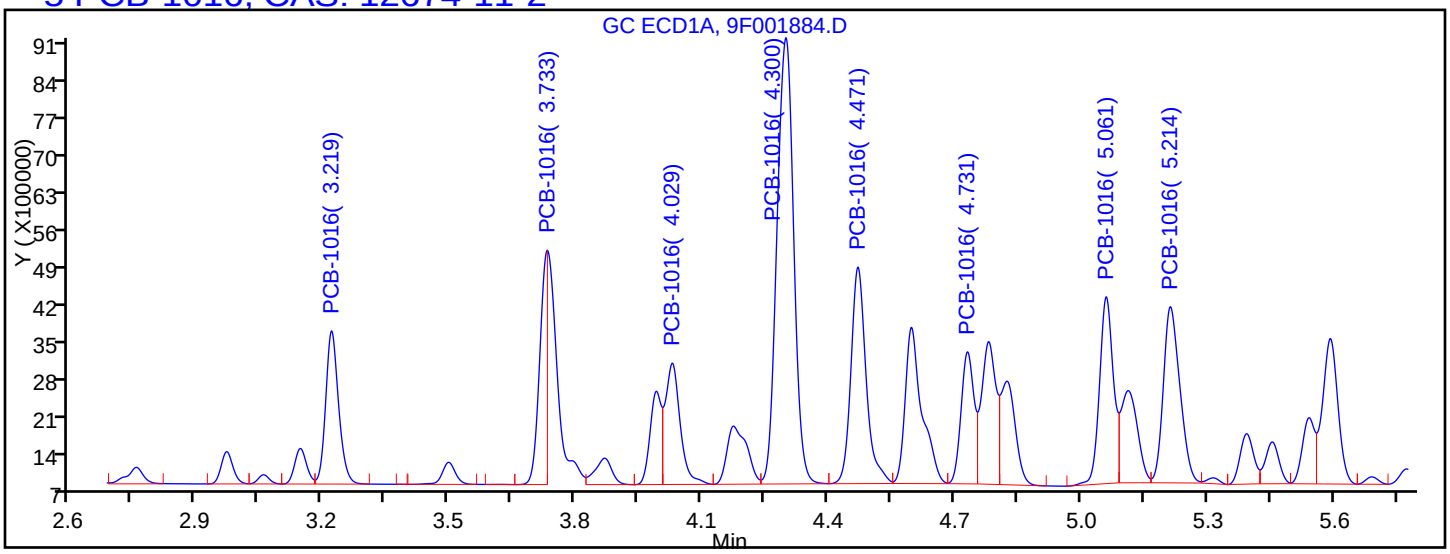
Operator ID: ALS Bottle#: 6 Worklist Smp#: 6

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

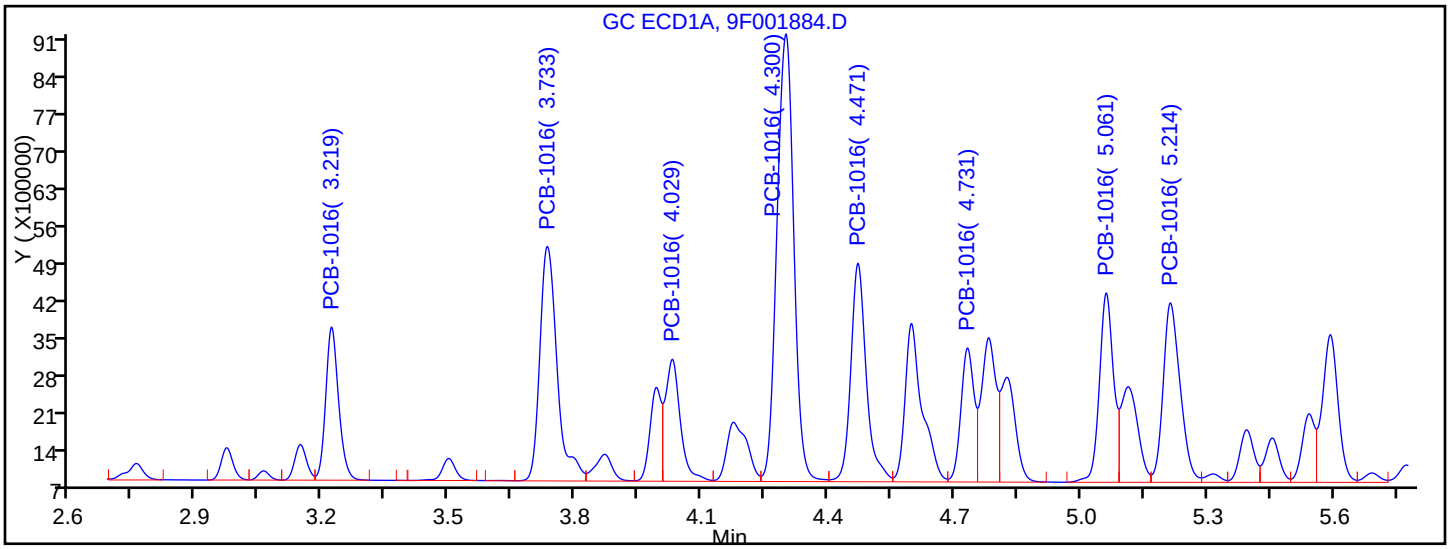
Column: Detector GC ECD1A

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 |



US EPA ARCHIVE DOCUMENT

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:

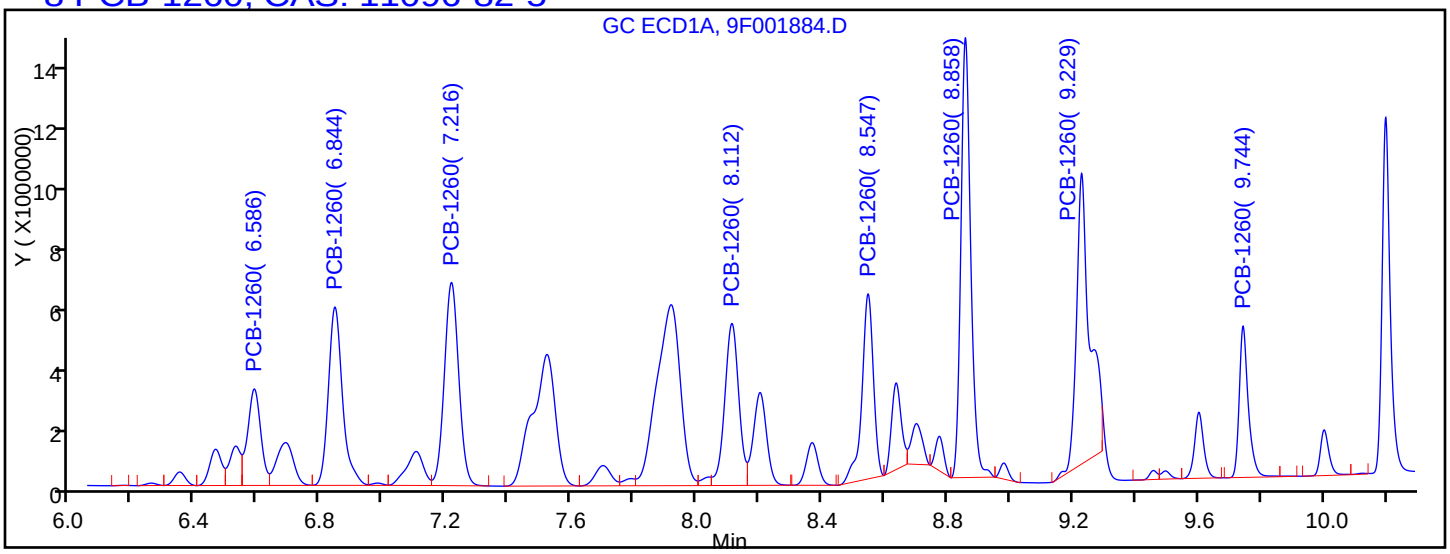
Operator ID: ALS Bottle#: 6 Worklist Smp#: 6

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

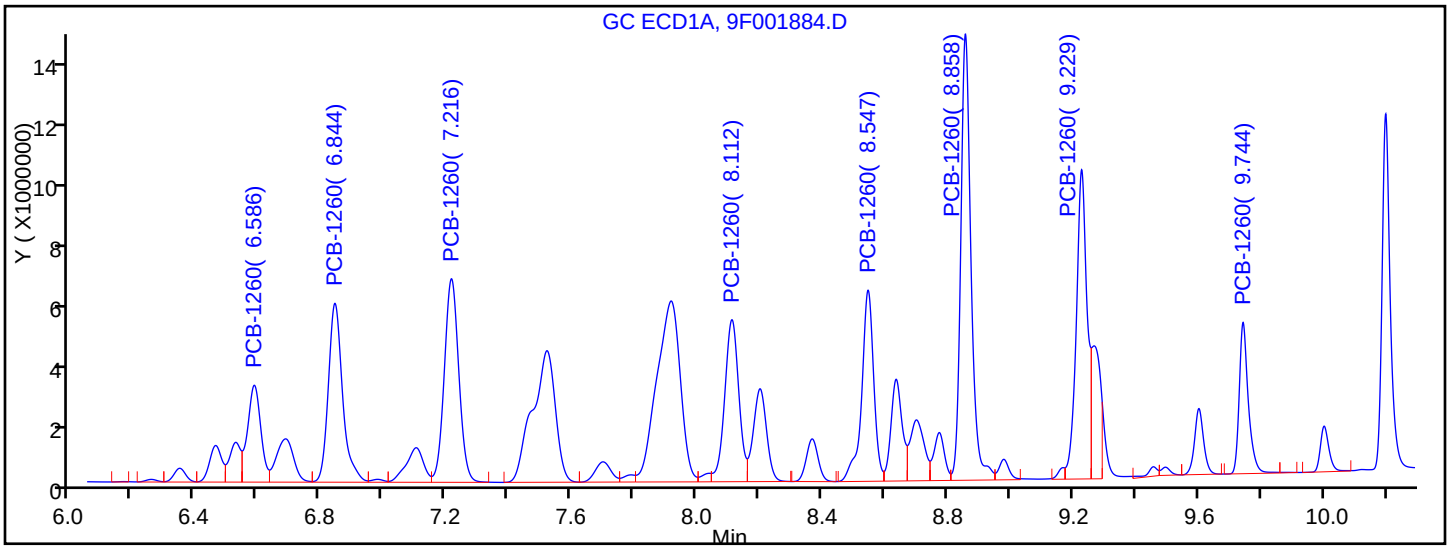
Column: Detector GC ECD1A

## 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 |



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

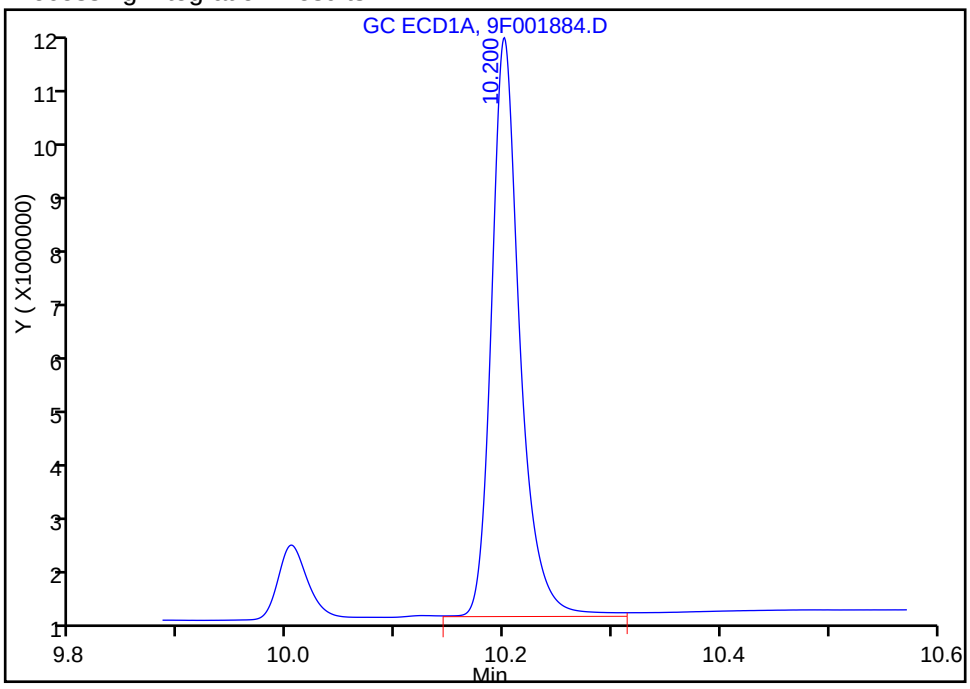
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001884.D
Injection Date: 12-May-2016 11:53:46 Instrument ID: CPESTGC9
Lims ID: IC PCB 5
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD1A

## $ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

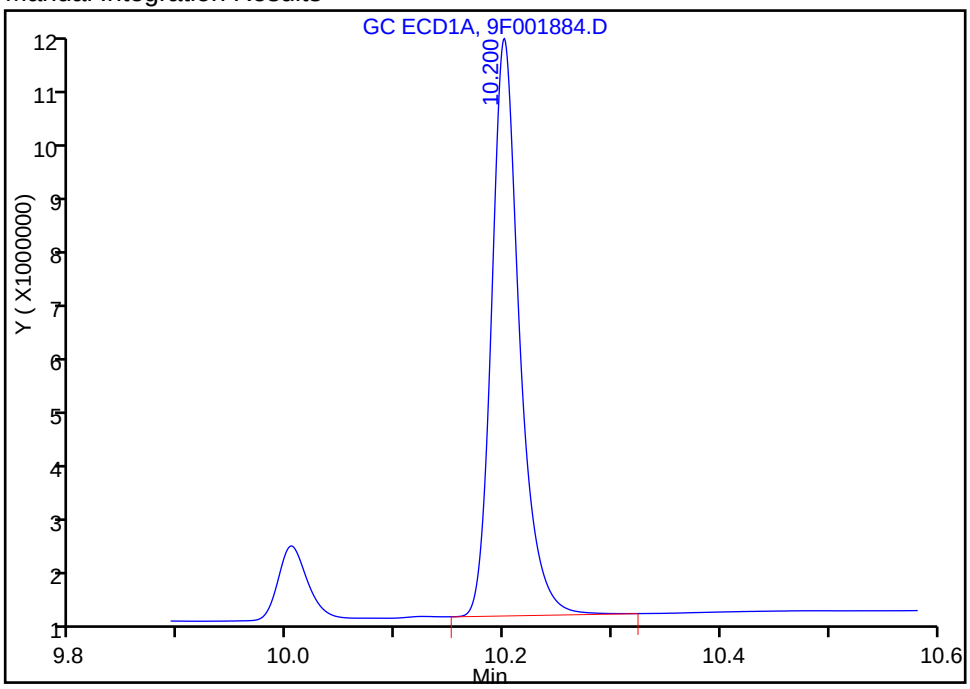
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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 | |

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| 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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

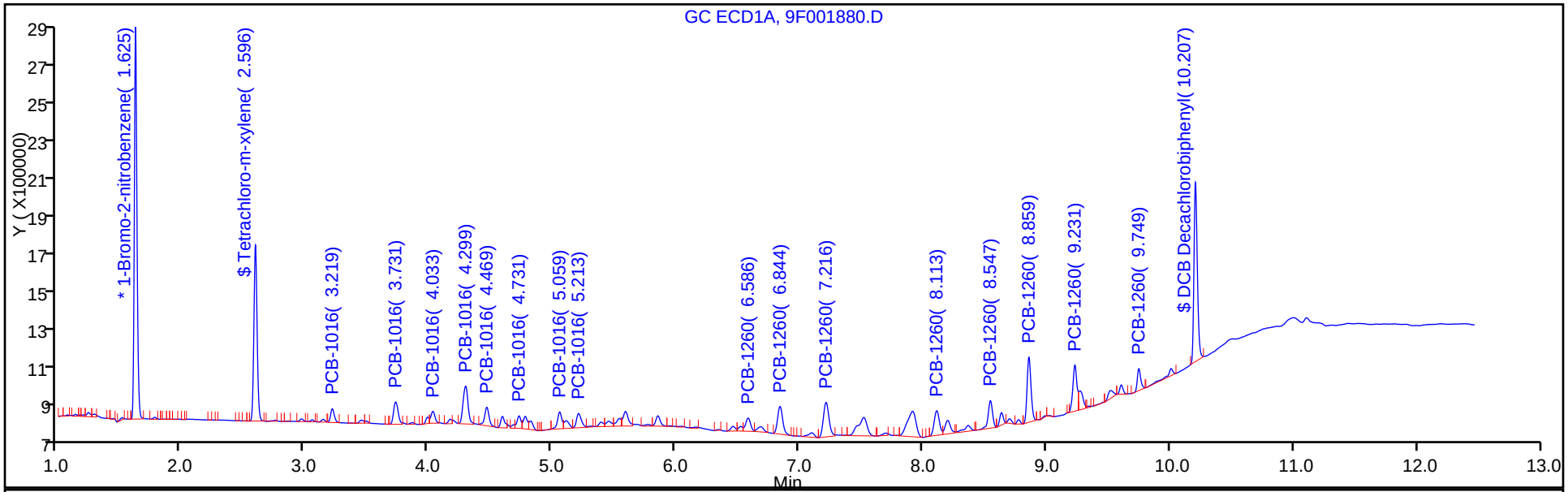
US EPA ARCHIVE DOCUMENT

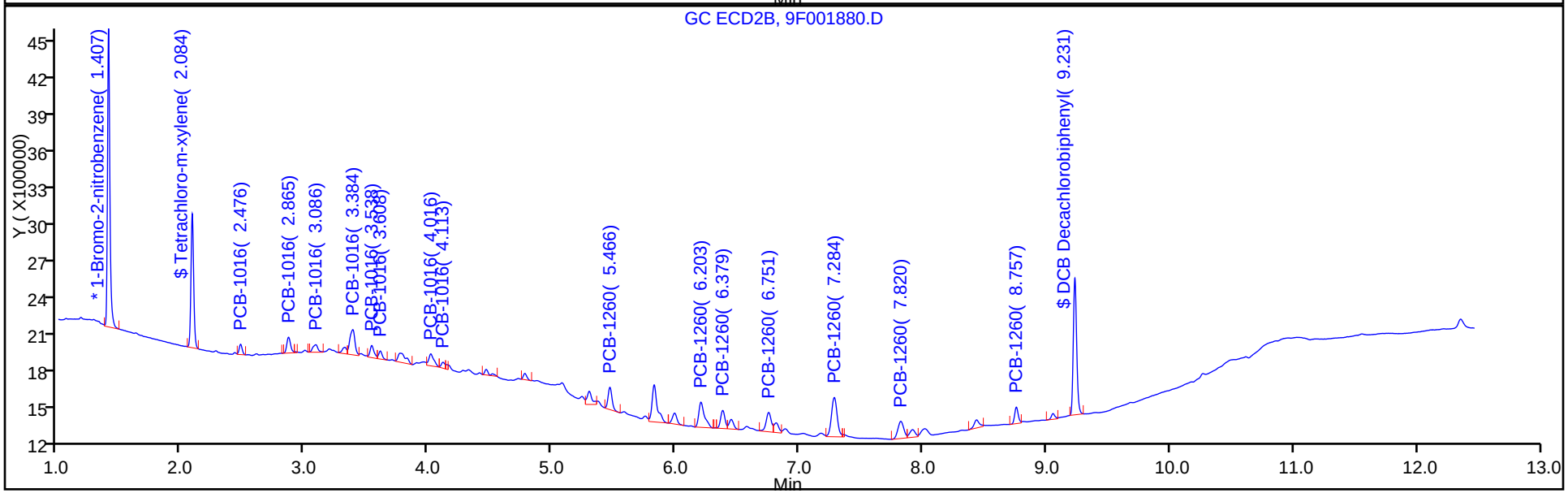
Report Date: 12-May-2016 15:20:55 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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:

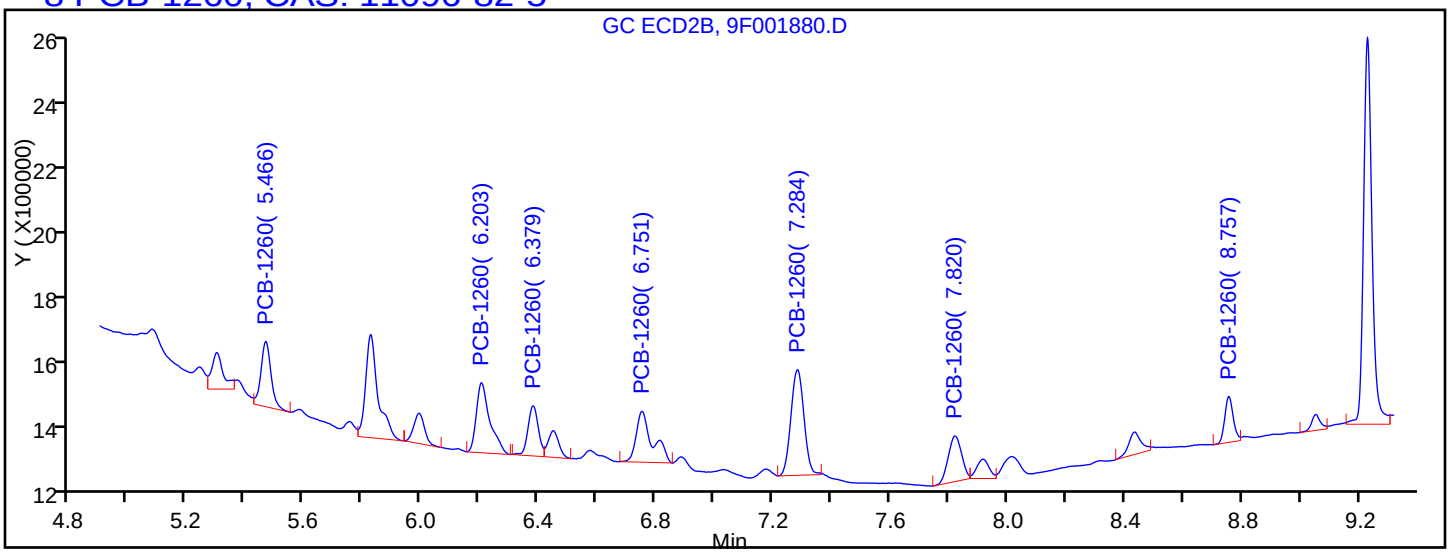
Operator ID: ALS Bottle#: 2 Worklist Smp#: 2

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

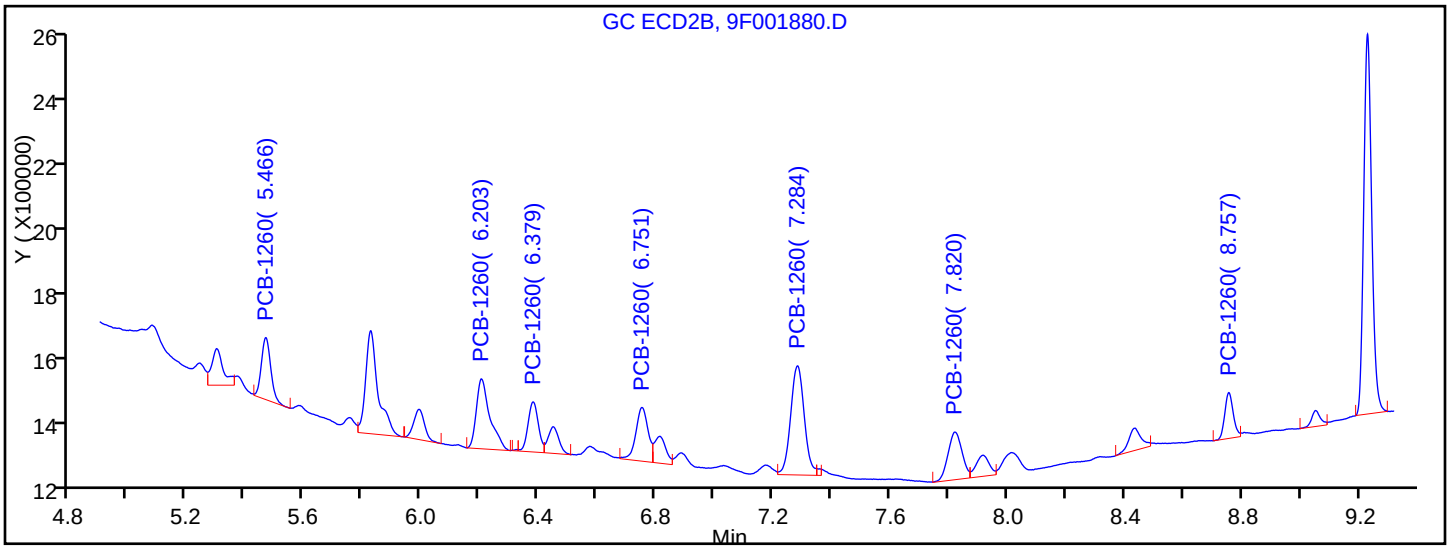
Column: Detector GC ECD2B

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 |



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

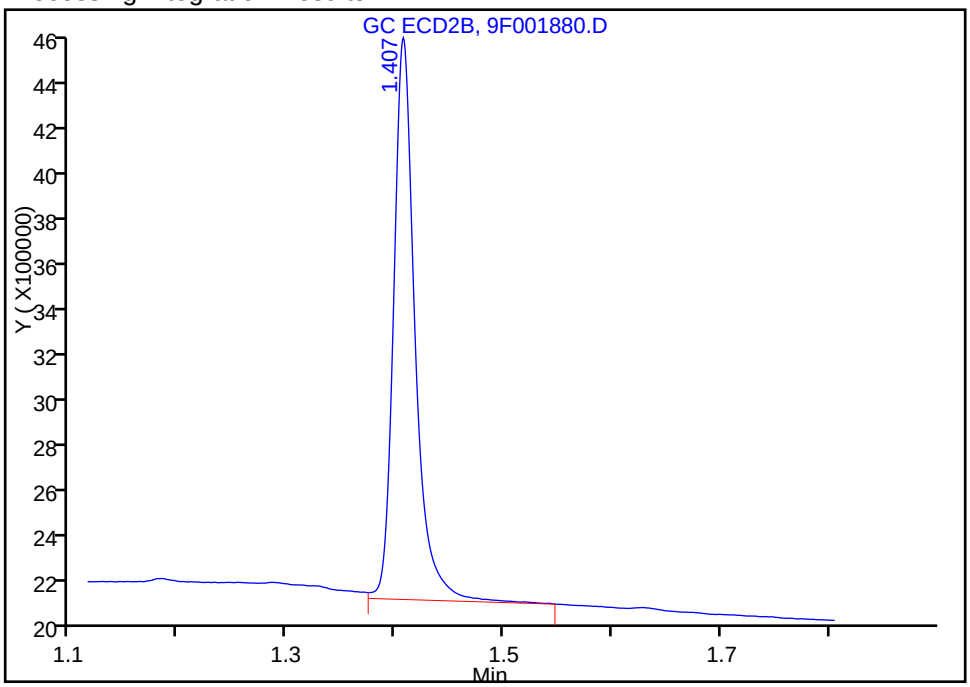
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D
Injection Date: 12-May-2016 10:14:48 Instrument ID: CPESTGC9
Lims ID: IC PCB 1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD2B

## * 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

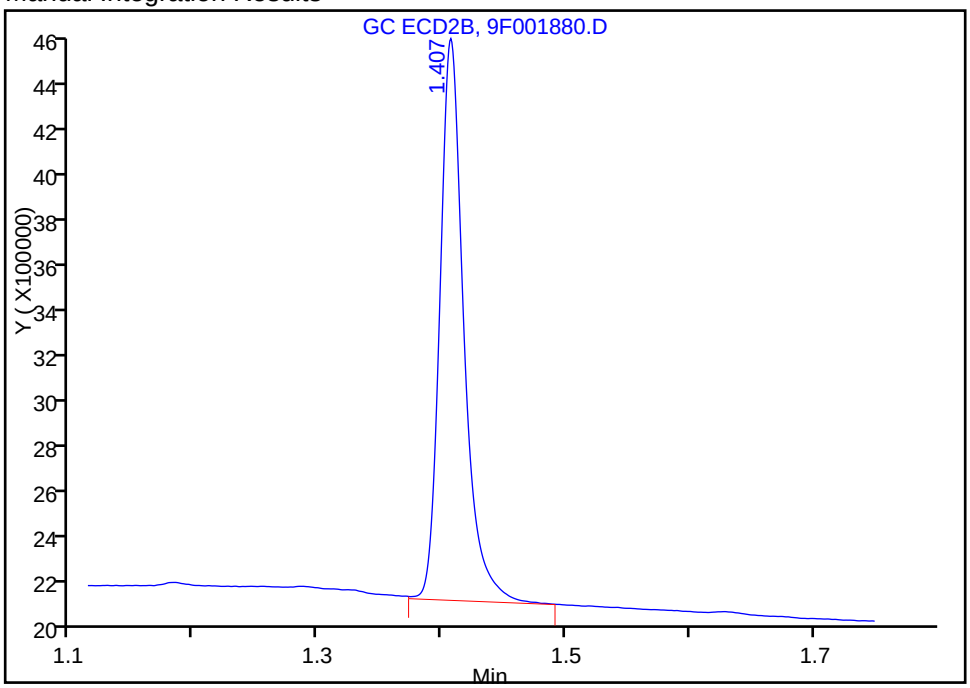
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

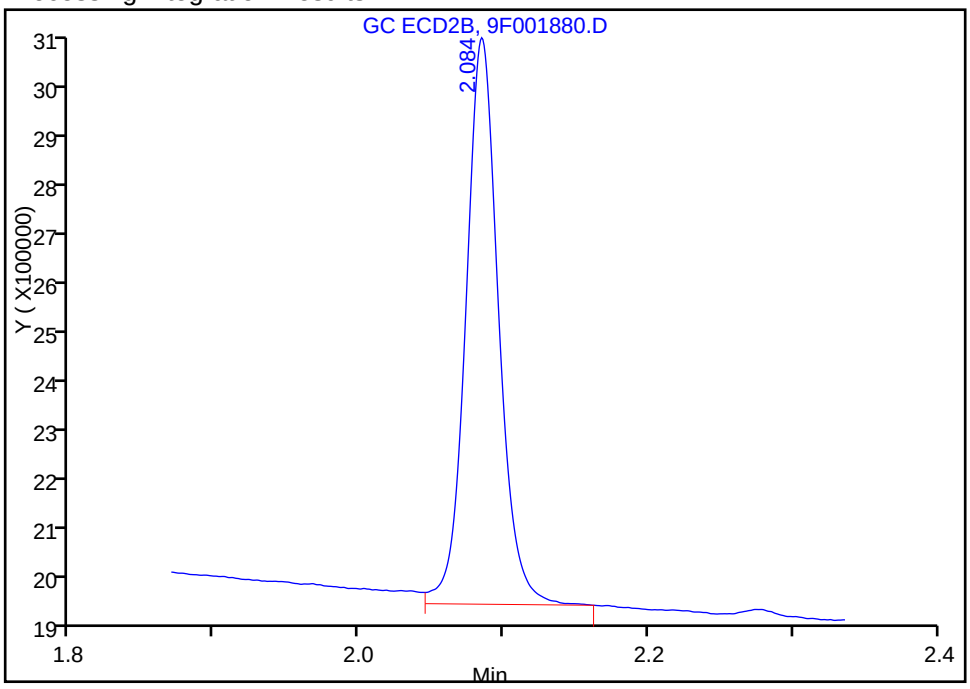
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D | | | | |
| Injection Date: | 12-May-2016 10:14:48 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | IC PCB 1 | | | | |
| Client ID: | | | | | |
| Operator ID: | | ALS Bottle#: | 2 | Worklist 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

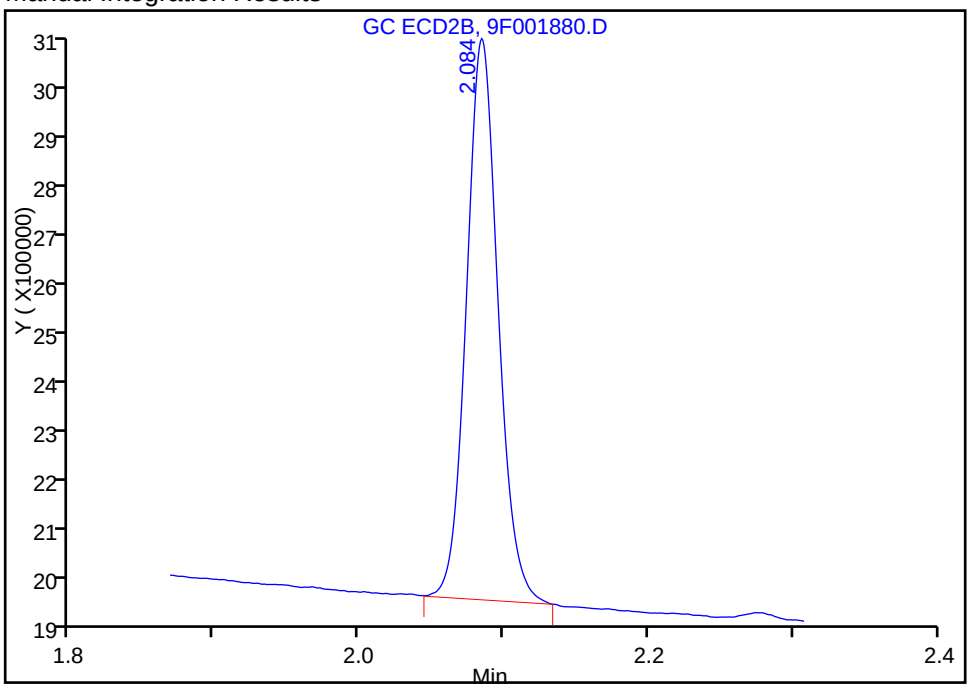
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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:

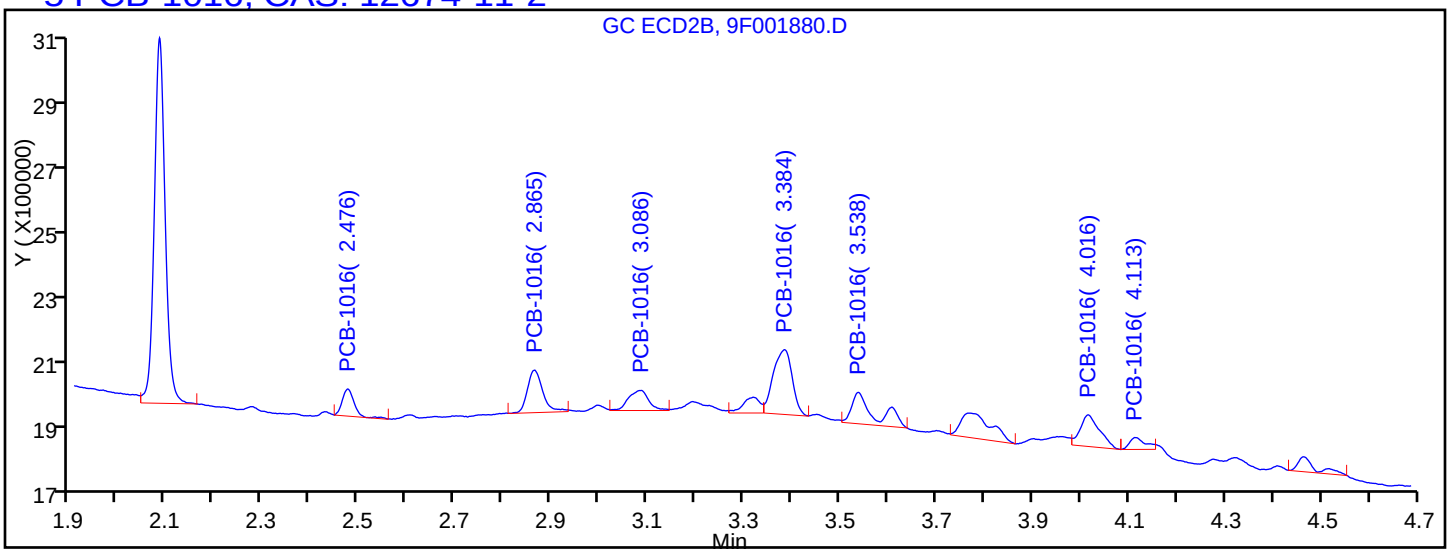
Operator ID: ALS Bottle#: 2 Worklist Smp#: 2

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

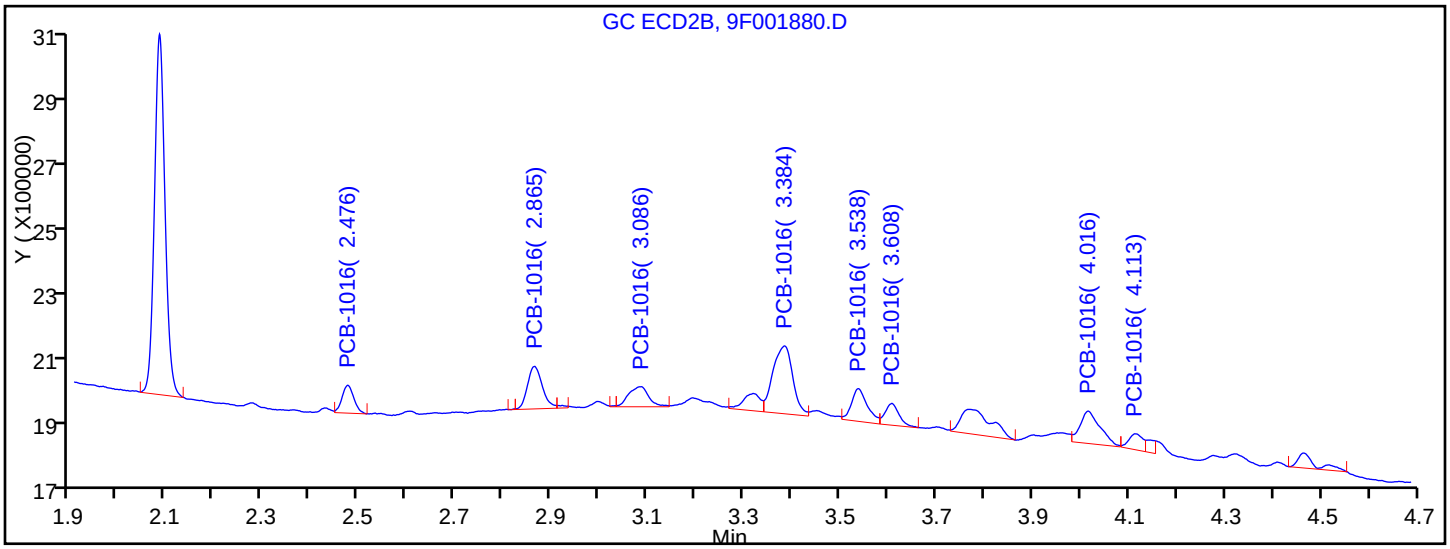
Column: Detector GC ECD2B

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 |



US EPA ARCHIVE DOCUMENT

TestAmerica Edison

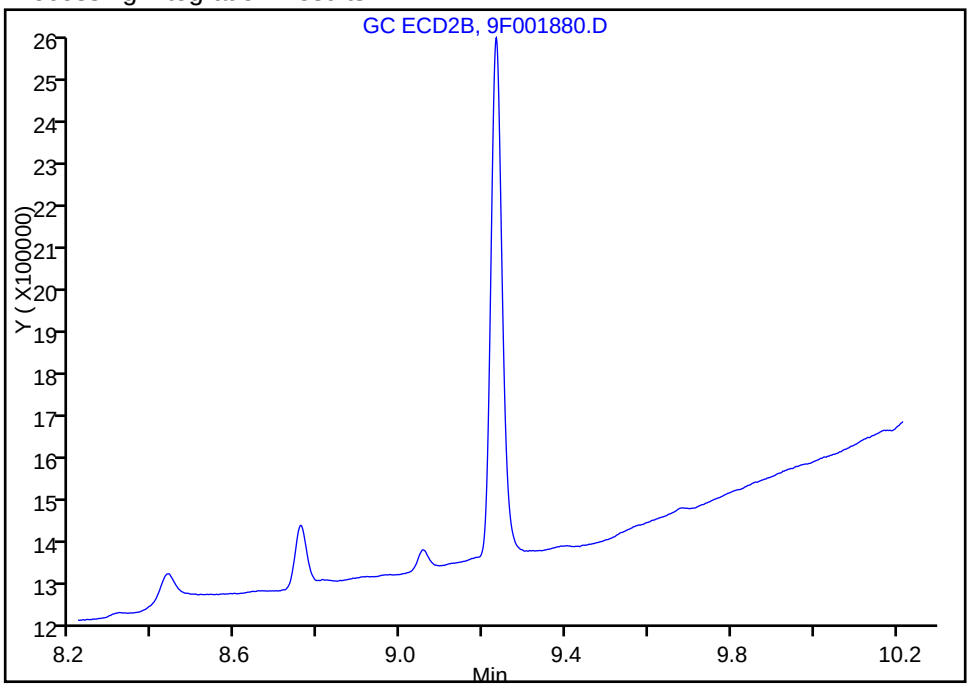
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D
Injection Date: 12-May-2016 10:14:48 Instrument ID: CPESTGC9
Lims ID: IC PCB 1
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD2B

## $ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 2

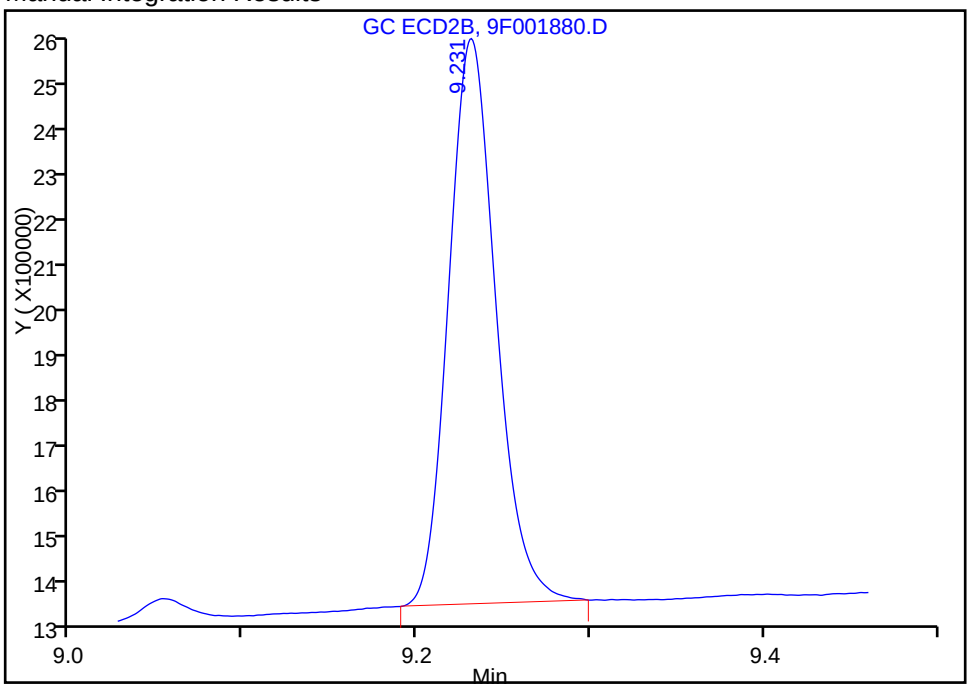
Processing Integration Results

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:



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001880.D

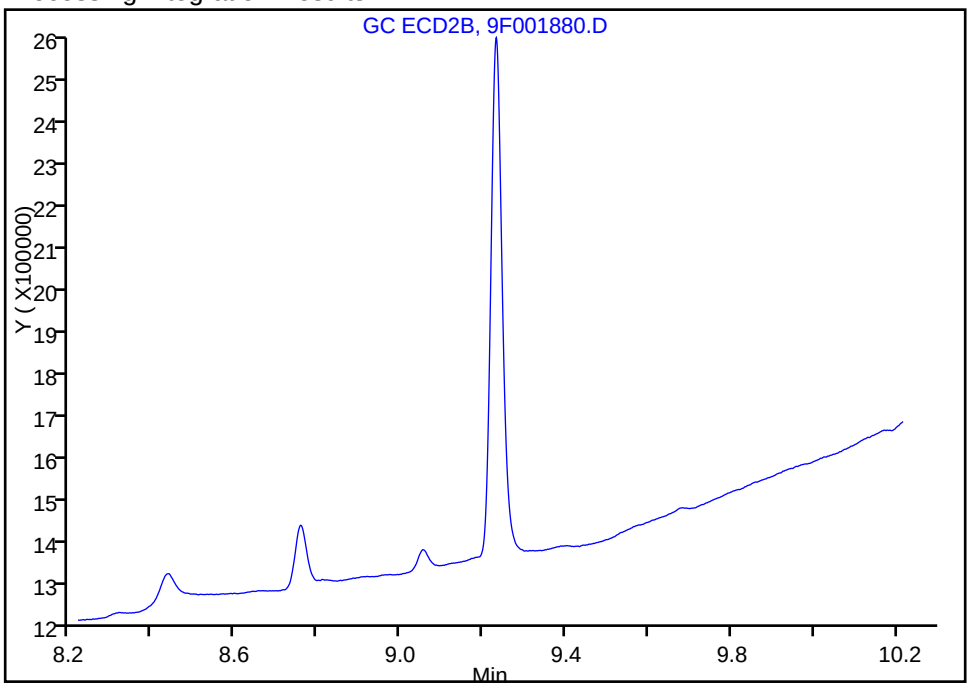
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 12-May-2016 10:14:48 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | IC PCB 1 | | | | |
| Client ID: | | | | | |
| Operator ID: | | ALS Bottle#: | 2 | Worklist Smp#: | 2 |
| Injection Vol: | 1.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | 8082-ISTD | Limit Group: | GC 8082A PCB ISTD | | |
| Column: | | Detector | GC ECD2B | | |

## $ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 2

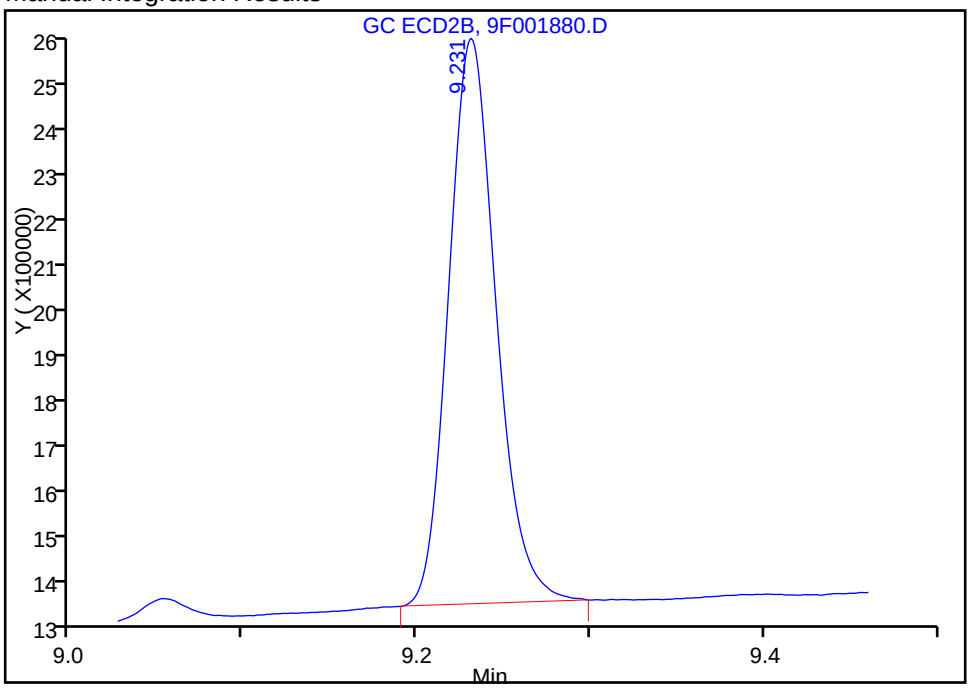
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

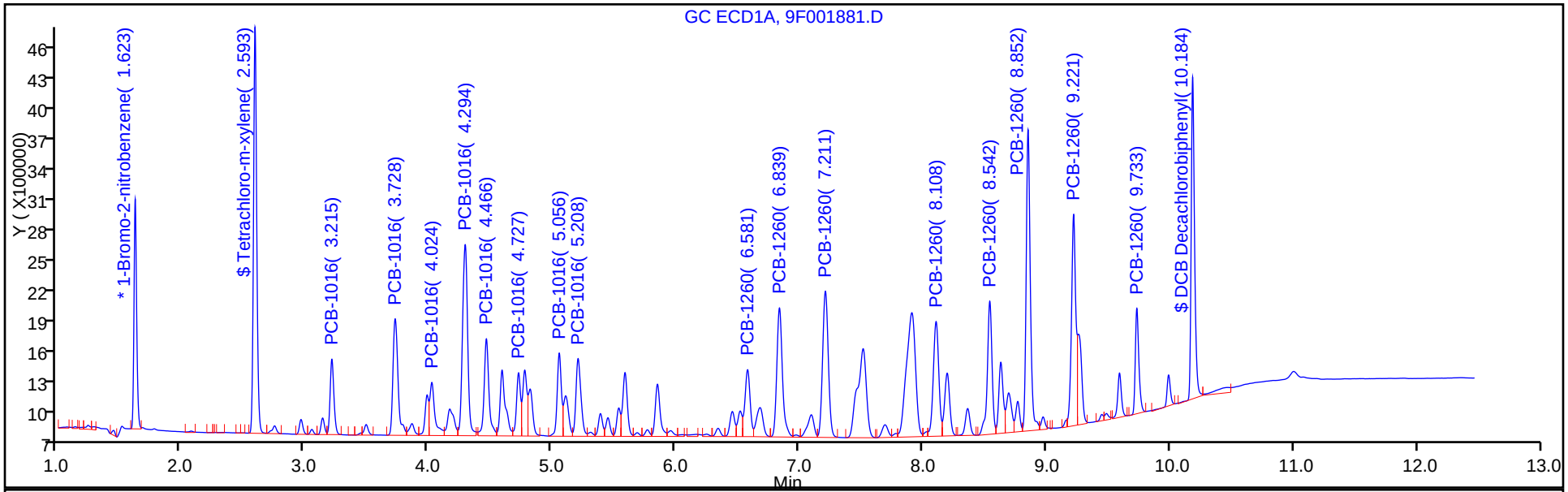
US EPA ARCHIVE DOCUMENT

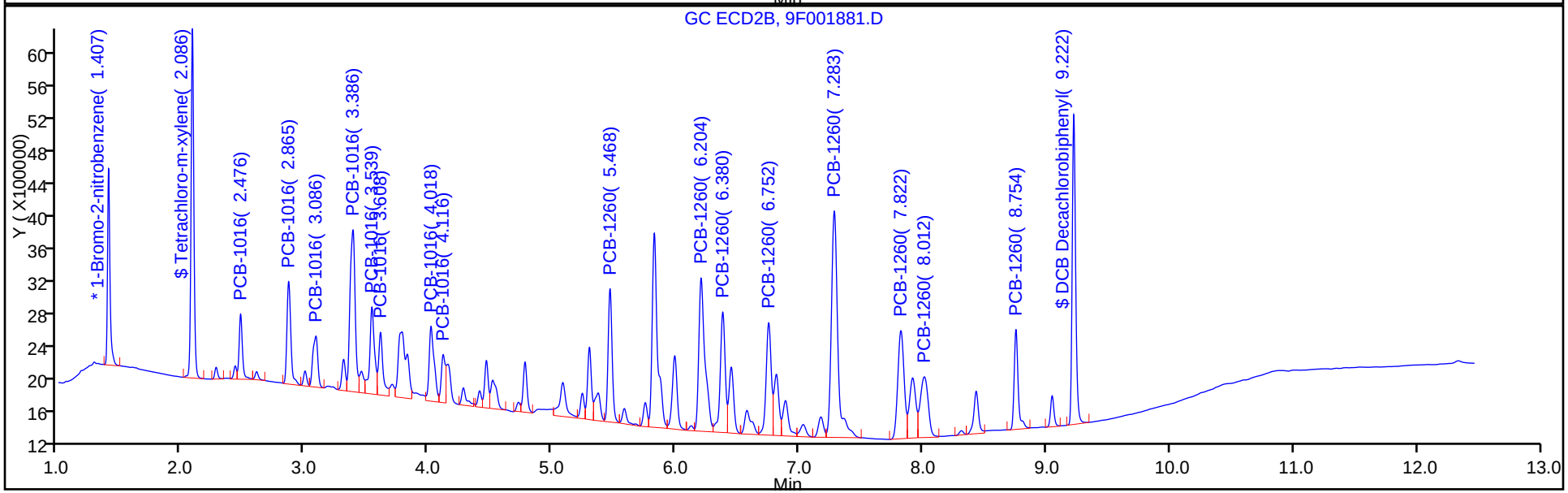
Report Date: 12-May-2016 15:21:08 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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

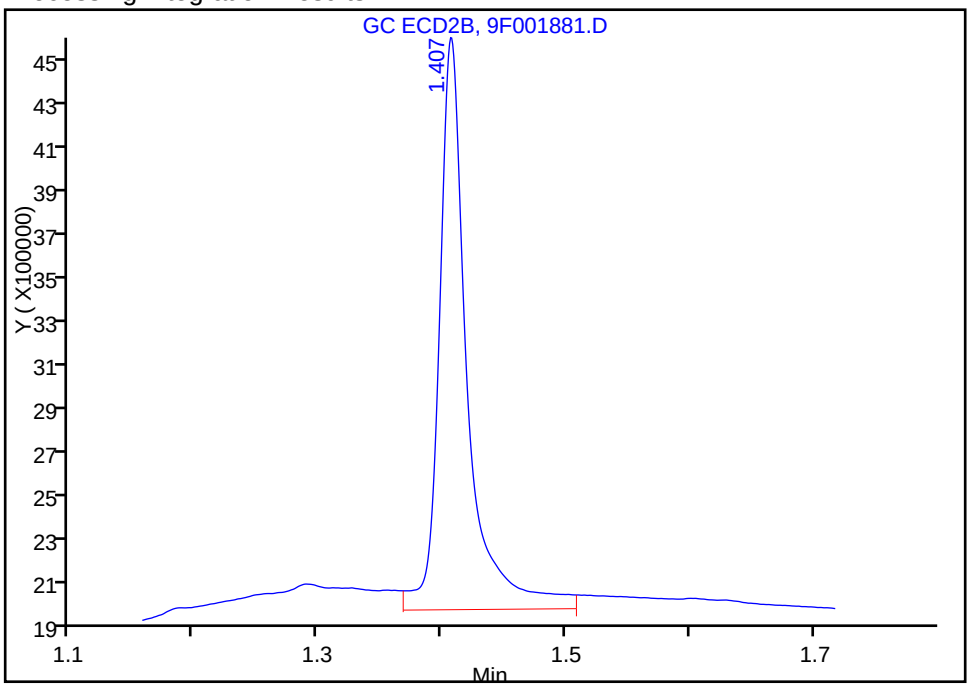
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001881.D
Injection Date: 12-May-2016 10:32:48 Instrument ID: CPESTGC9
Lims ID: IC PCB 2
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD2B

## * 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

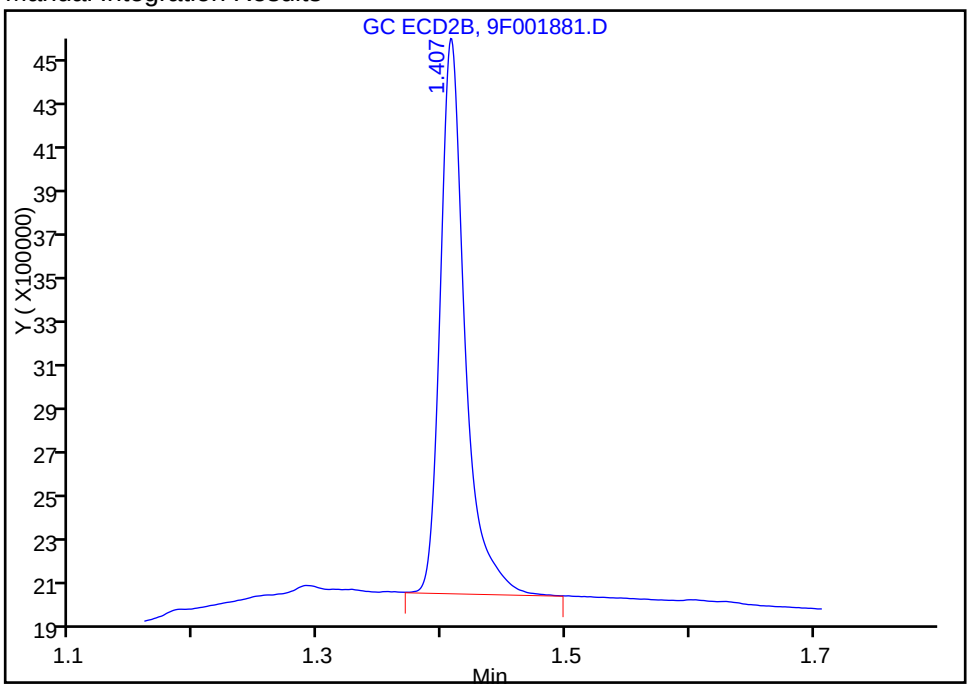
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

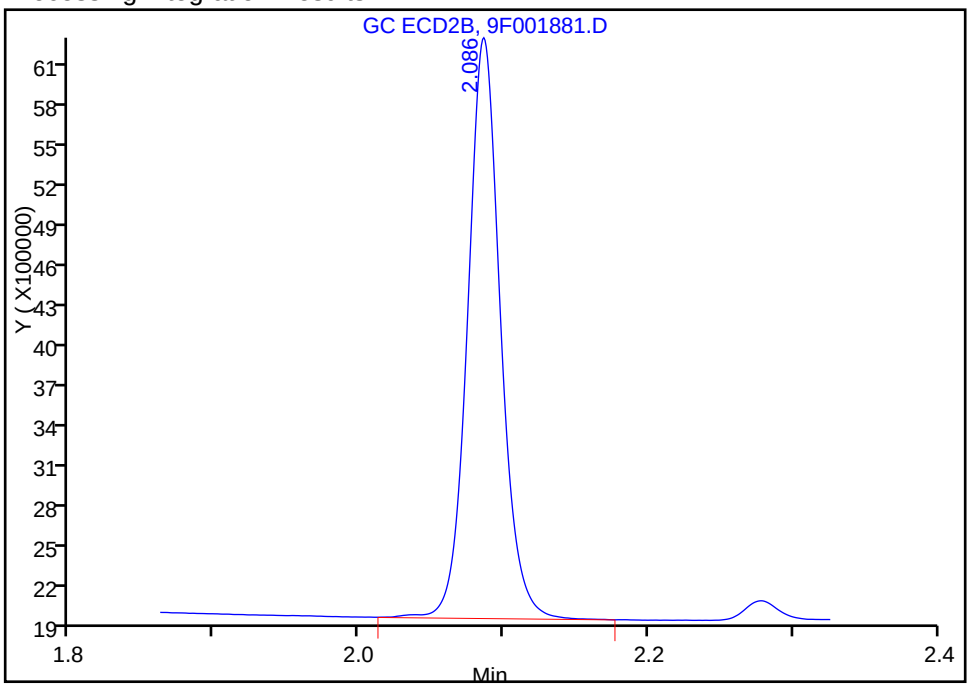
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001881.D
Injection Date: 12-May-2016 10:32:48 Instrument ID: CPESTGC9
Lims ID: IC PCB 2
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD2B

## $ 2 Tetrachloro-m-xylene, CAS: 877-09-8

Signal: 2

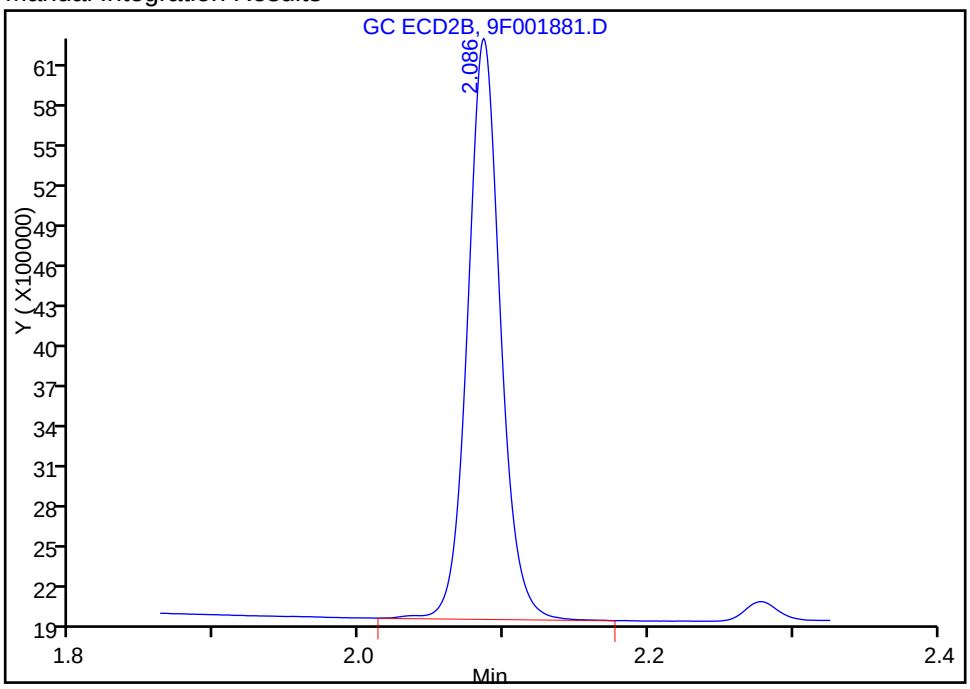
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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:

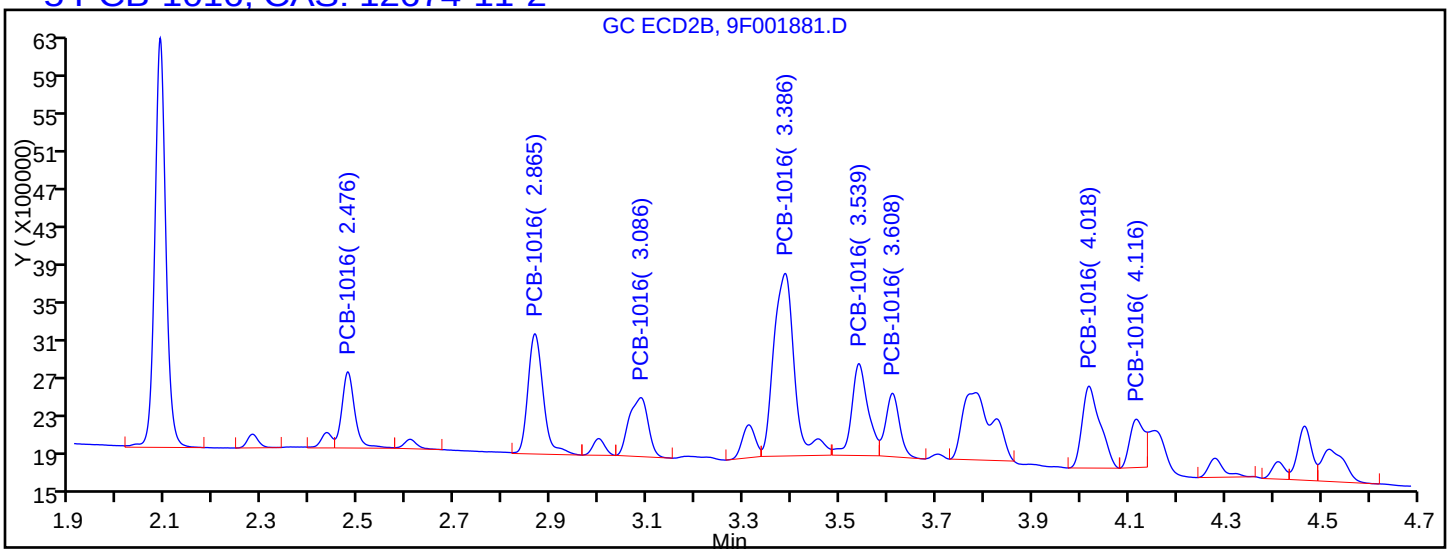
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

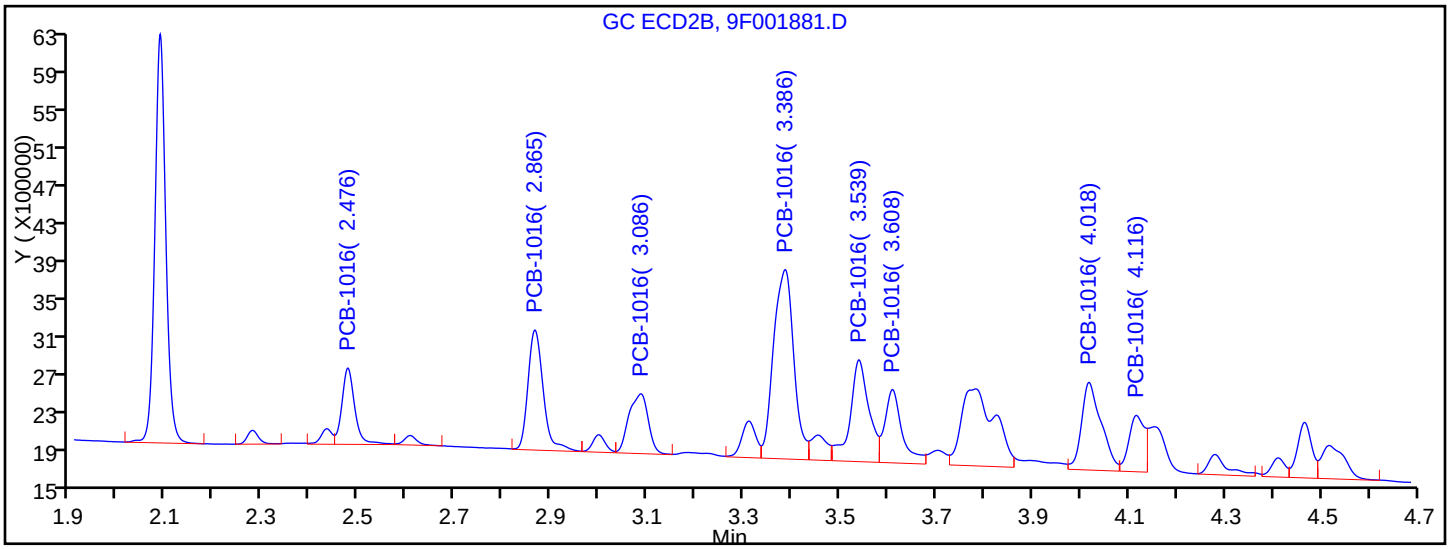
Column: Detector GC ECD2B

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 |



US EPA ARCHIVE DOCUMENT

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:

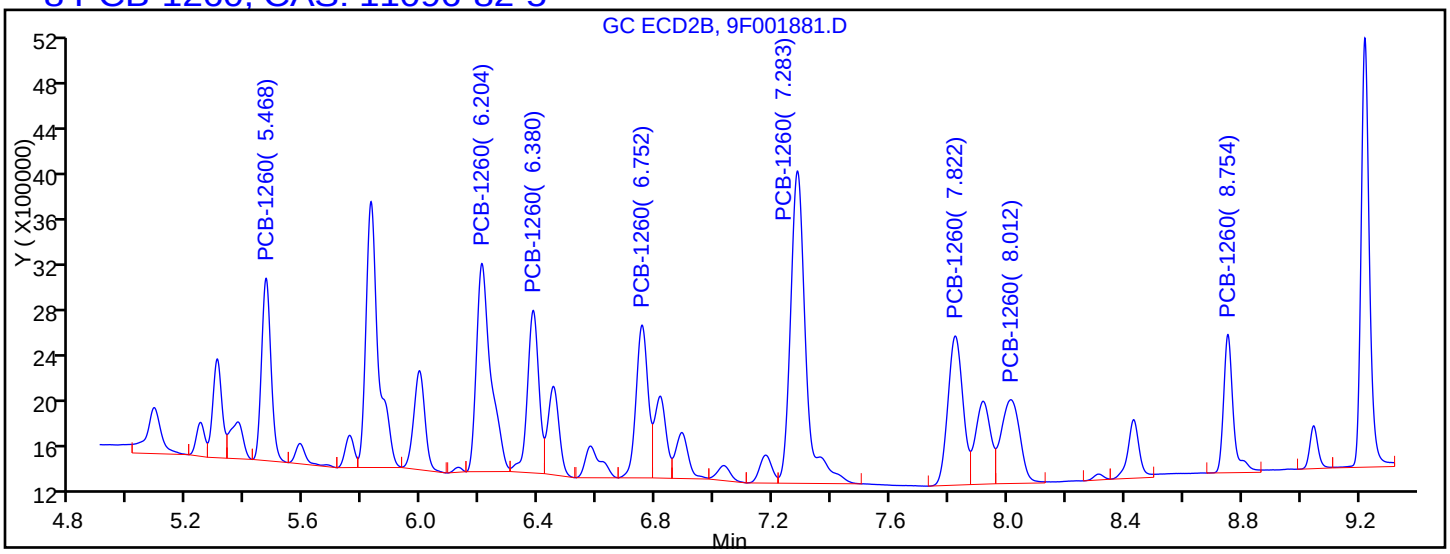
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

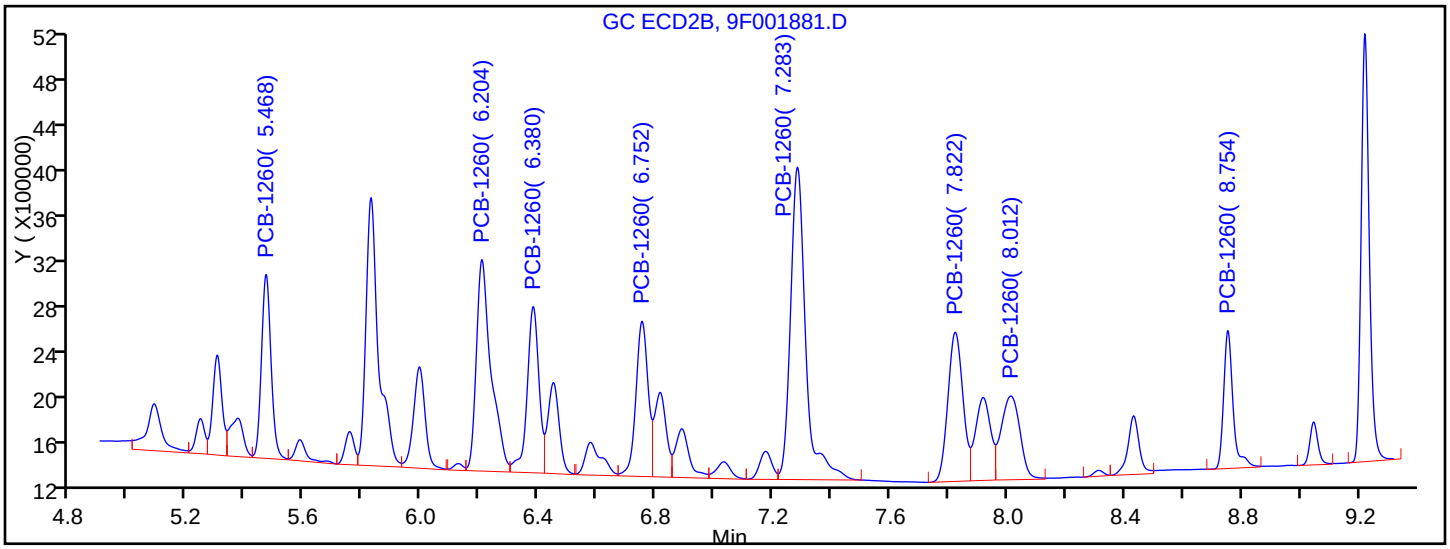
Column: Detector GC ECD2B

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 | |



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

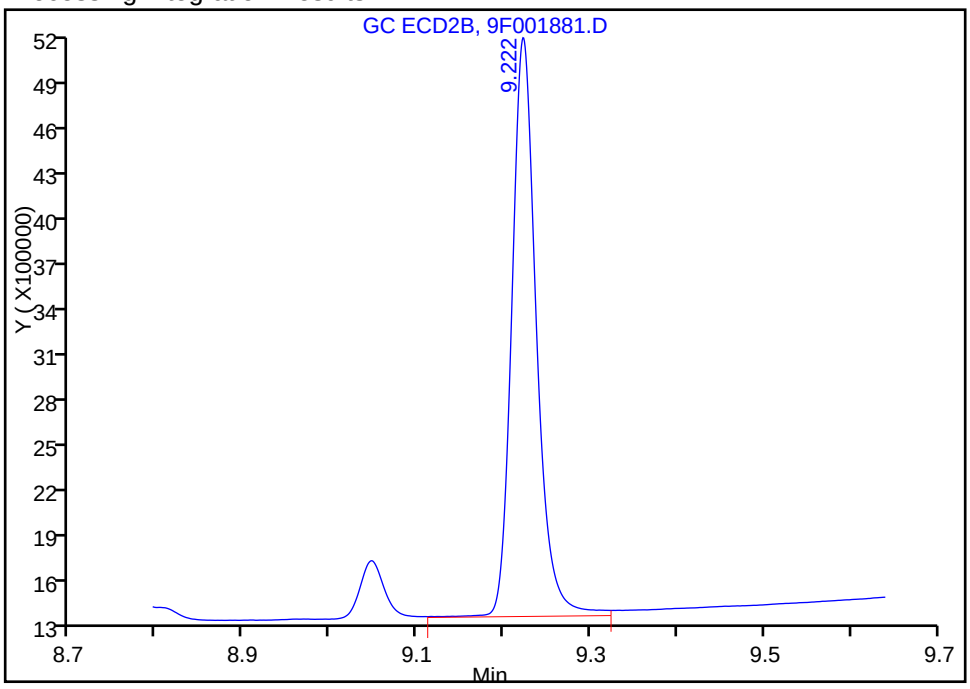
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001881.D
Injection Date: 12-May-2016 10:32:48 Instrument ID: CPESTGC9
Lims ID: IC PCB 2
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD2B

## $ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 2

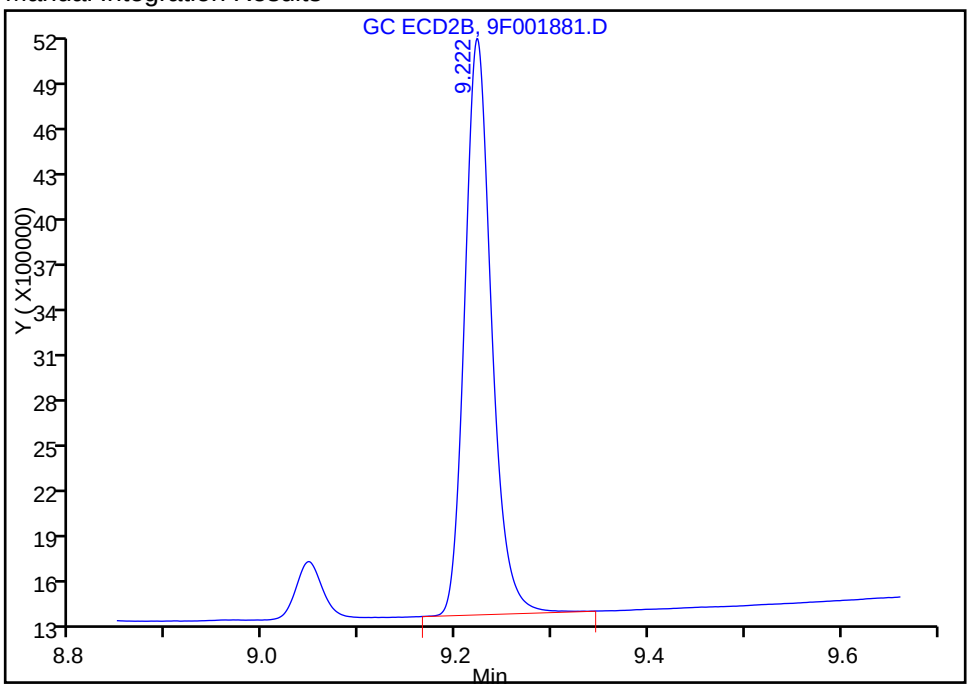
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

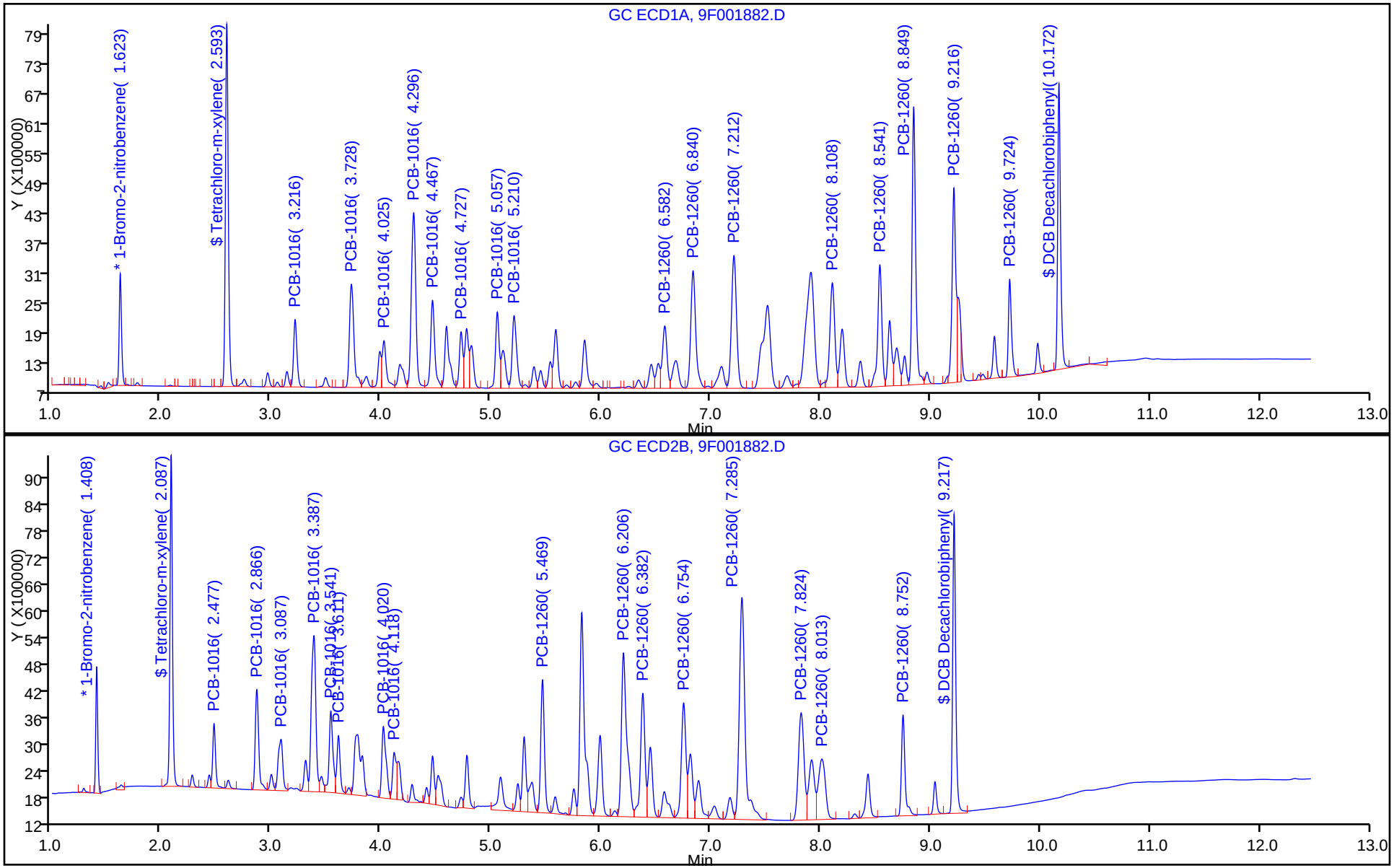
US EPA ARCHIVE DOCUMENT

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

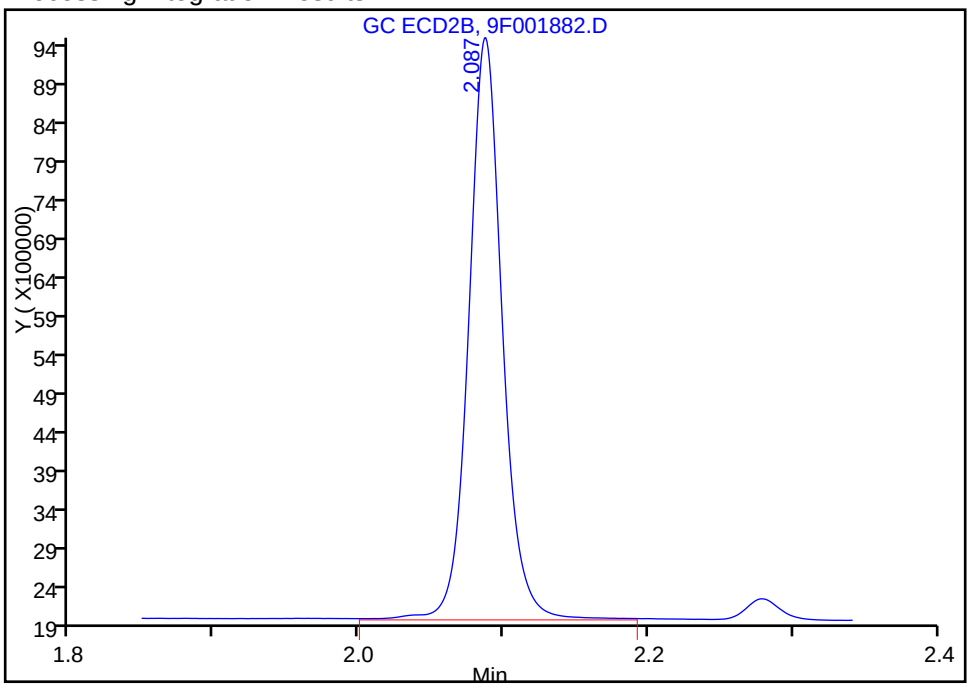
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001882.D | | | | |
| Injection Date: | 12-May-2016 10:50:51 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | IC PCB 3 | | | | |
| Client ID: | | | | | |
| Operator ID: | | ALS Bottle#: | 4 | Worklist 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

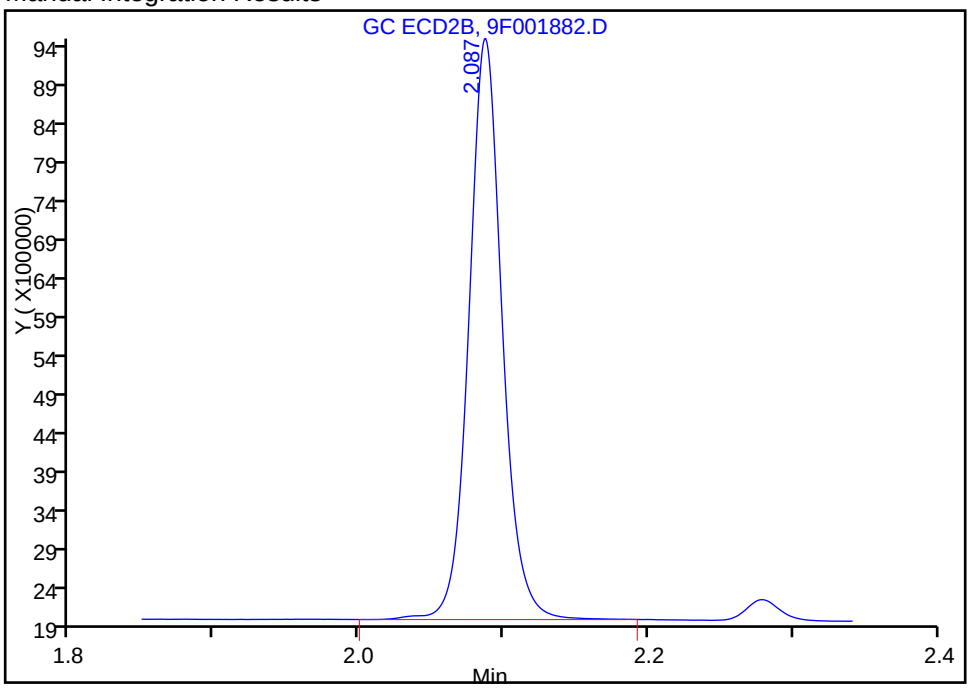
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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:

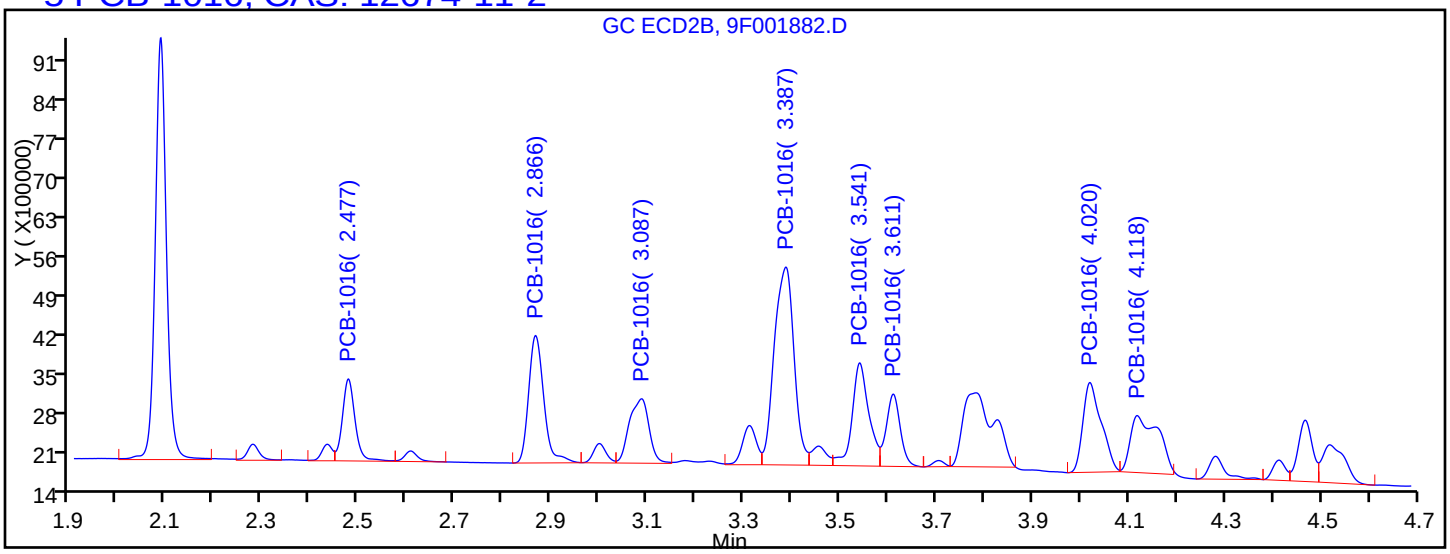
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

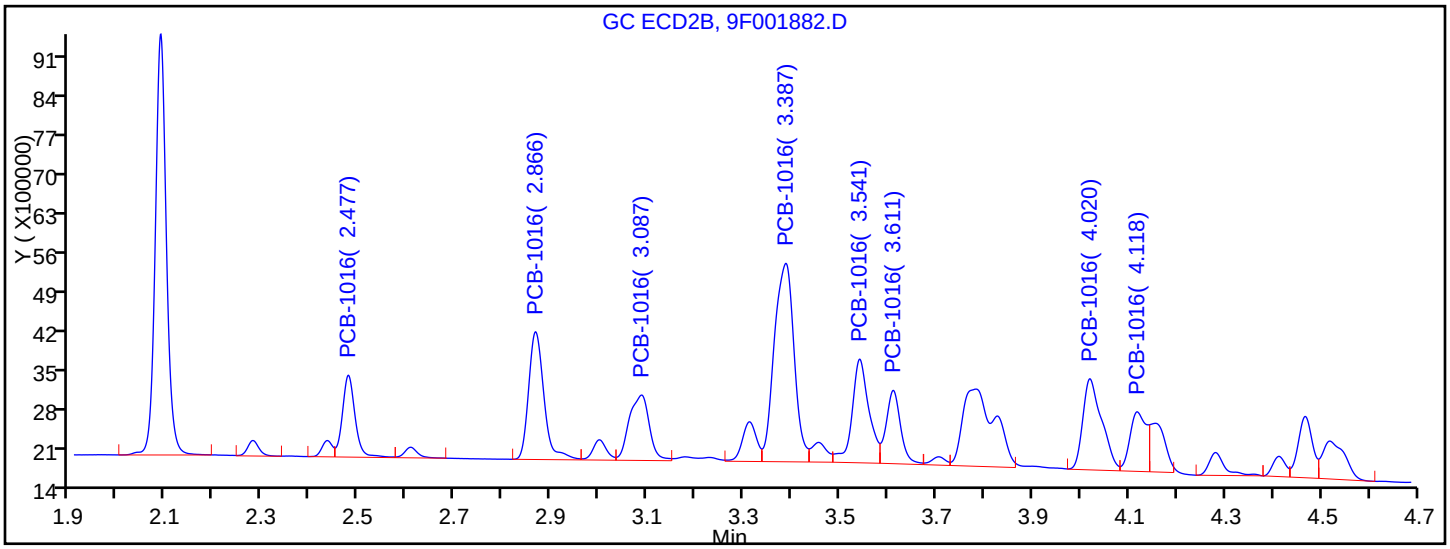
Column: Detector GC ECD2B

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 |



US EPA ARCHIVE DOCUMENT

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:

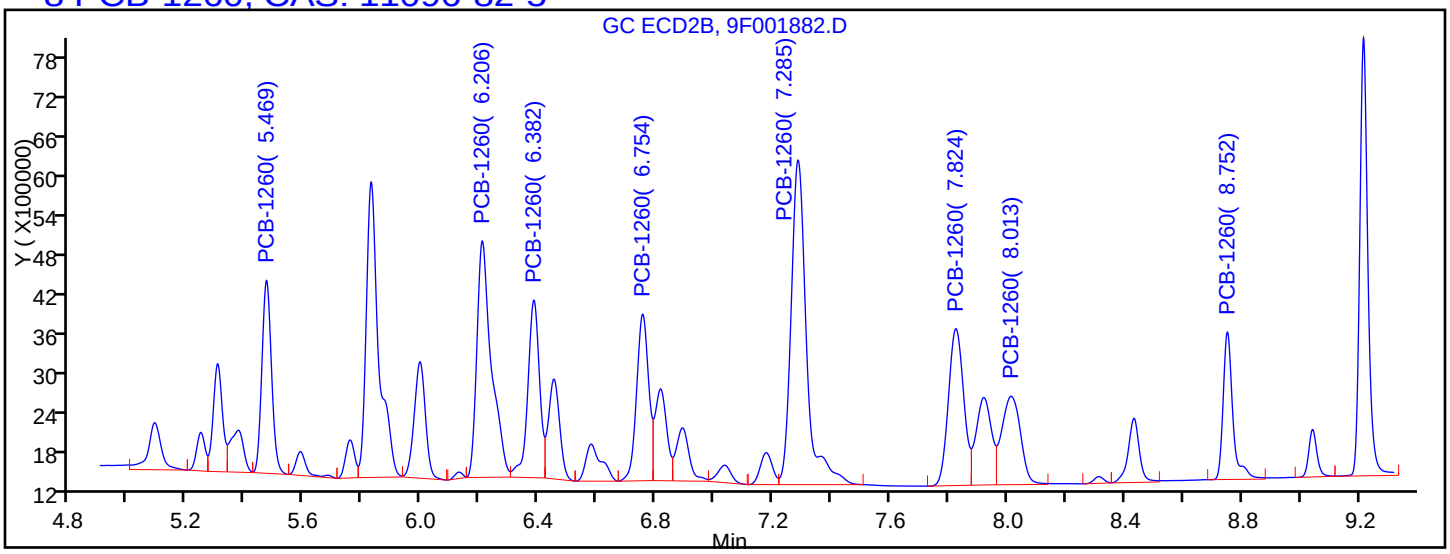
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

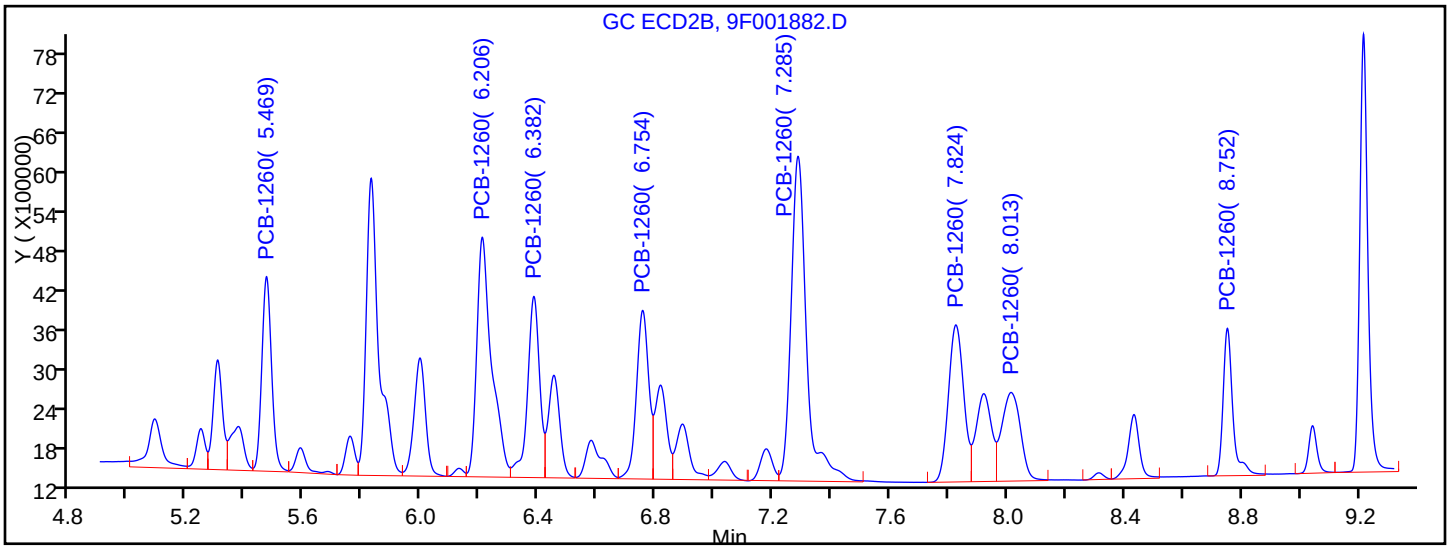
Column: Detector GC ECD2B

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 |



US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

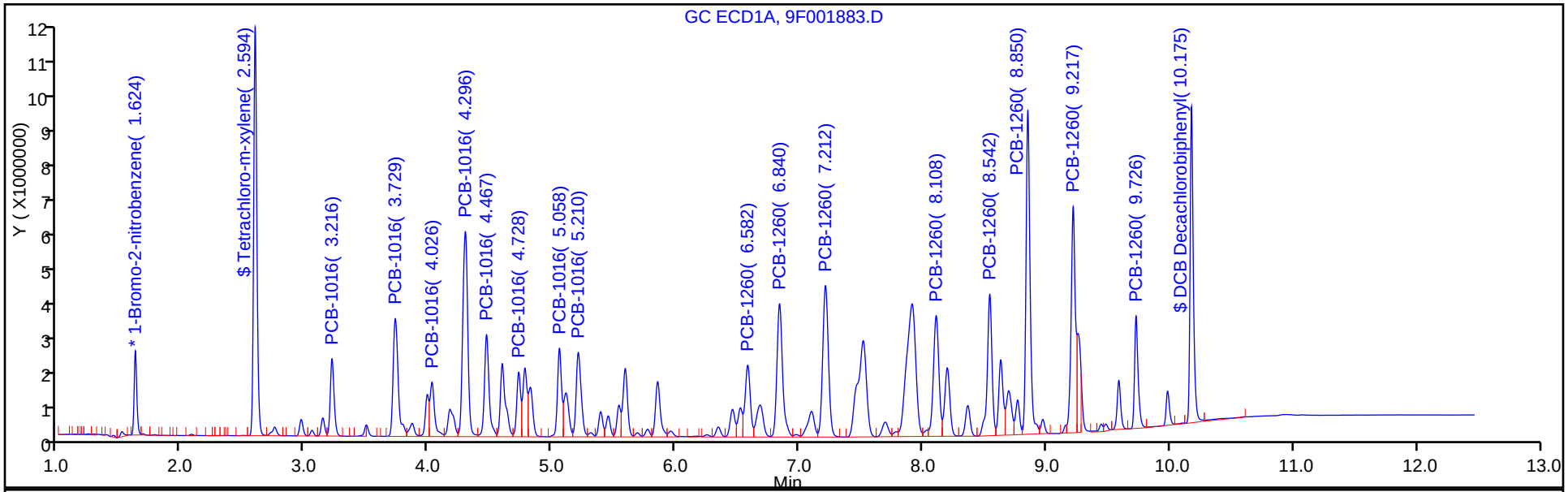
US EPA ARCHIVE DOCUMENT

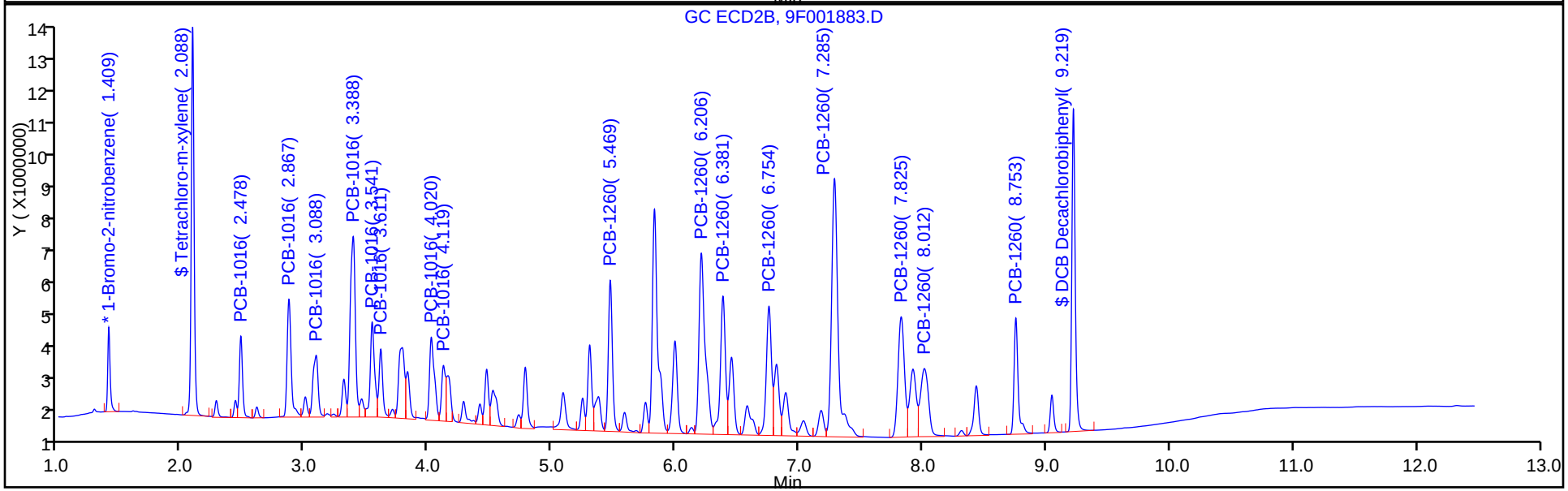
Report Date: 12-May-2016 15:21:29 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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

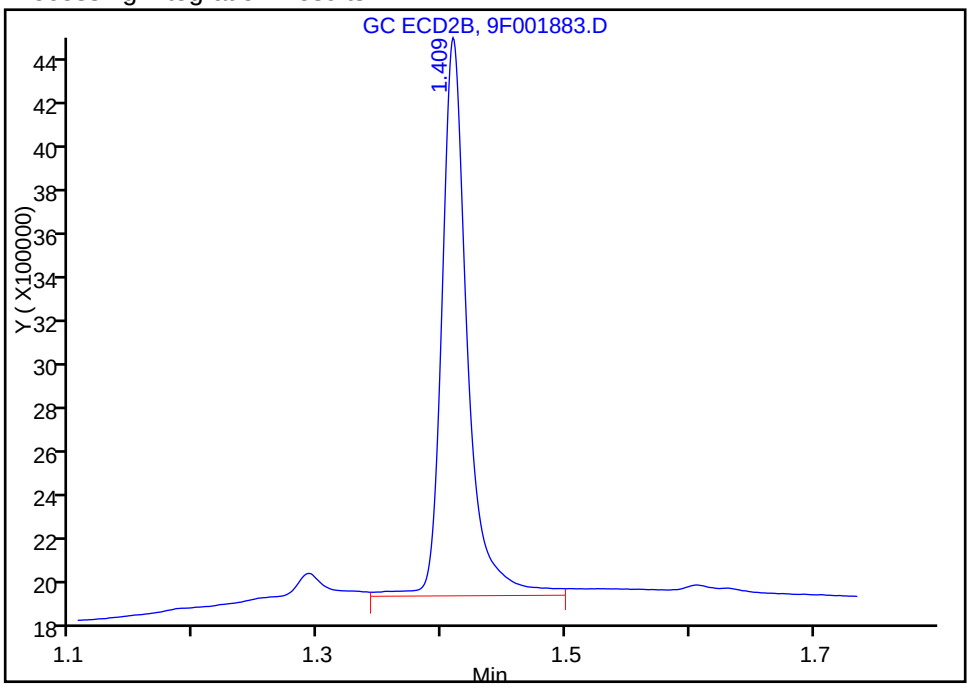
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001883.D
Injection Date: 12-May-2016 11:08:53 Instrument ID: CPESTGC9
Lims ID: IC PCB 4
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD2B

## * 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

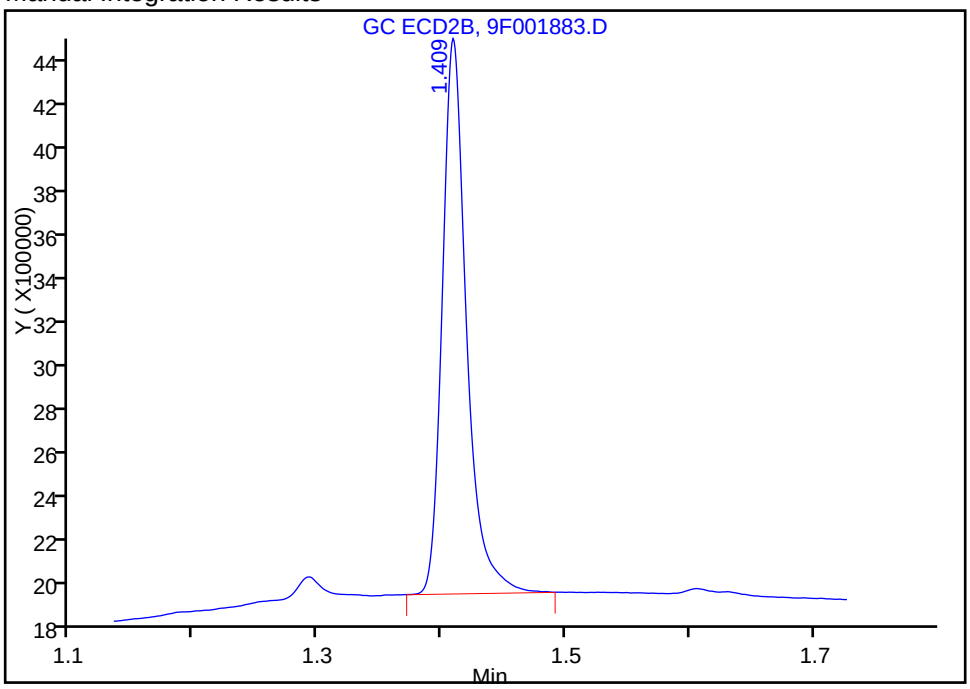
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

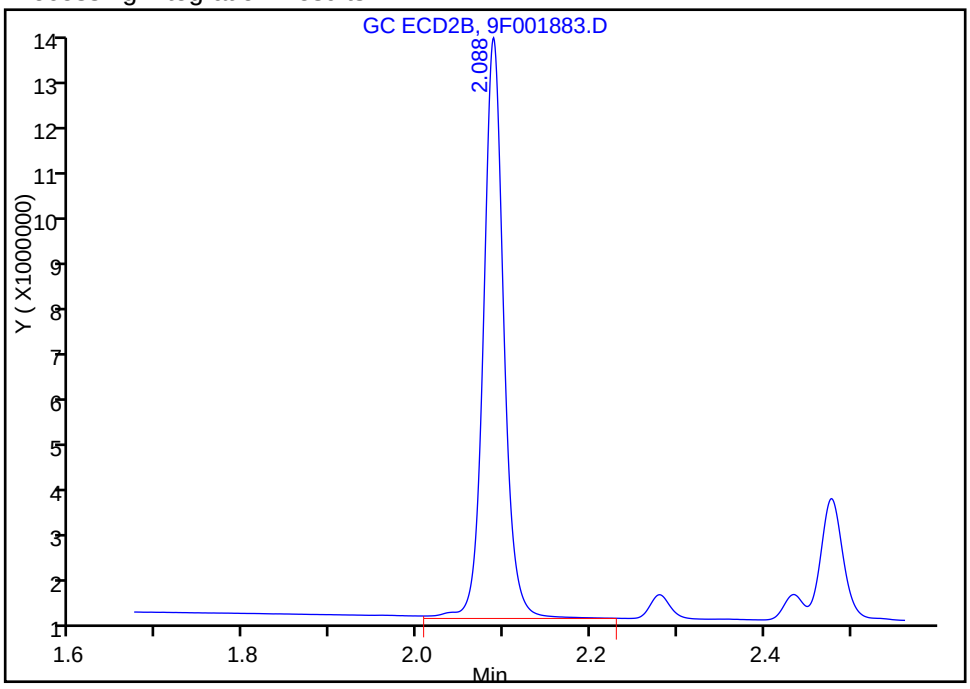
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001883.D
Injection Date: 12-May-2016 11:08:53 Instrument ID: CPESTGC9
Lims ID: IC PCB 4
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD2B

## $ 2 Tetrachloro-m-xylene, CAS: 877-09-8

Signal: 2

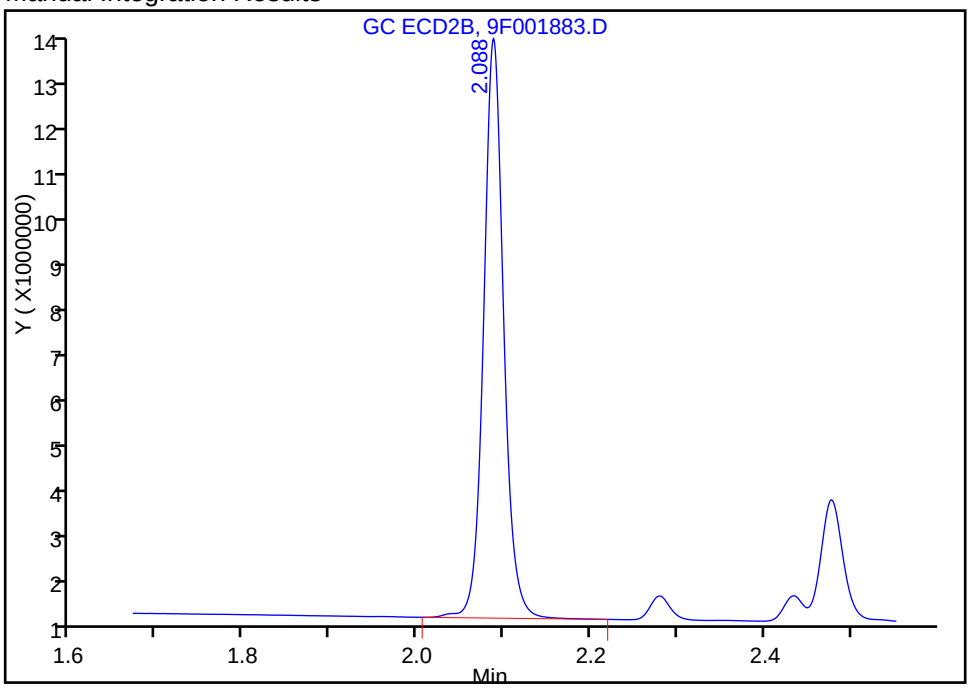
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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:

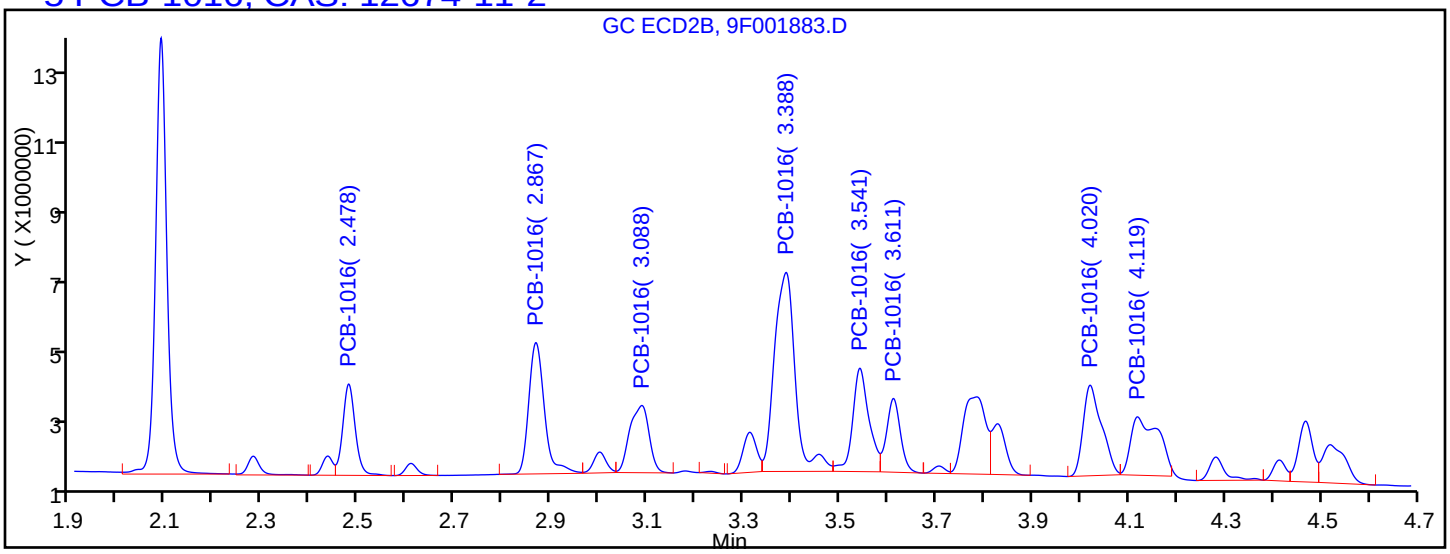
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

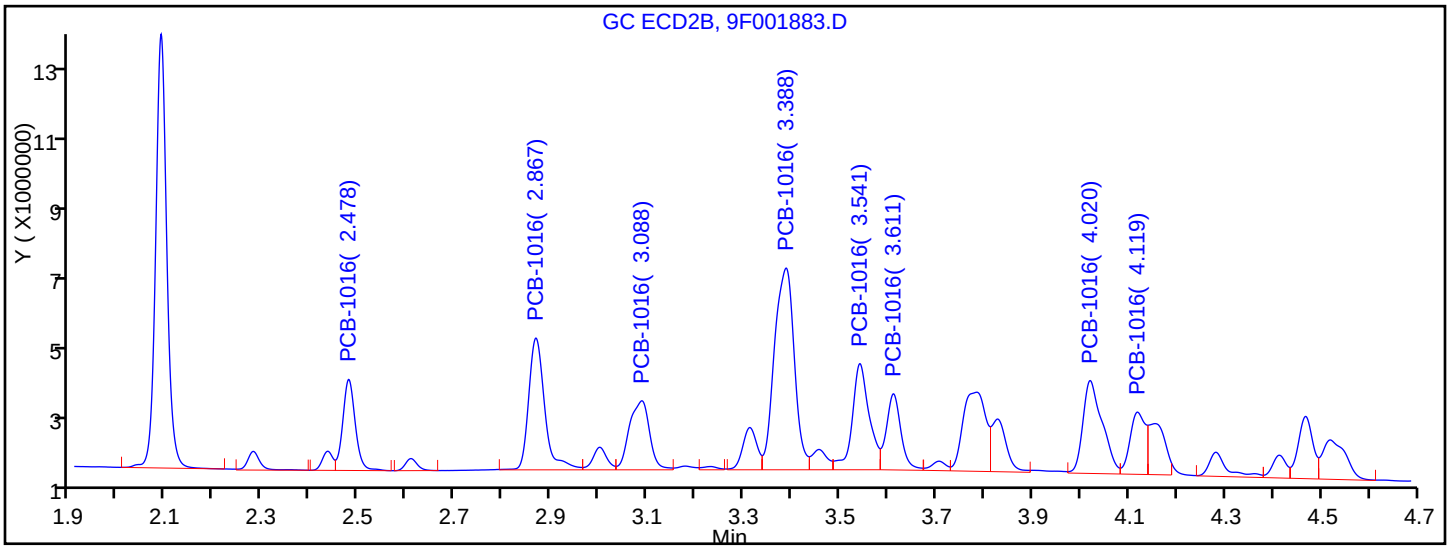
Column: Detector GC ECD2B

## 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 |



US EPA ARCHIVE DOCUMENT

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:

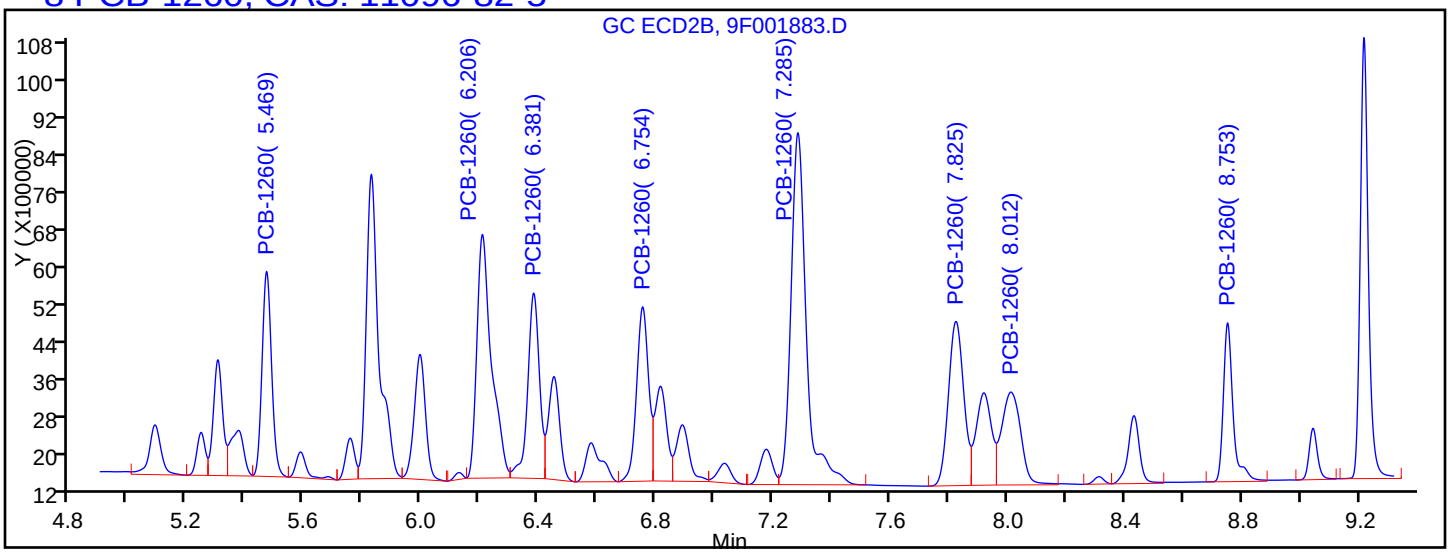
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

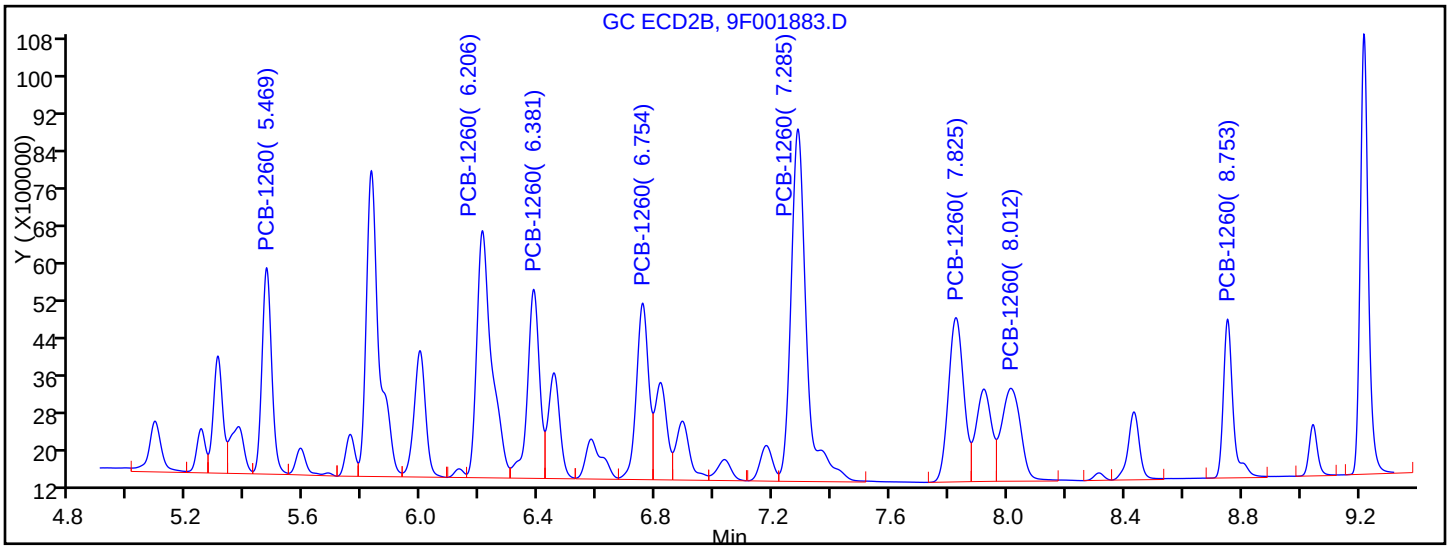
Column: Detector GC ECD2B

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 | |



US EPA ARCHIVE DOCUMENT

TestAmerica Edison

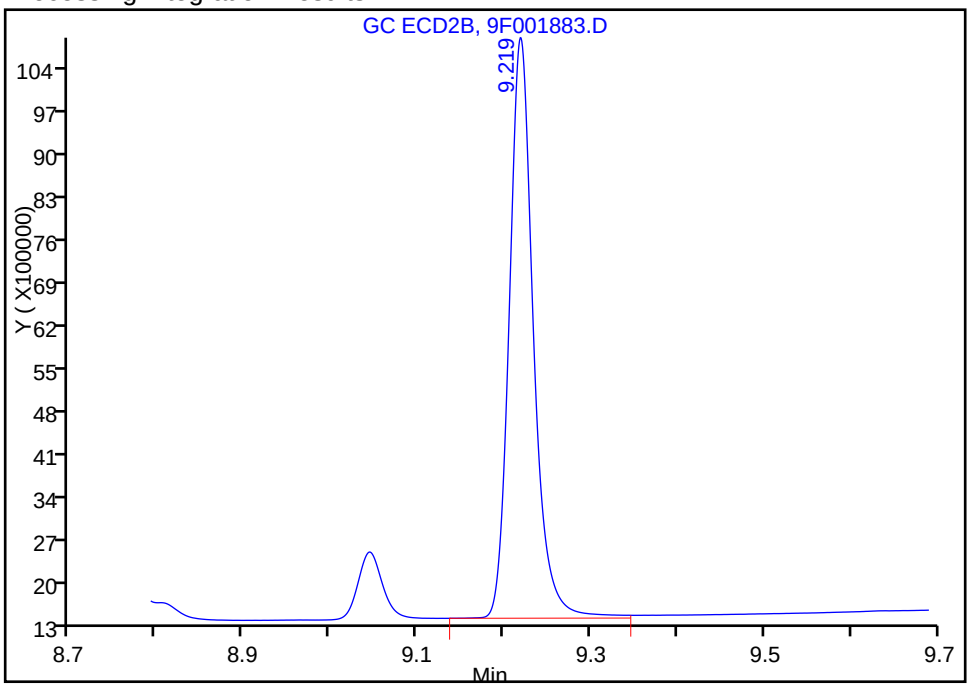
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001883.D
Injection Date: 12-May-2016 11:08:53 Instrument ID: CPESTGC9
Lims ID: IC PCB 4
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD2B

## $ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 2

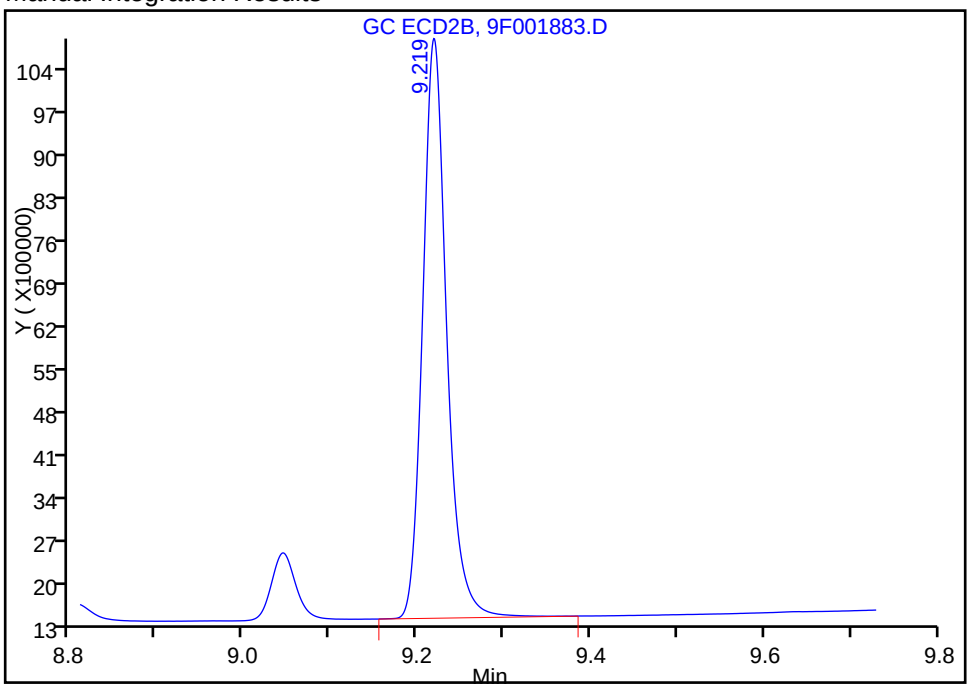
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

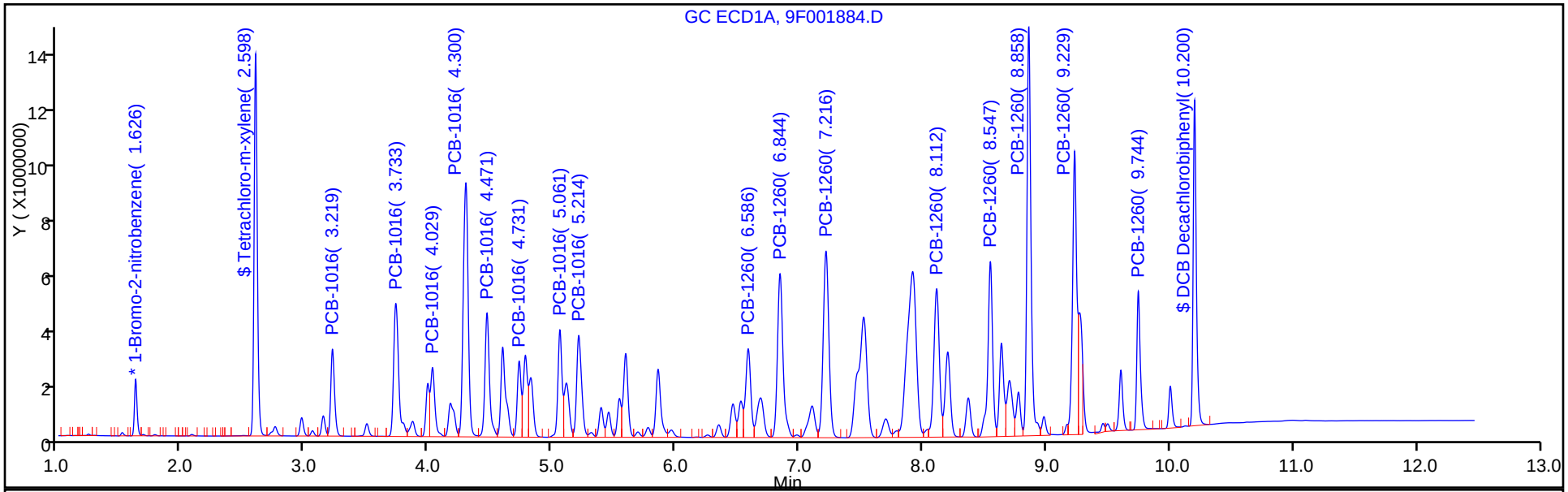
US EPA ARCHIVE DOCUMENT

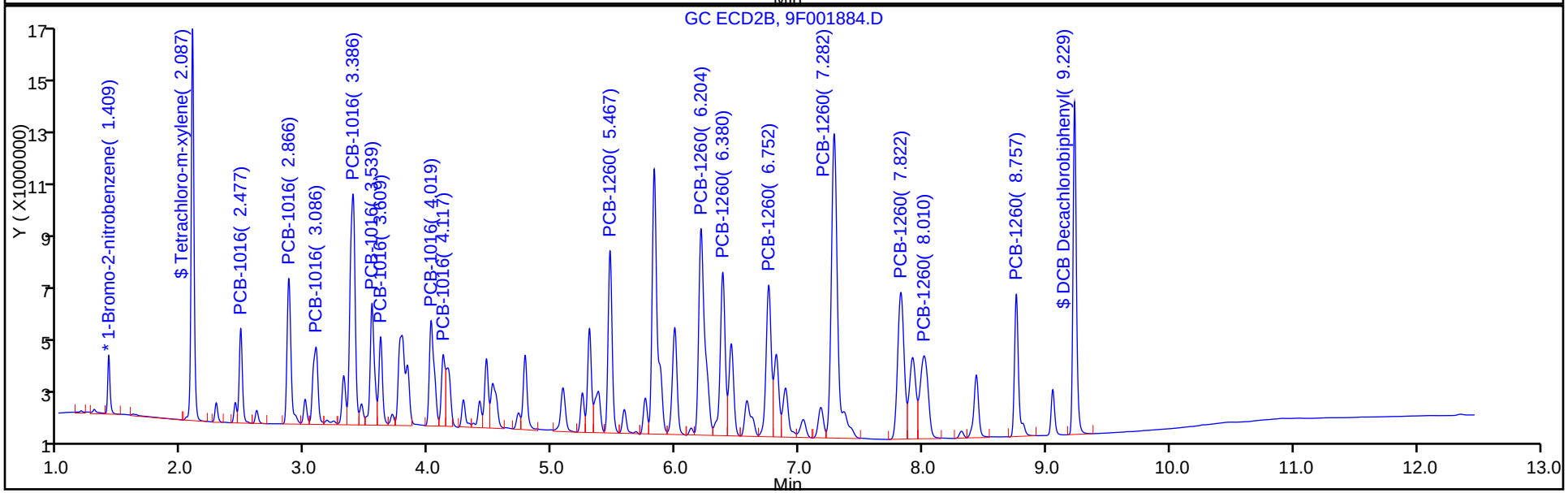
Report Date: 12-May-2016 15:21:40 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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

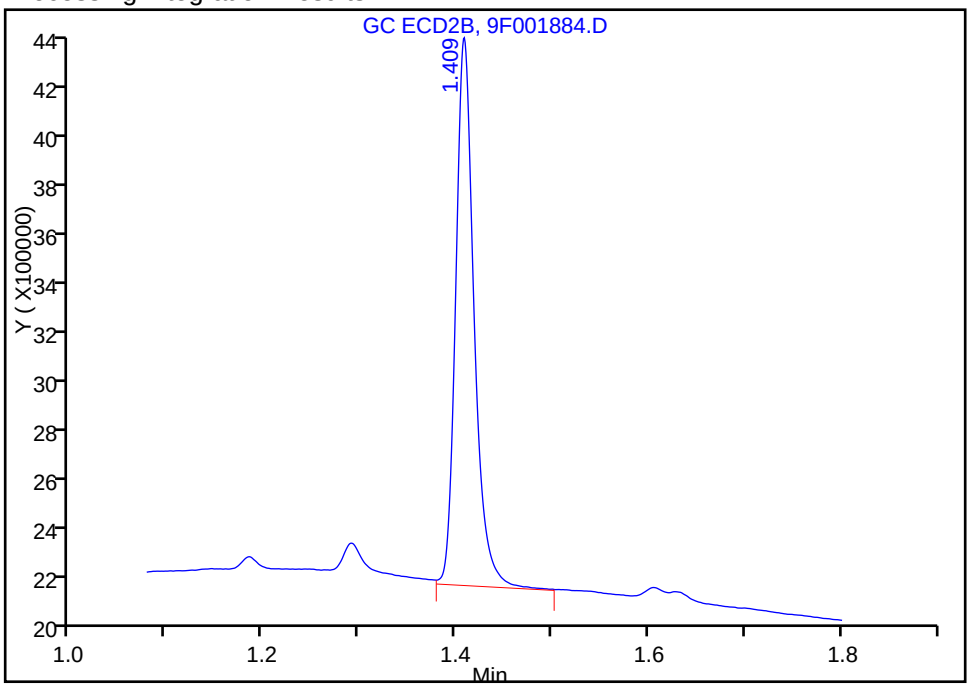
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001884.D
Injection Date: 12-May-2016 11:53:46 Instrument ID: CPESTGC9
Lims ID: IC PCB 5
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD2B

## * 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

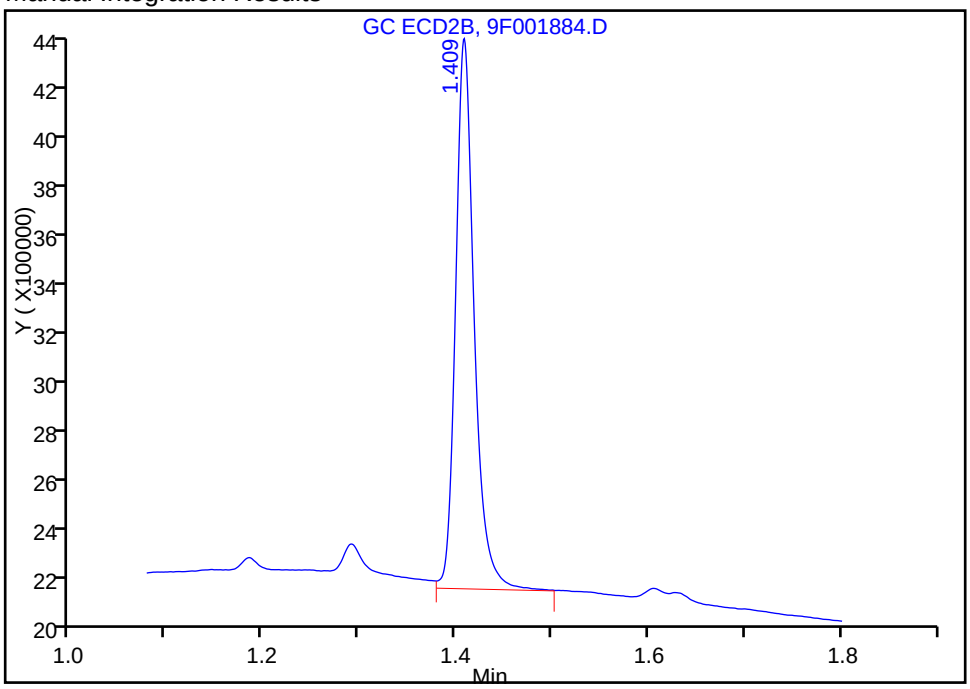
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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:

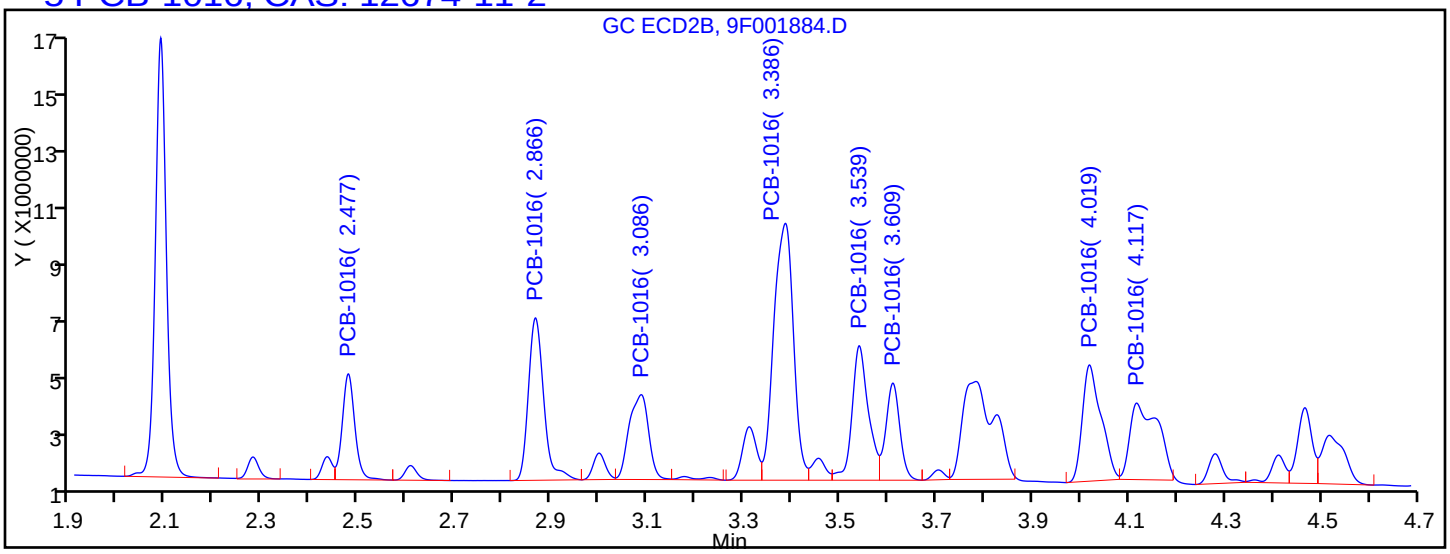
Operator ID: ALS Bottle#: 6 Worklist Smp#: 6

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

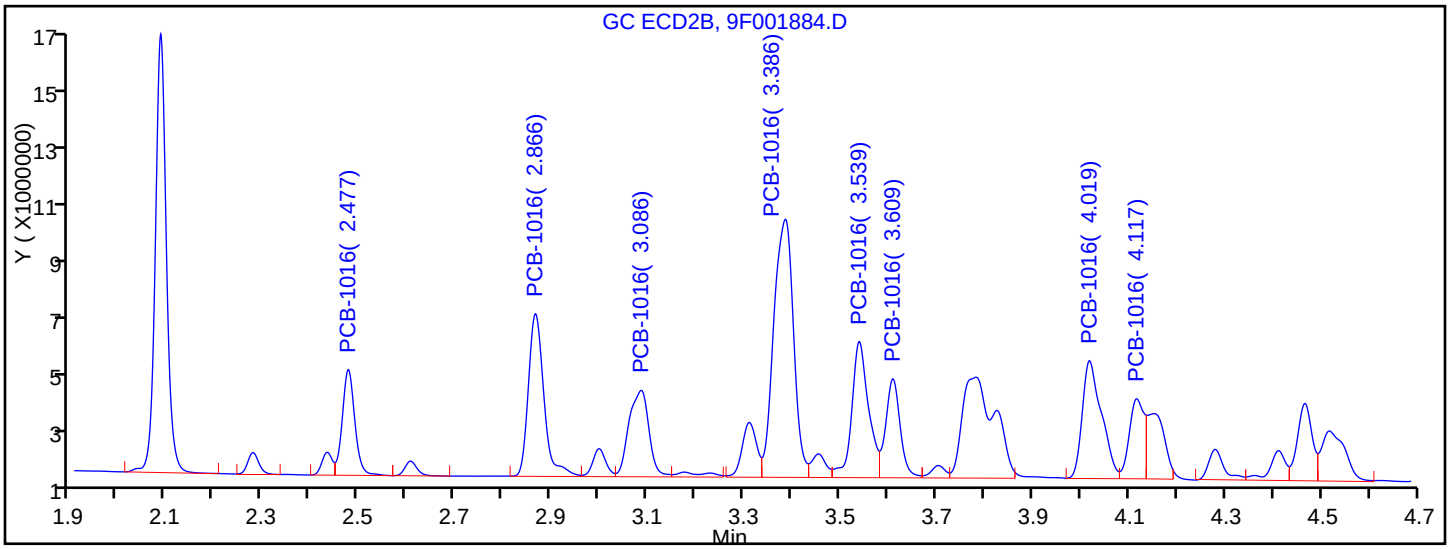
Column: Detector GC ECD2B

## 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 |



US EPA ARCHIVE DOCUMENT

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:

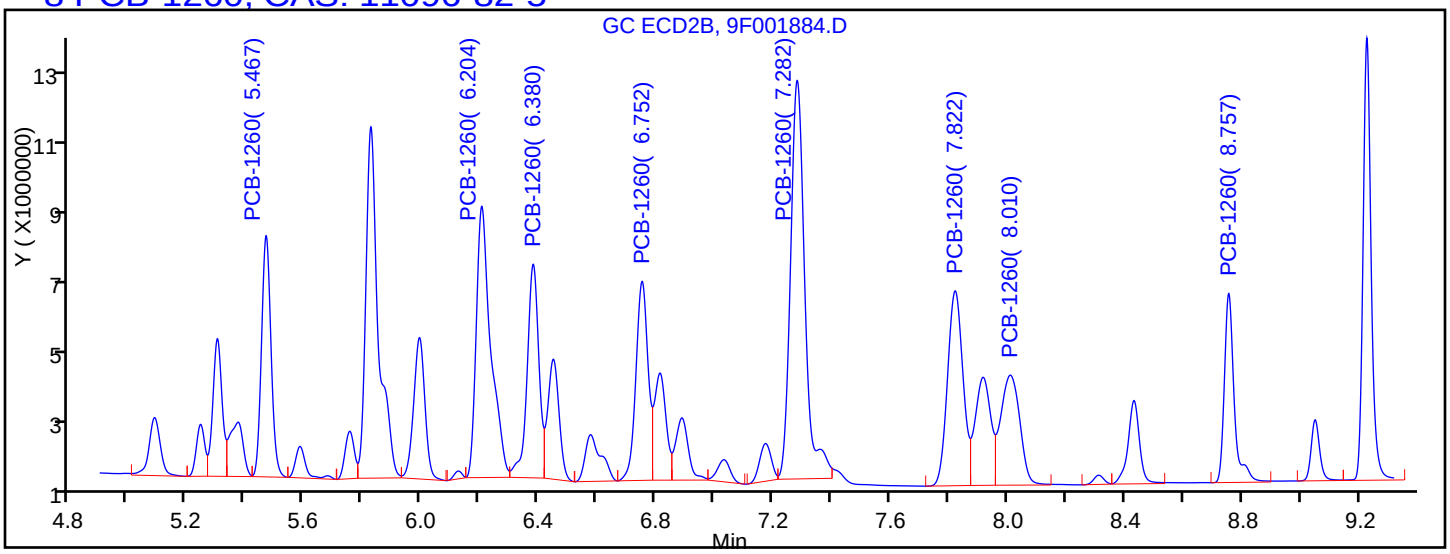
Operator ID: ALS Bottle#: 6 Worklist Smp#: 6

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

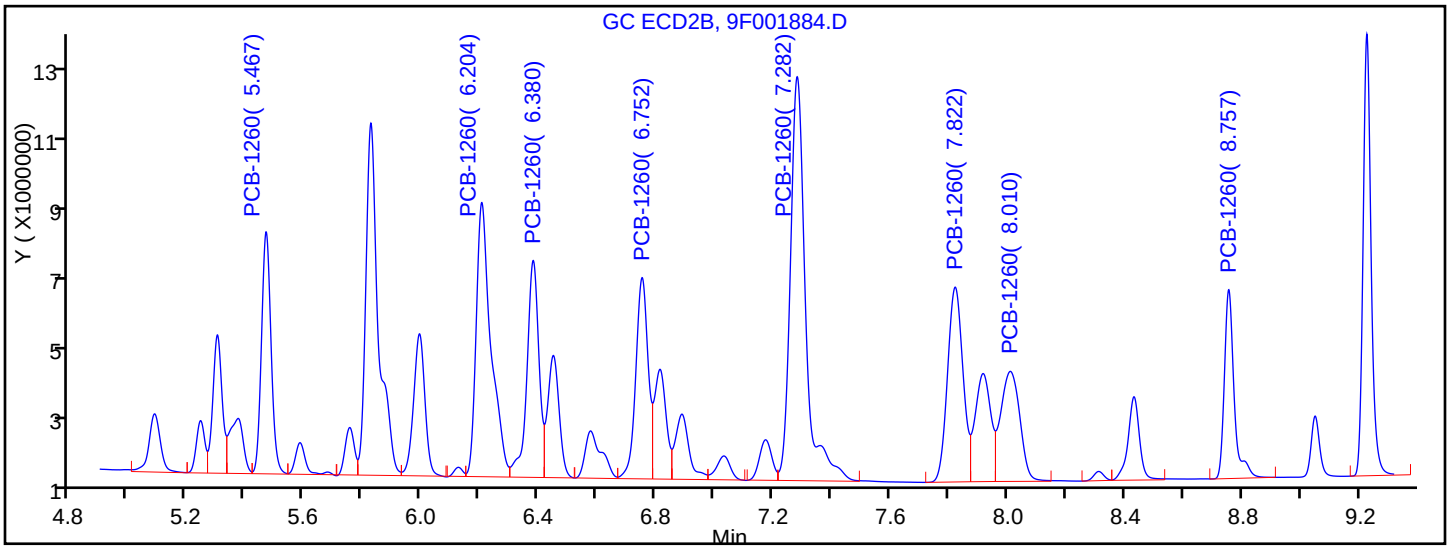
Column: Detector GC ECD2B

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 | |



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

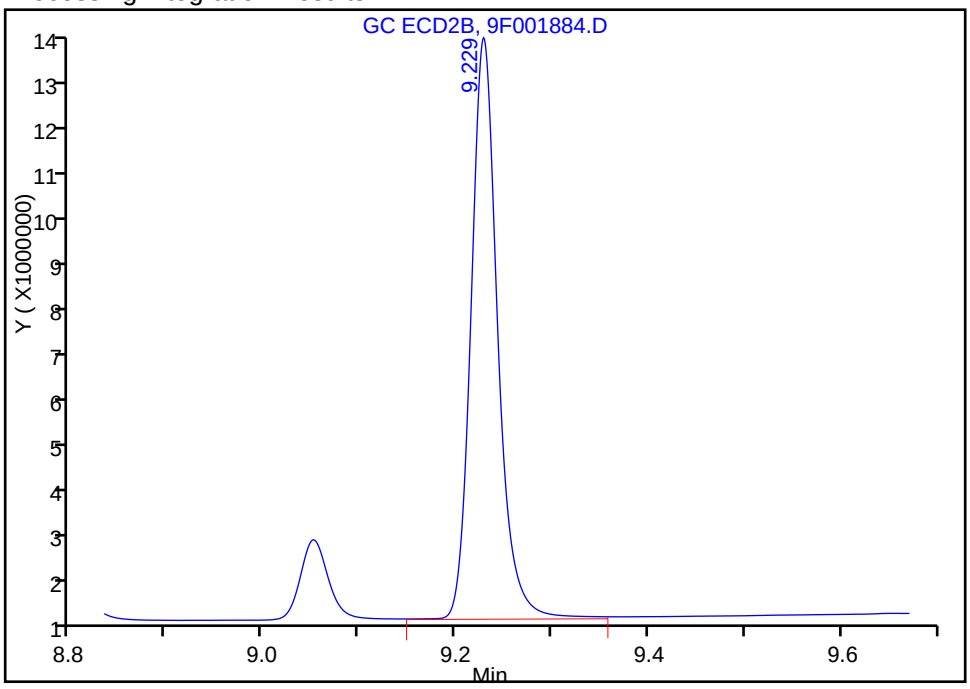
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001884.D
Injection Date: 12-May-2016 11:53:46 Instrument ID: CPESTGC9
Lims ID: IC PCB 5
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD2B

## $ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 2

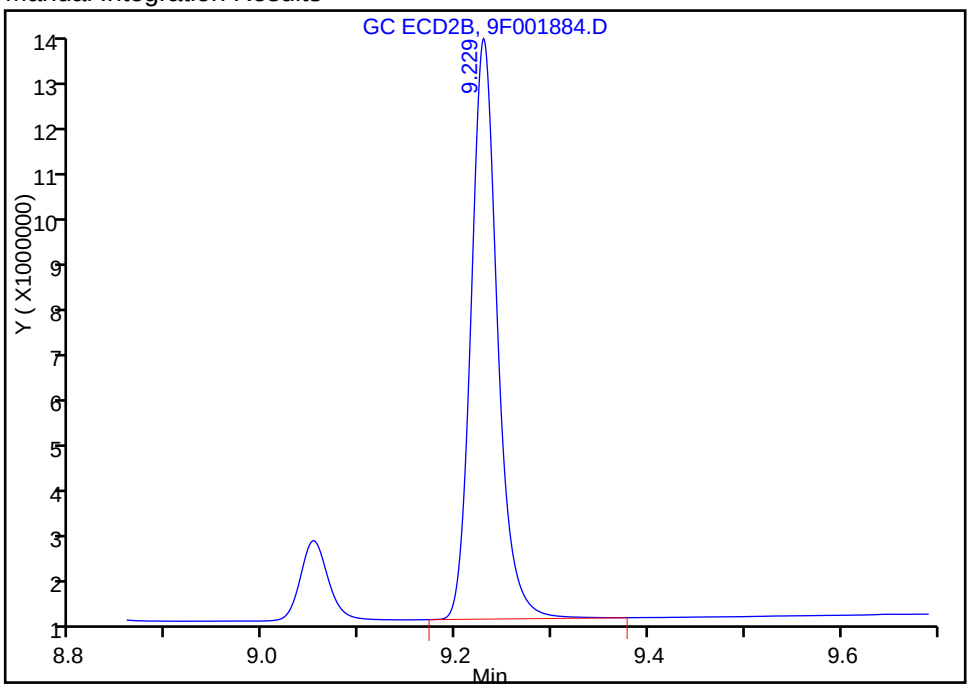
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

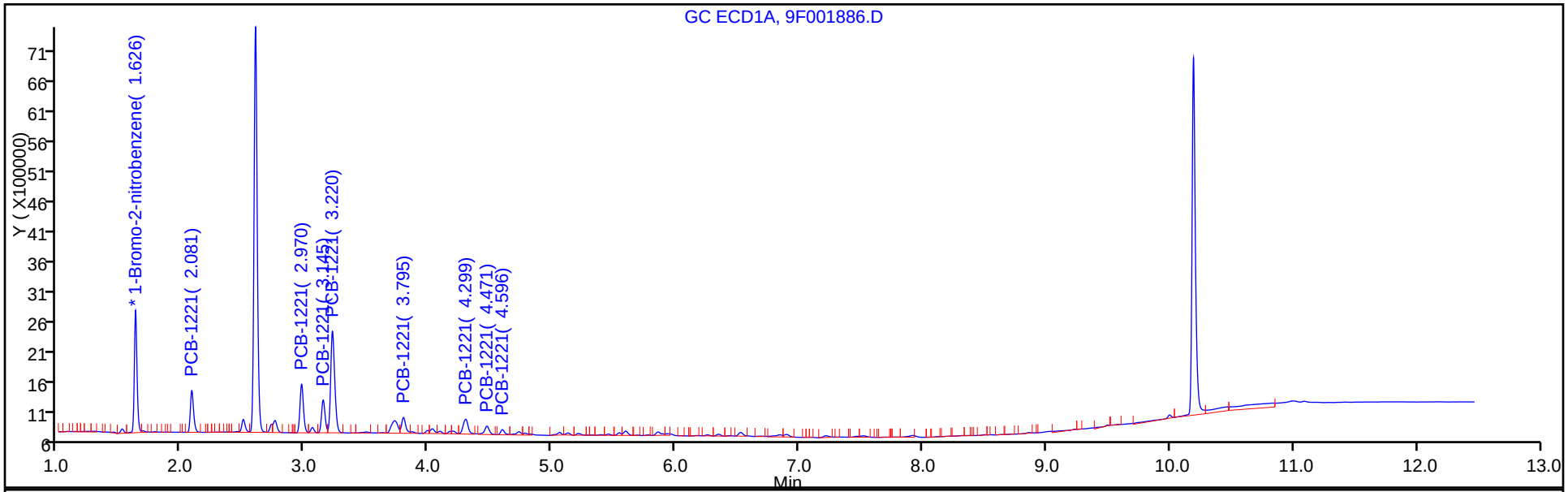
US EPA ARCHIVE DOCUMENT

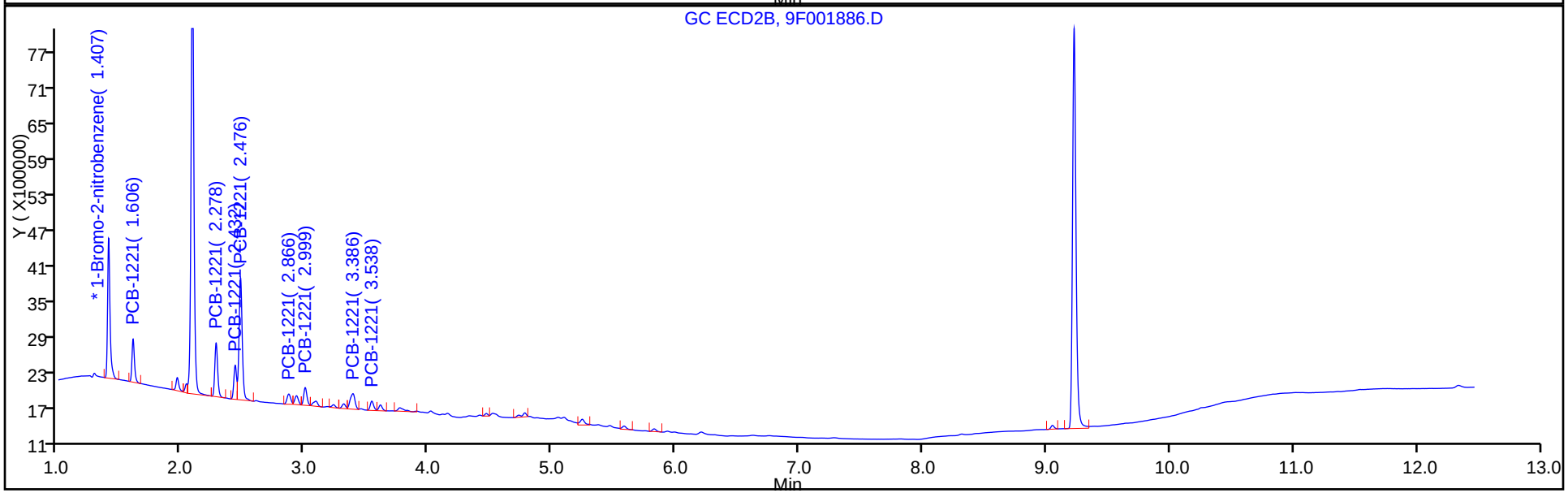
Report Date: 12-May-2016 15:22:00 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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:

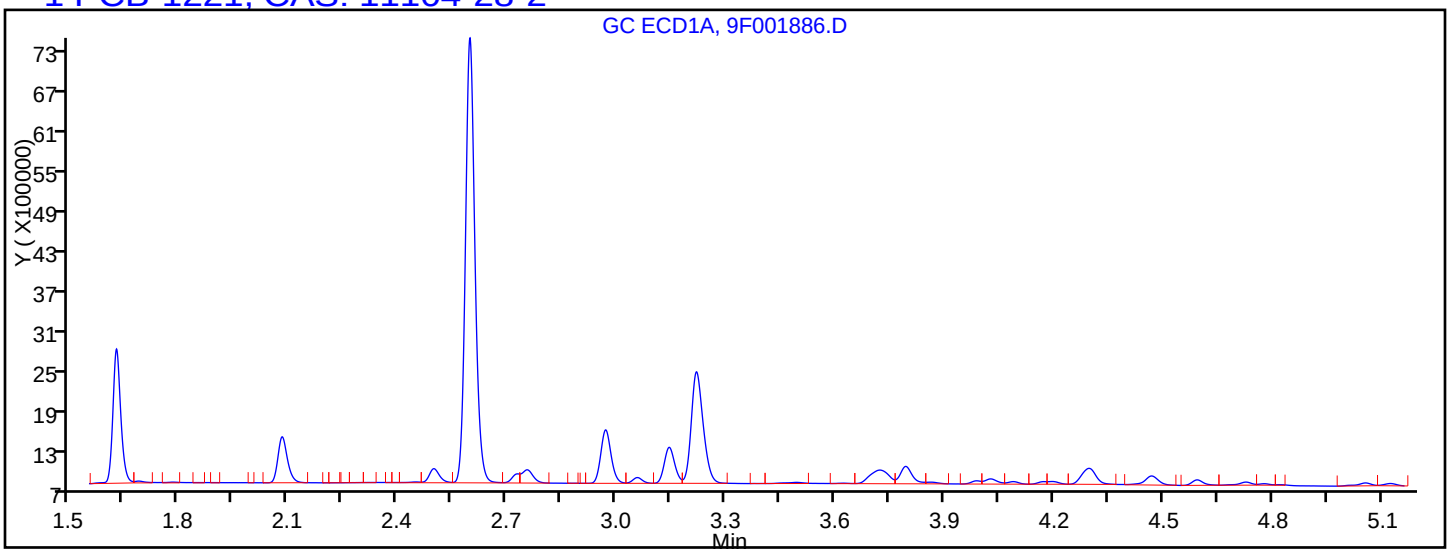
Operator ID: ALS Bottle#: 8 Worklist Smp#: 8

Injection Vol: 1.0 ul Dil. Factor: 1.0000

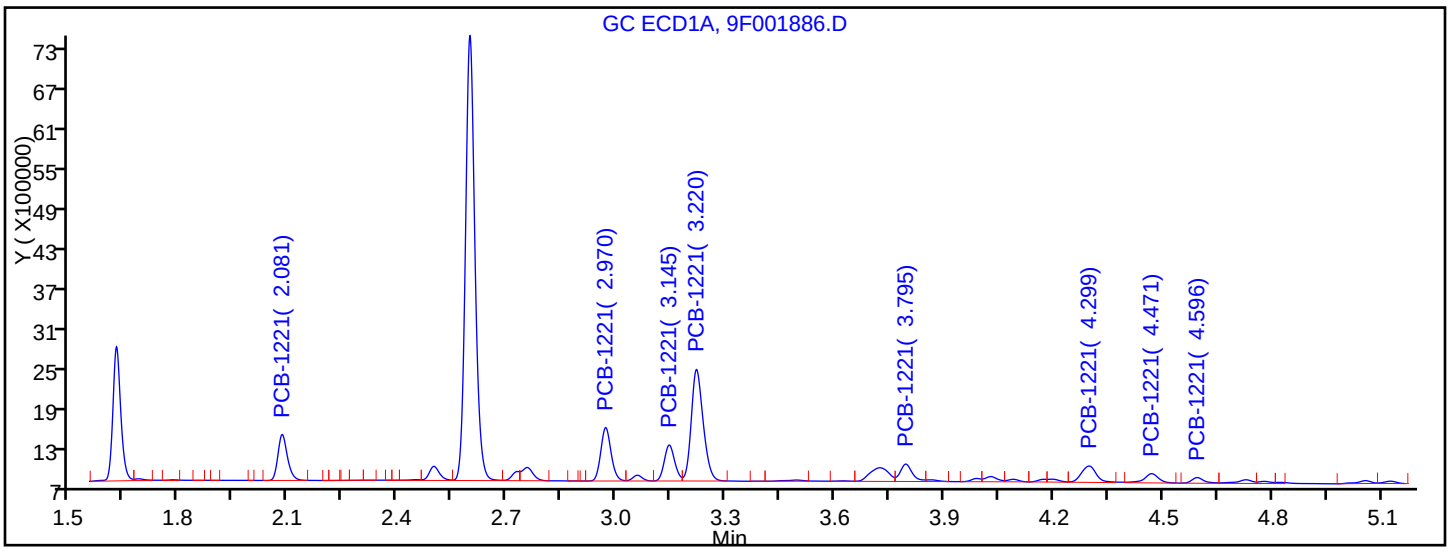
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

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



US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

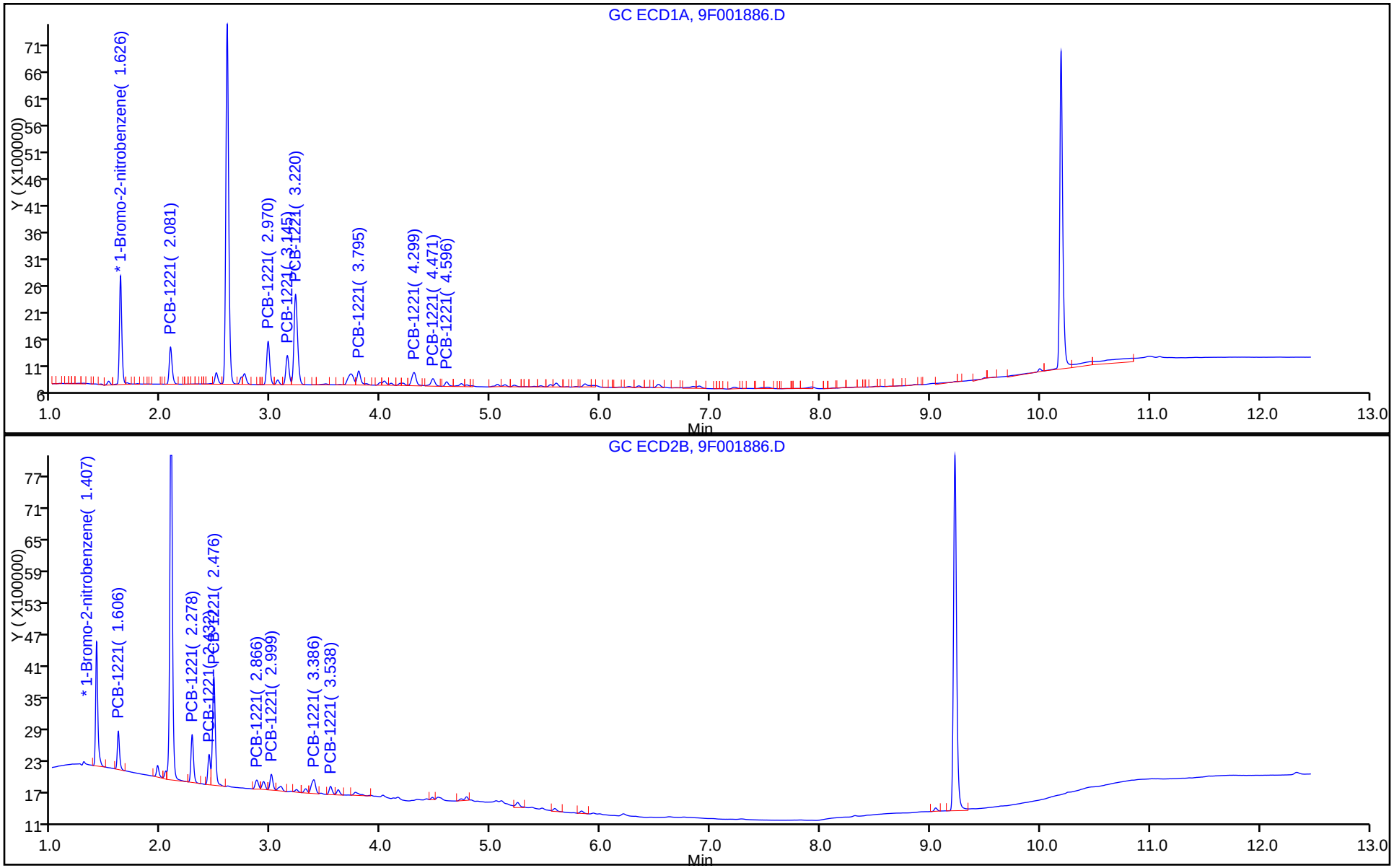
US EPA ARCHIVE DOCUMENT

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 | | |



Manual Integration/User Assign Peak Report

TestAmerica Edison

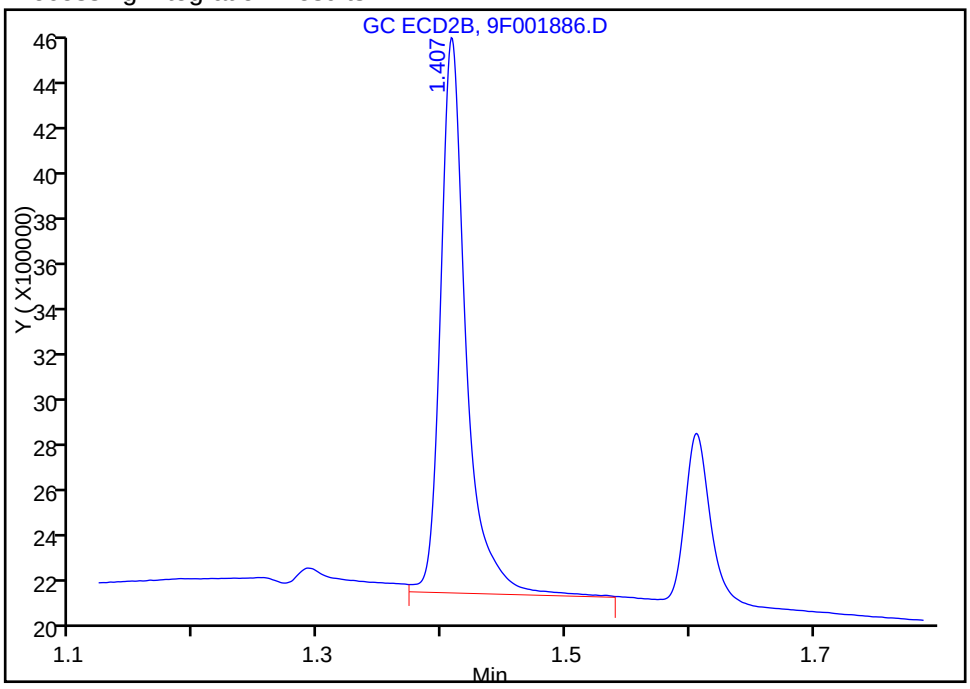
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001886.D | | | | |
| Injection Date: | 12-May-2016 12:41:14 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | IC 1221 | | | | |
| Client ID: | | | | | |
| Operator ID: | | ALS Bottle#: | 8 | Worklist 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

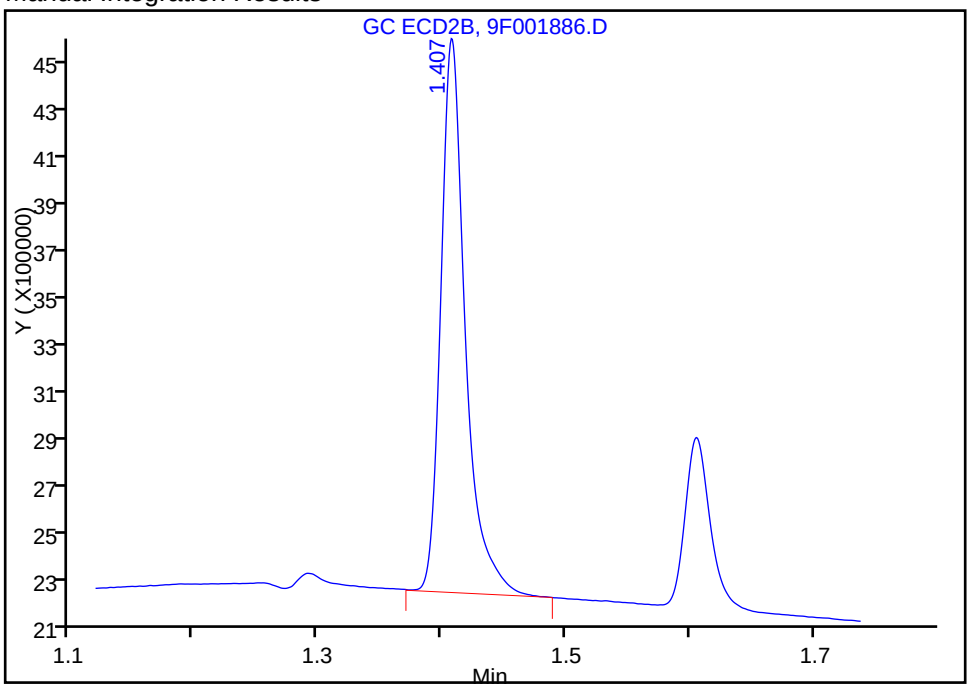
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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:

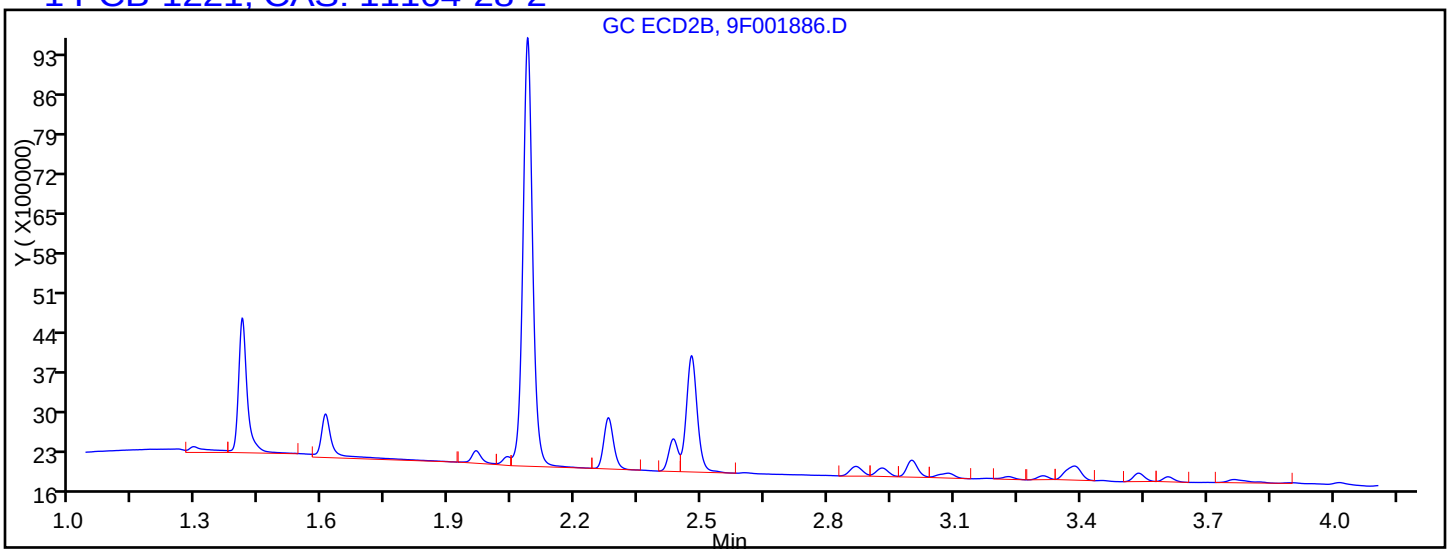
Operator ID: ALS Bottle#: 8 Worklist Smp#: 8

Injection Vol: 1.0 ul Dil. Factor: 1.0000

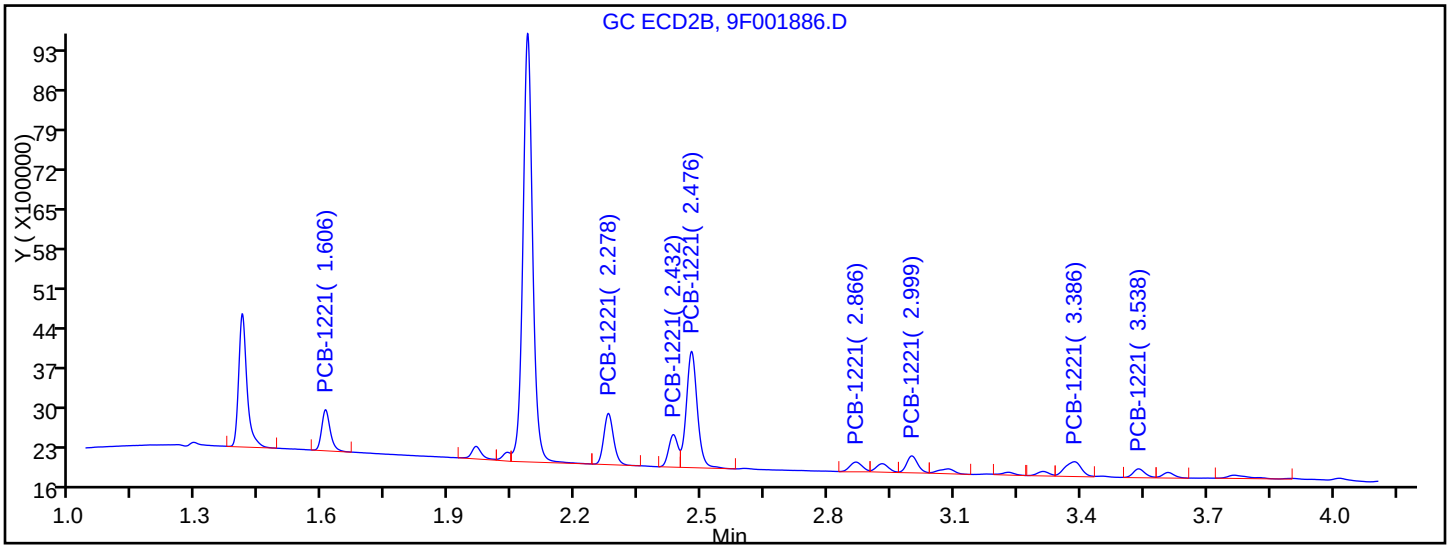
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

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



US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

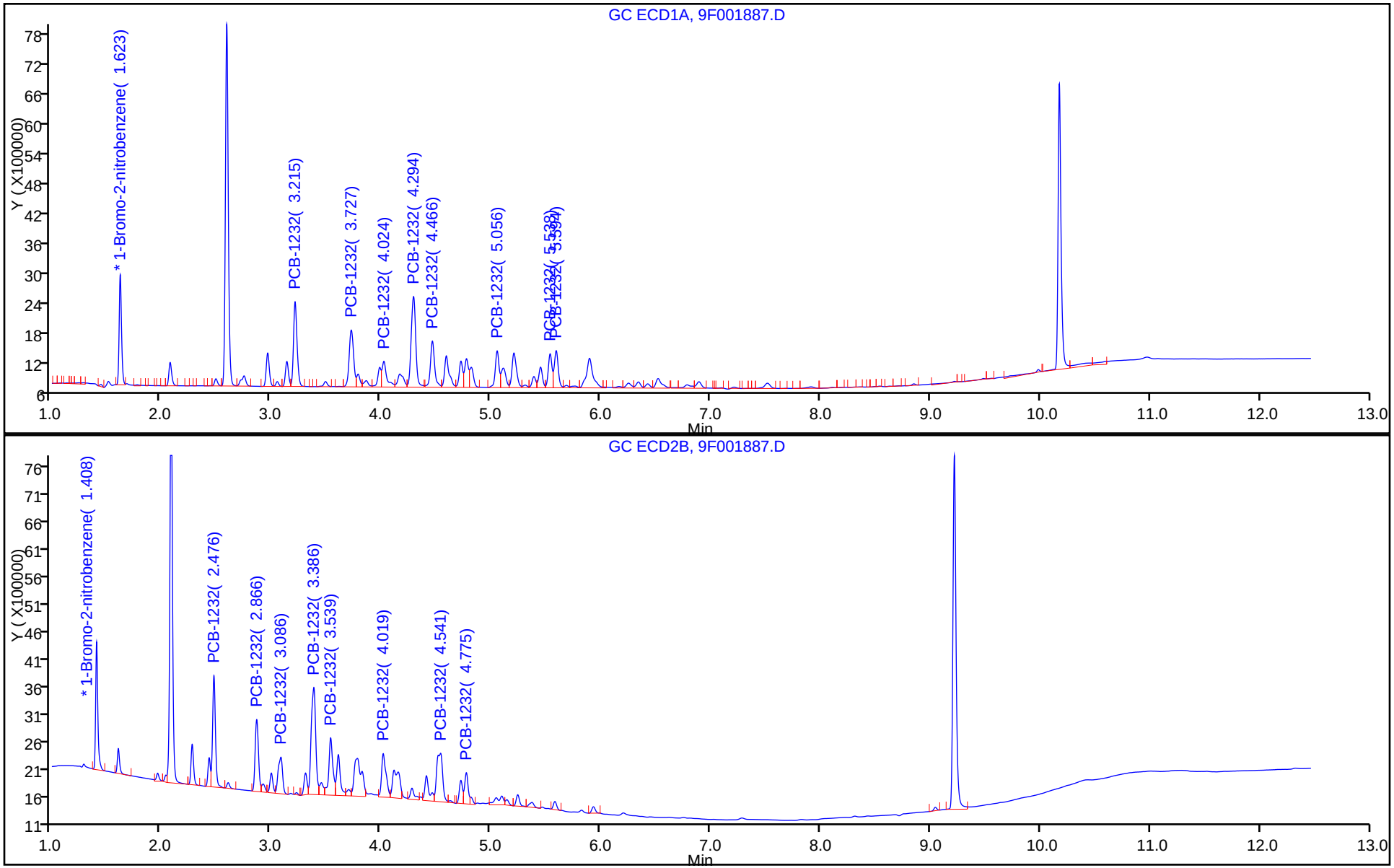
US EPA ARCHIVE DOCUMENT

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

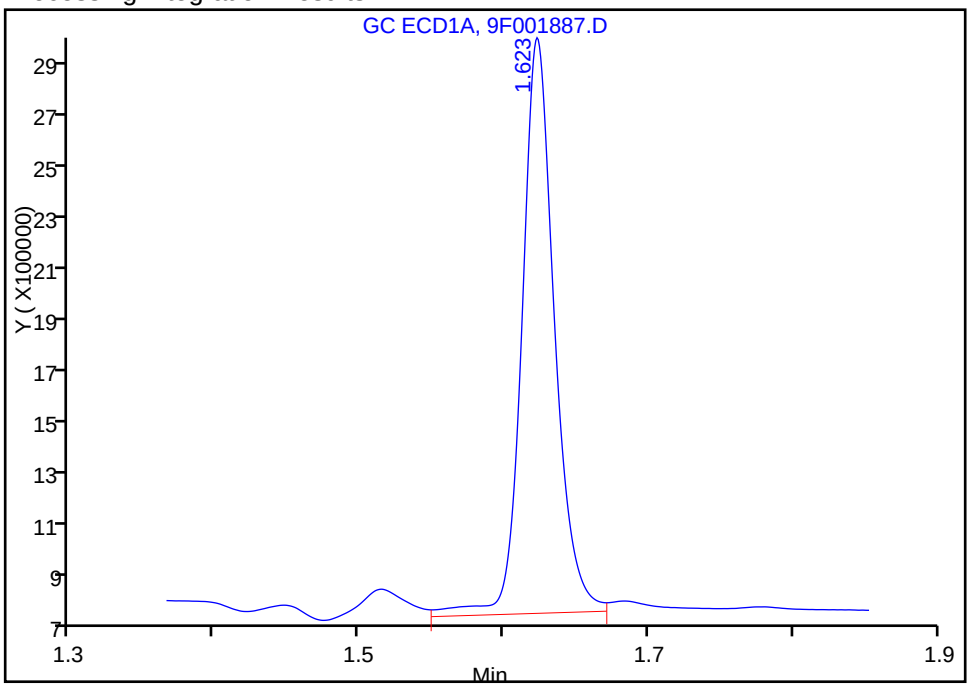
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001887.D
Injection Date: 12-May-2016 12:59:16 Instrument ID: CPESTGC9
Lims ID: IC 1232
Client ID:
Operator ID: ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD1A

## * 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 1

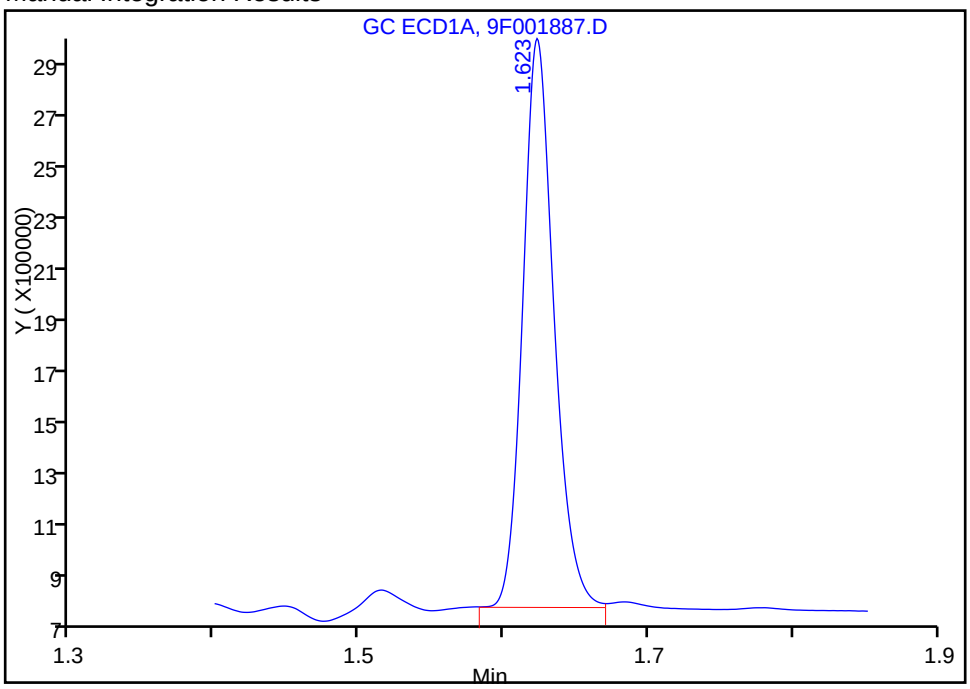
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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:

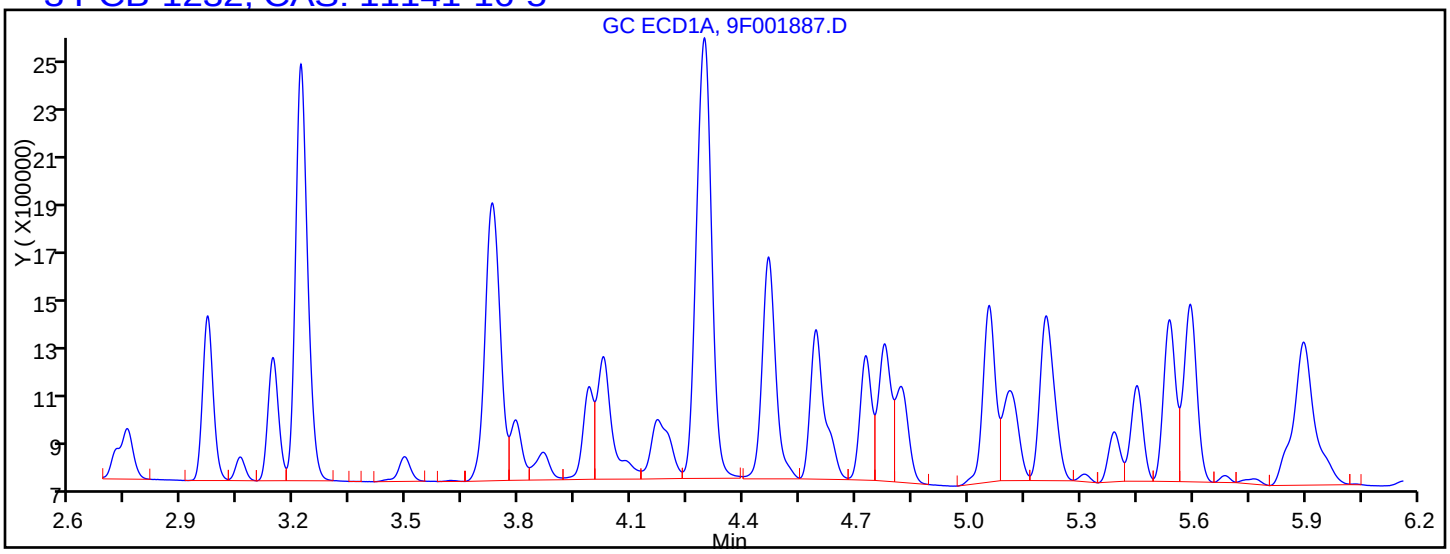
Operator ID: ALS Bottle#: 9 Worklist Smp#: 9

Injection Vol: 1.0 ul Dil. Factor: 1.0000

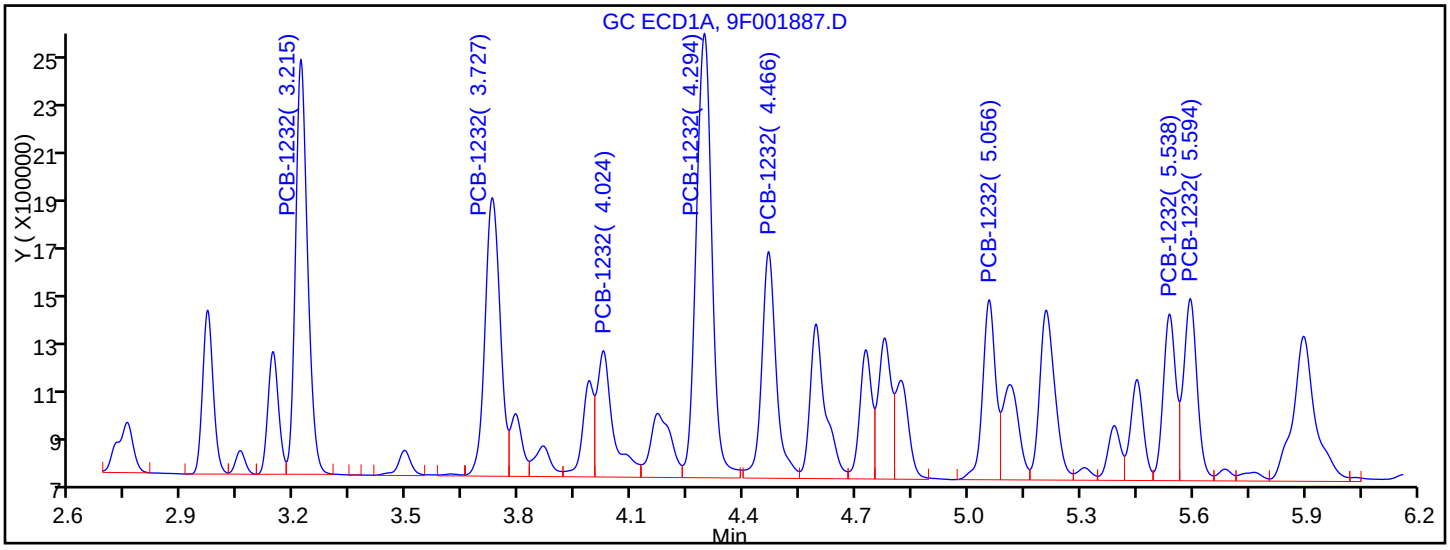
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

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

US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

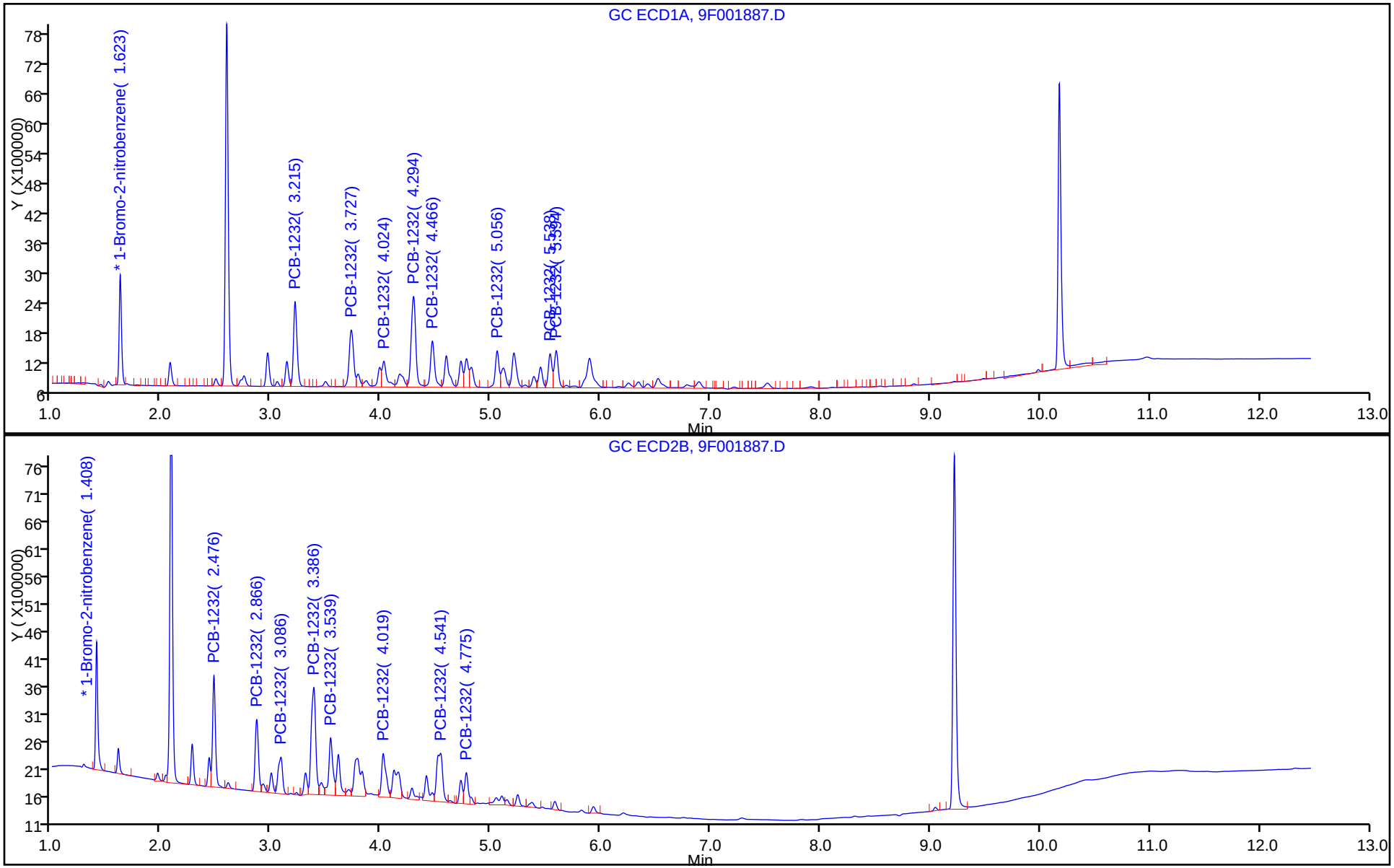
US EPA ARCHIVE DOCUMENT

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 | | |



Manual Integration/User Assign Peak Report

TestAmerica Edison

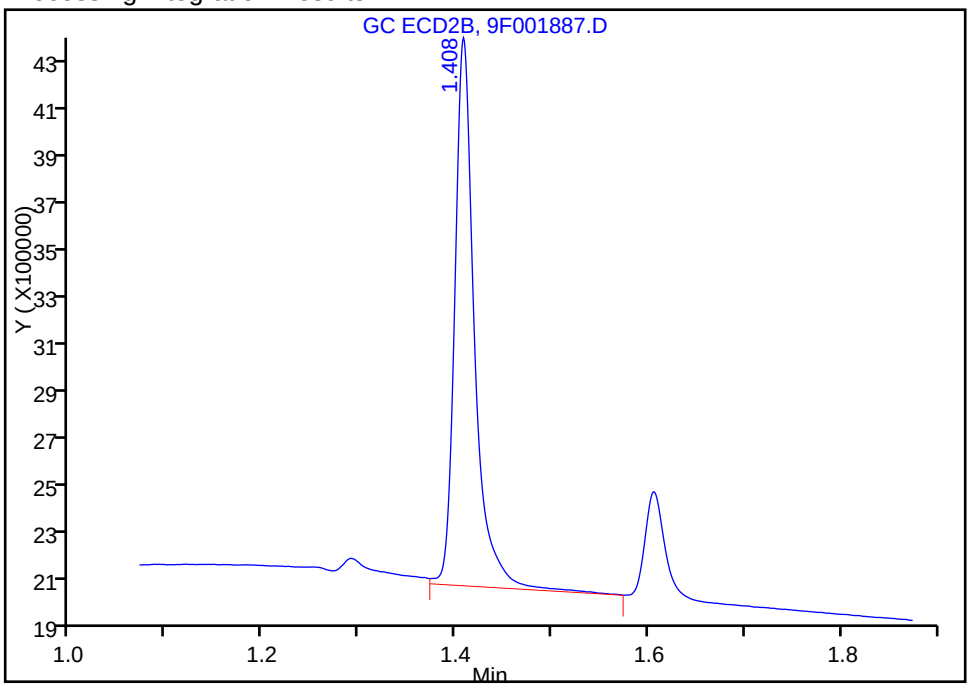
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001887.D | | | | |
| Injection Date: | 12-May-2016 12:59:16 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | IC 1232 | | | | |
| Client ID: | | | | | |
| Operator ID: | | ALS Bottle#: | 9 | Worklist Smp#: | 9 |
| Injection Vol: | 1.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | 8082-ISTD | Limit Group: | GC 8082A PCB ISTD | | |
| Column: | | Detector | GC ECD2B | | |

## * 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

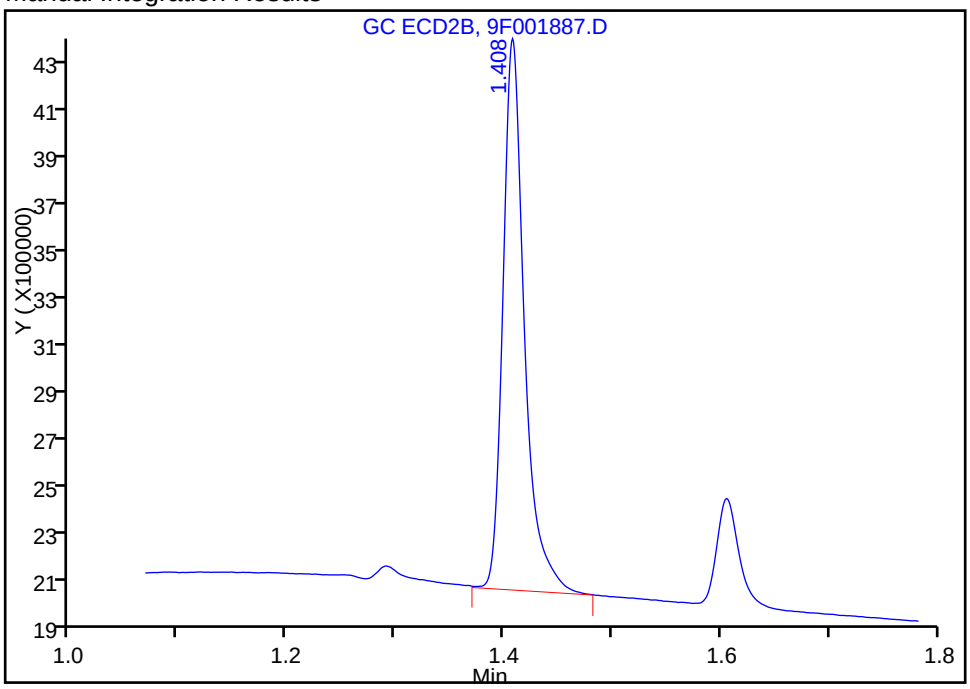
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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:

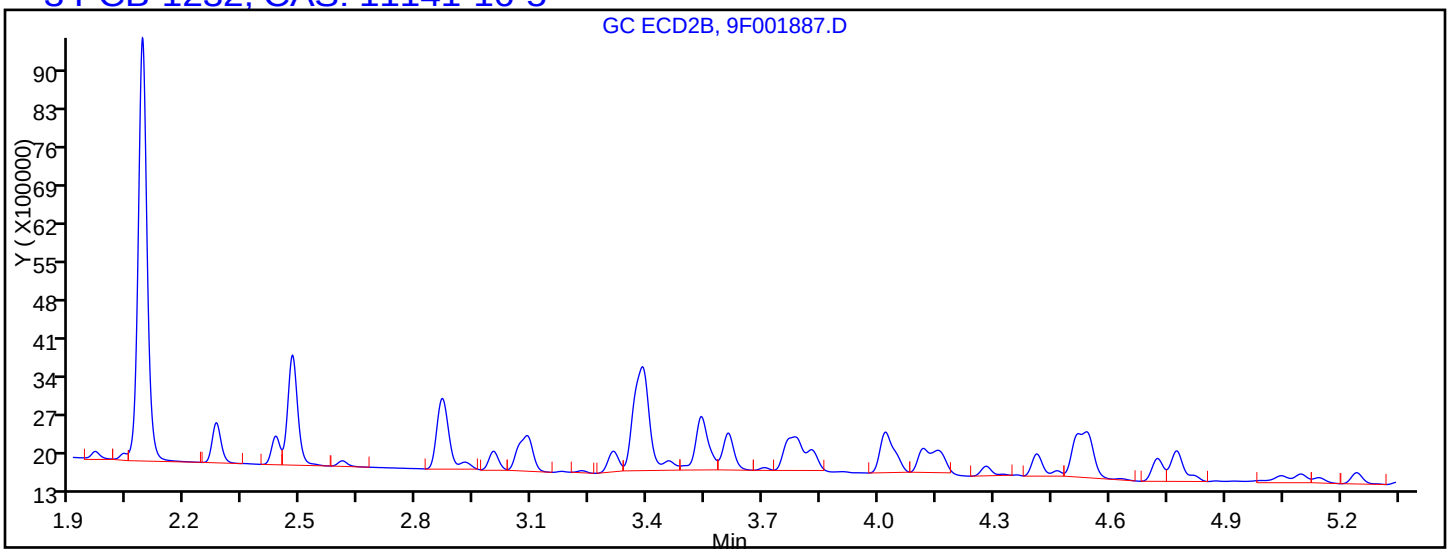
Operator ID: ALS Bottle#: 9 Worklist Smp#: 9

Injection Vol: 1.0 ul Dil. Factor: 1.0000

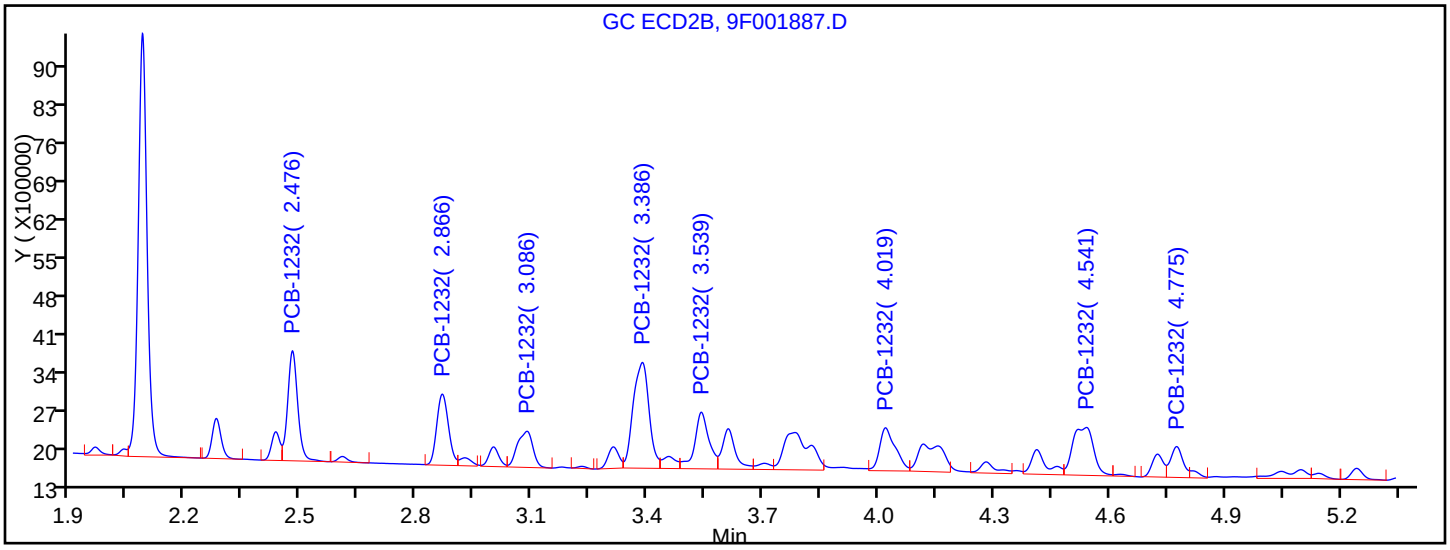
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

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



US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

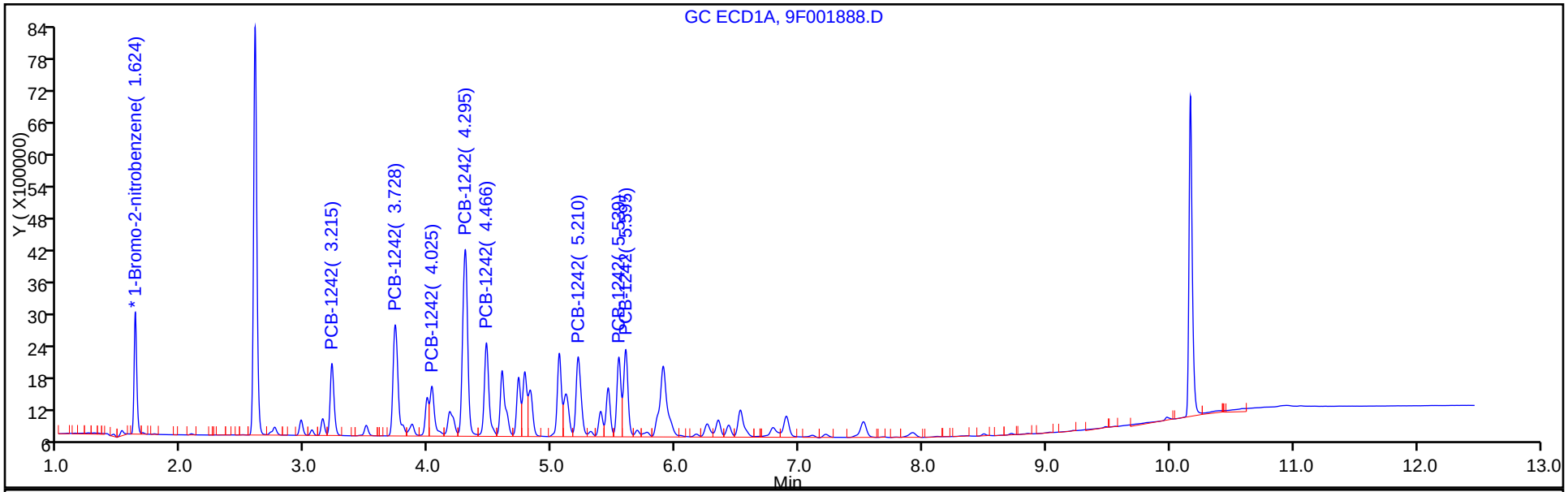
US EPA ARCHIVE DOCUMENT

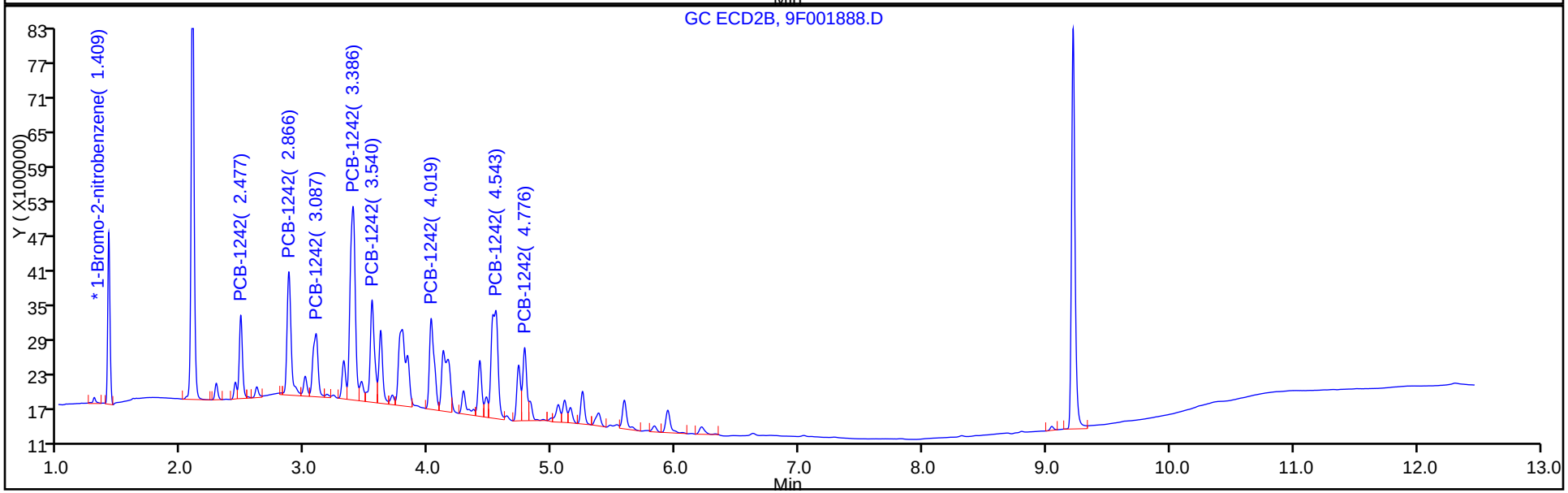
Report Date: 12-May-2016 15:22:13 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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 | | |



Manual Integration/User Assign Peak Report

TestAmerica Edison

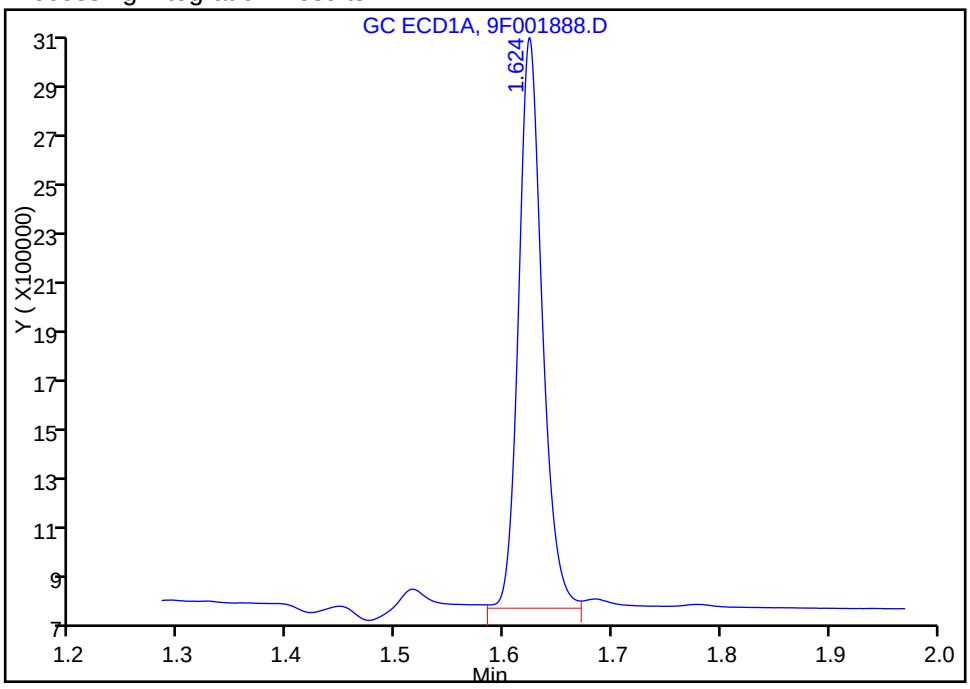
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001888.D
Injection Date: 12-May-2016 13:17:20 Instrument ID: CPESTGC9
Lims ID: IC 1242
Client ID:
Operator ID: ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD1A

## * 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 1

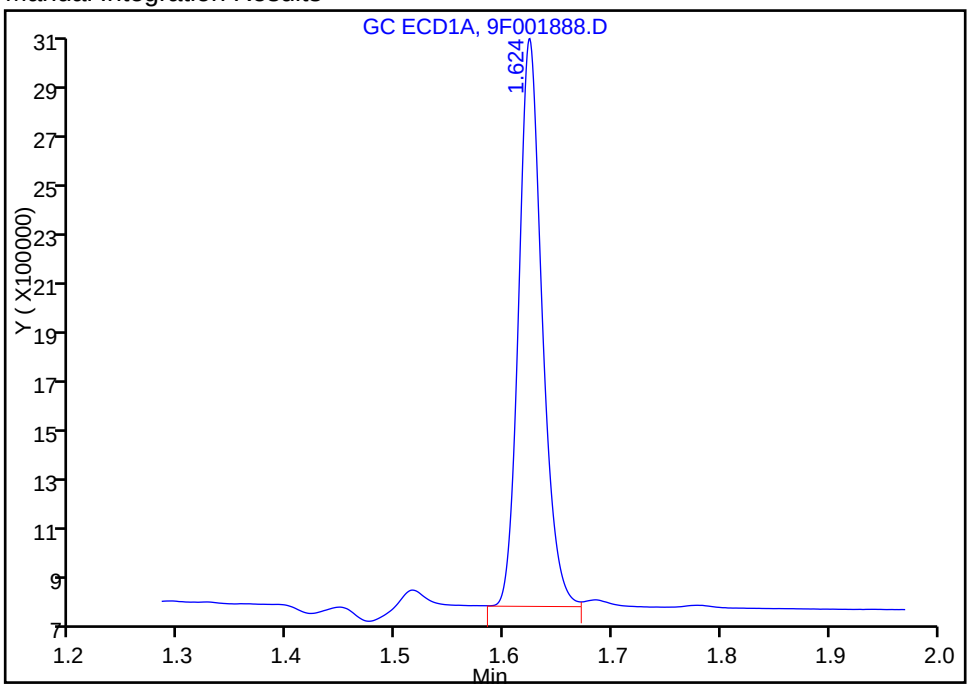
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

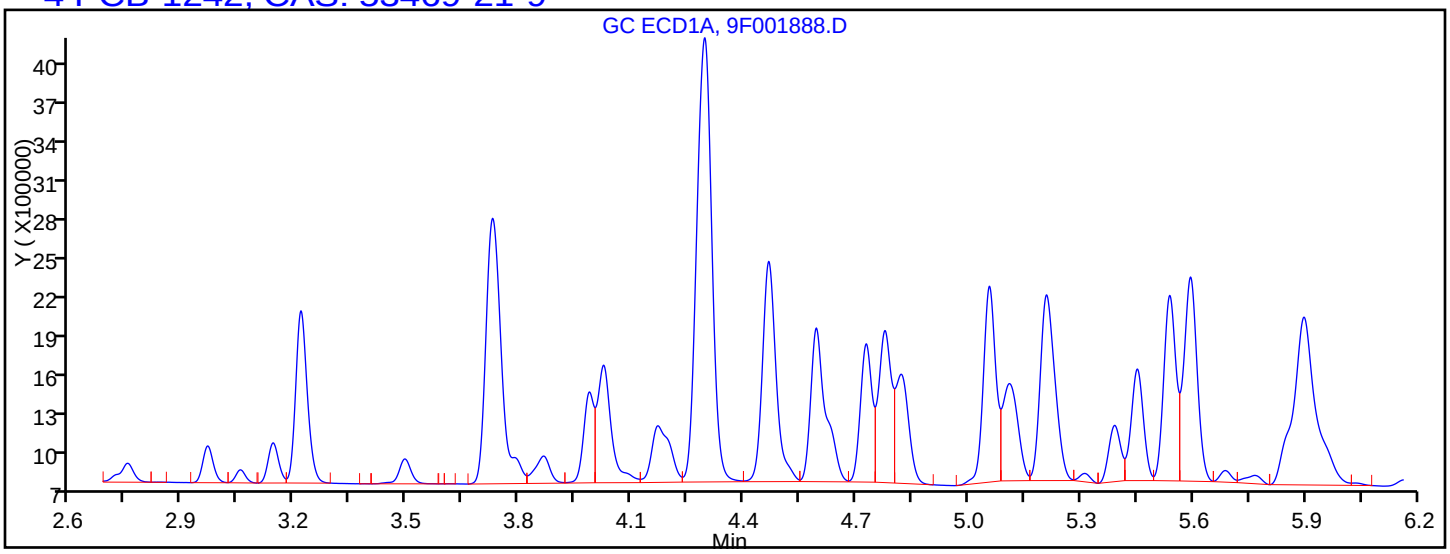
Report Date: 12-May-2016 15:22:13 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

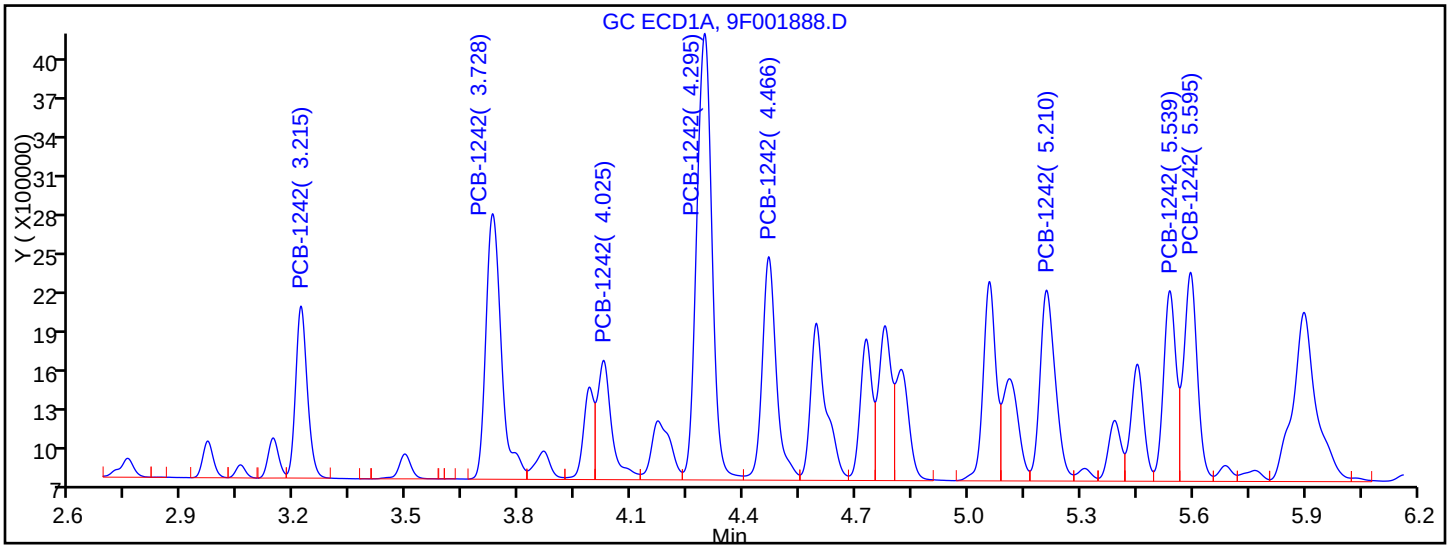
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001888.D

| | | | | | |
|---|---|---|---|---|---|
| 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

US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

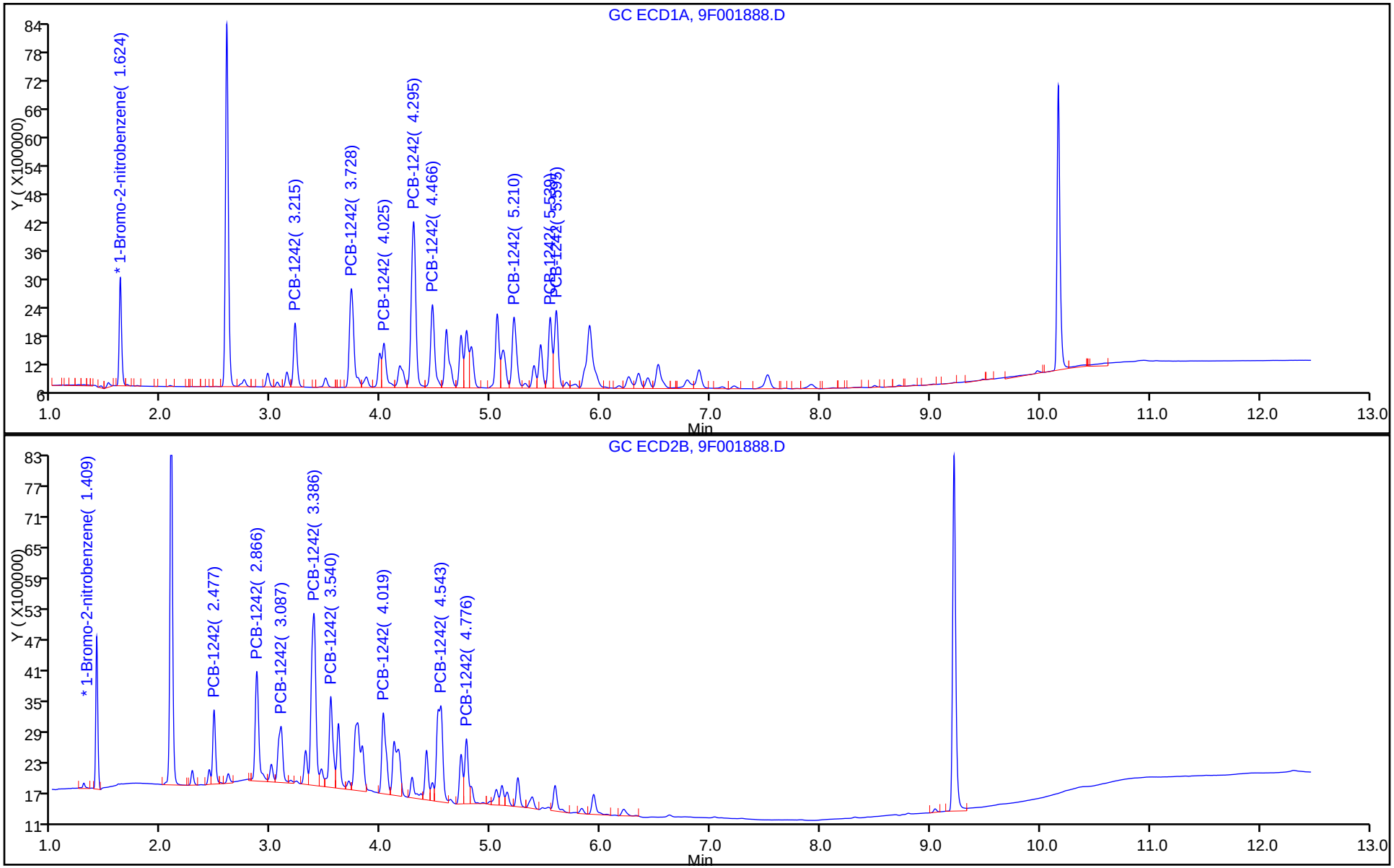
US EPA ARCHIVE DOCUMENT

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 | | |



Manual Integration/User Assign Peak Report

TestAmerica Edison

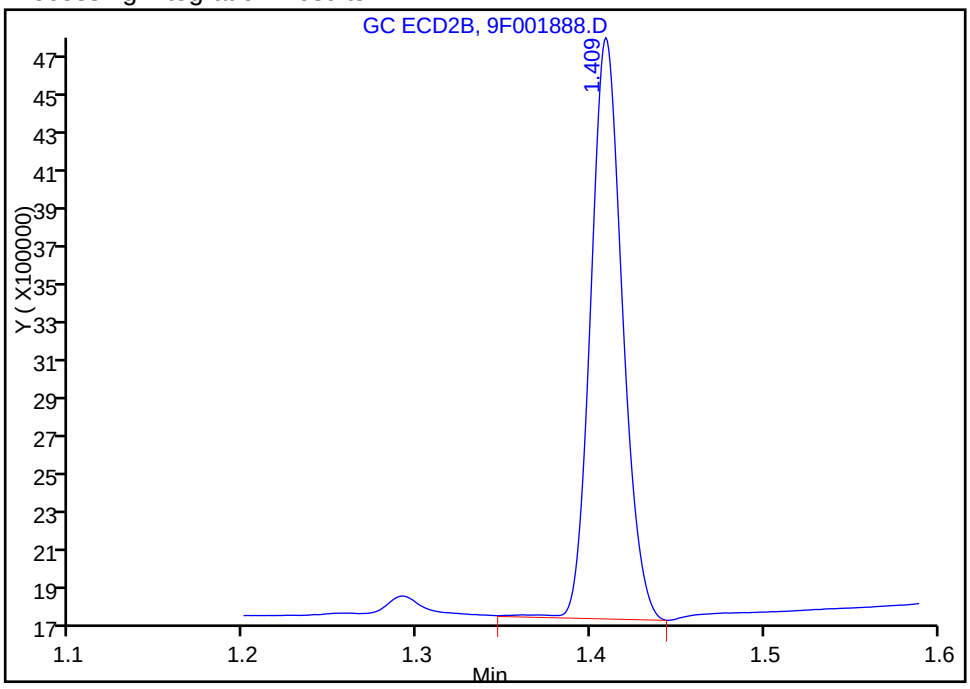
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001888.D | | | | |
| Injection Date: | 12-May-2016 13:17:20 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | IC 1242 | | | | |
| Client ID: | | | | | |
| Operator ID: | | ALS Bottle#: | 10 | Worklist 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

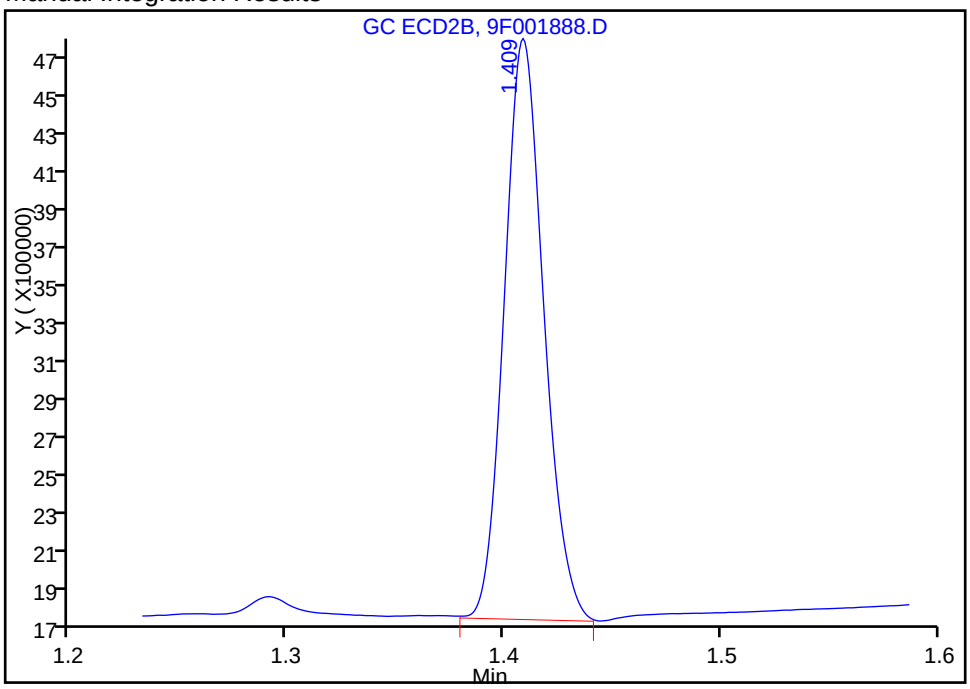
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

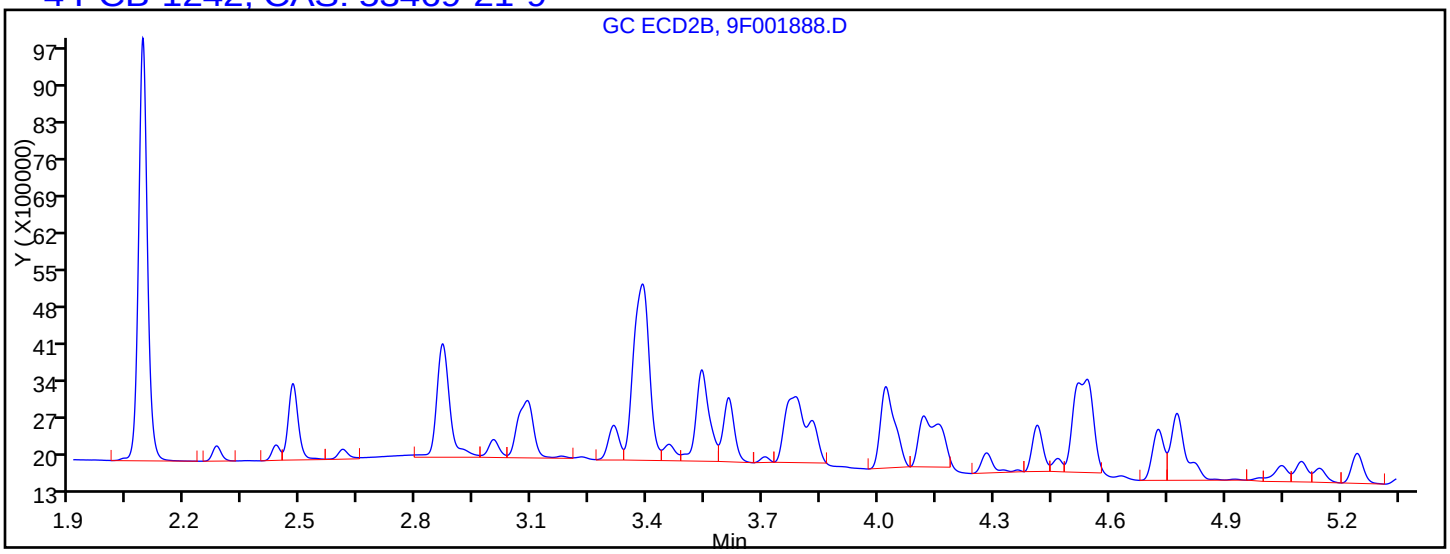
Report Date: 12-May-2016 15:22:14 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

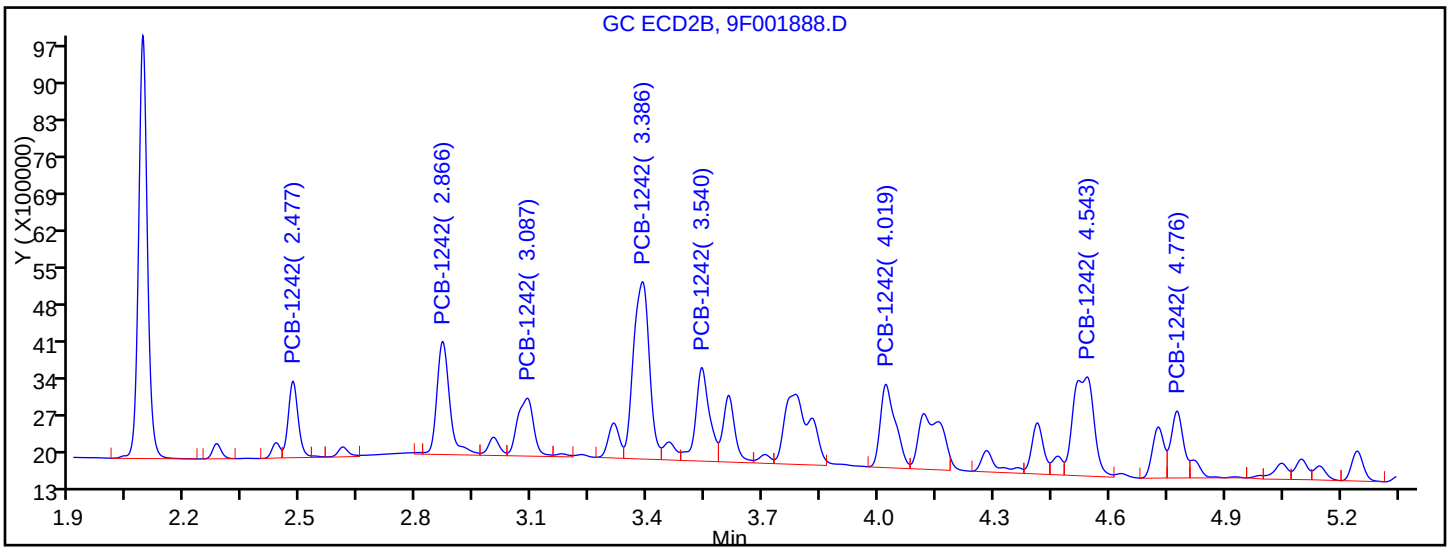
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001888.D

| | | | | | |
|---|---|---|---|---|---|
| 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



US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

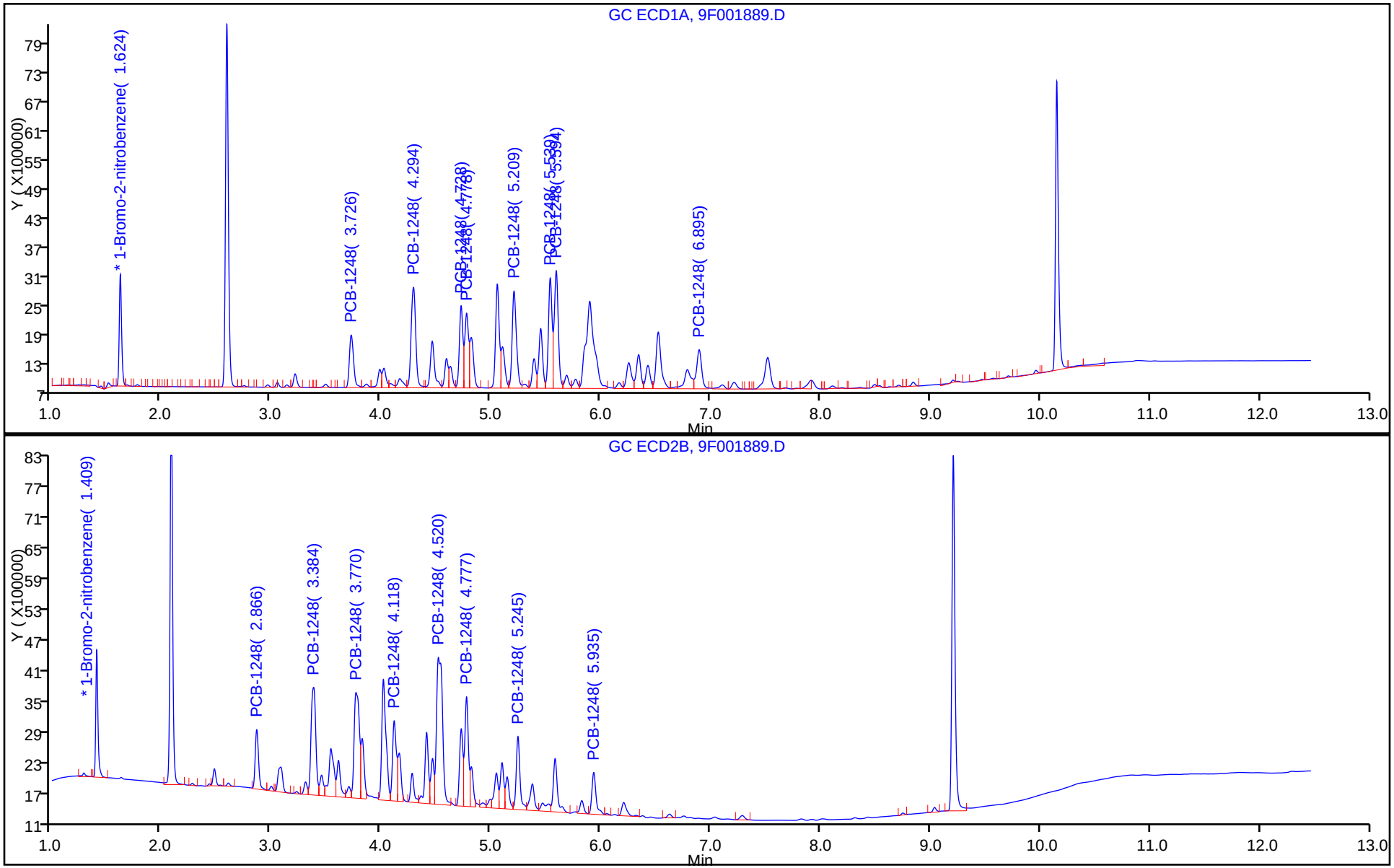
US EPA ARCHIVE DOCUMENT

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

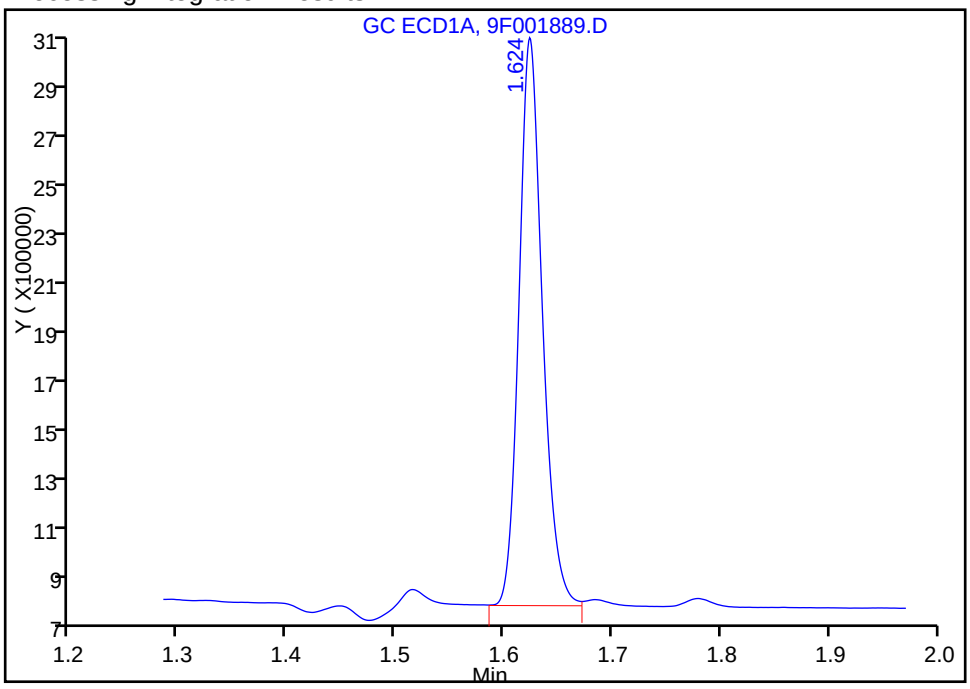
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001889.D
Injection Date: 12-May-2016 13:35:21 Instrument ID: CPESTGC9
Lims ID: IC 1248
Client ID:
Operator ID: ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD1A

## * 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 1

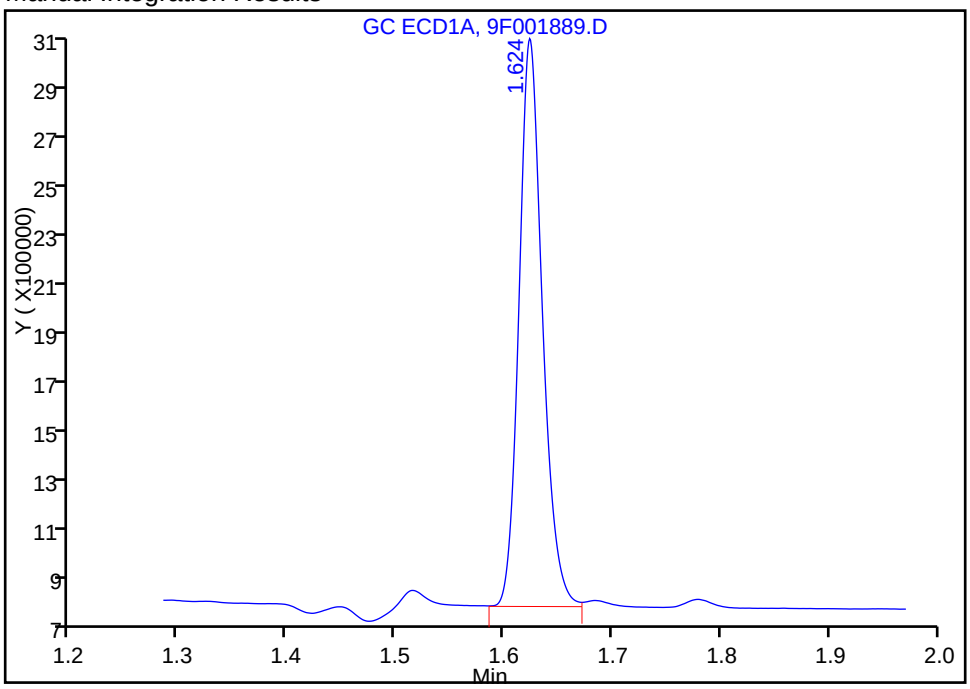
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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:

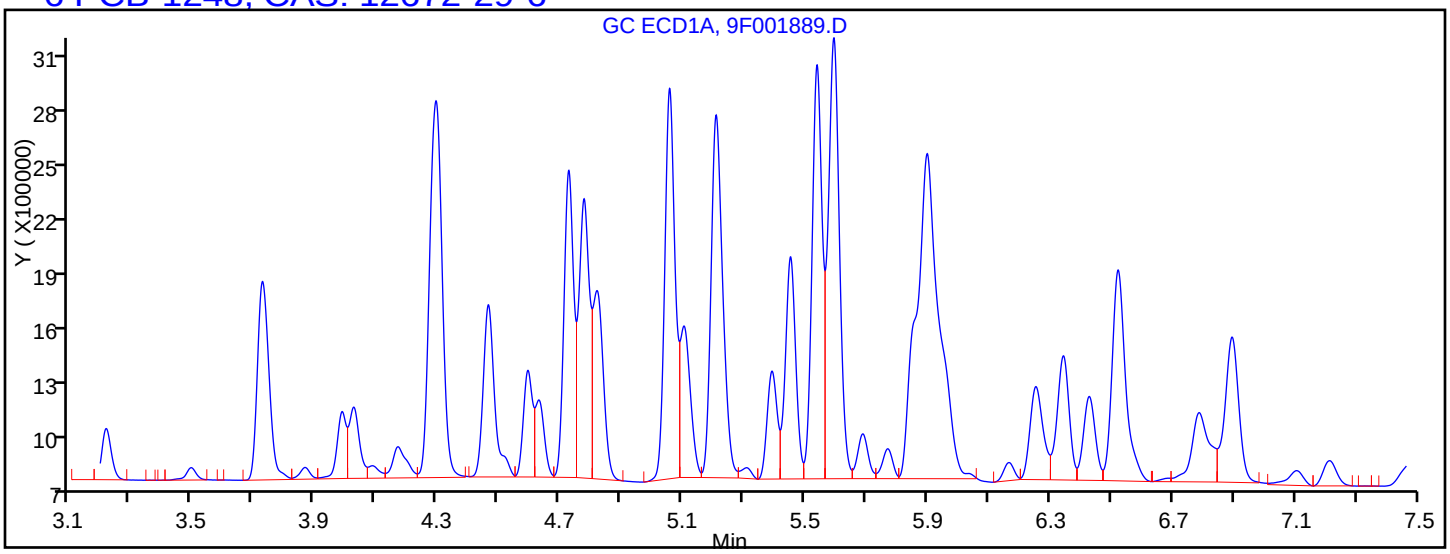
Operator ID: ALS Bottle#: 11 Worklist Smp#: 11

Injection Vol: 1.0 ul Dil. Factor: 1.0000

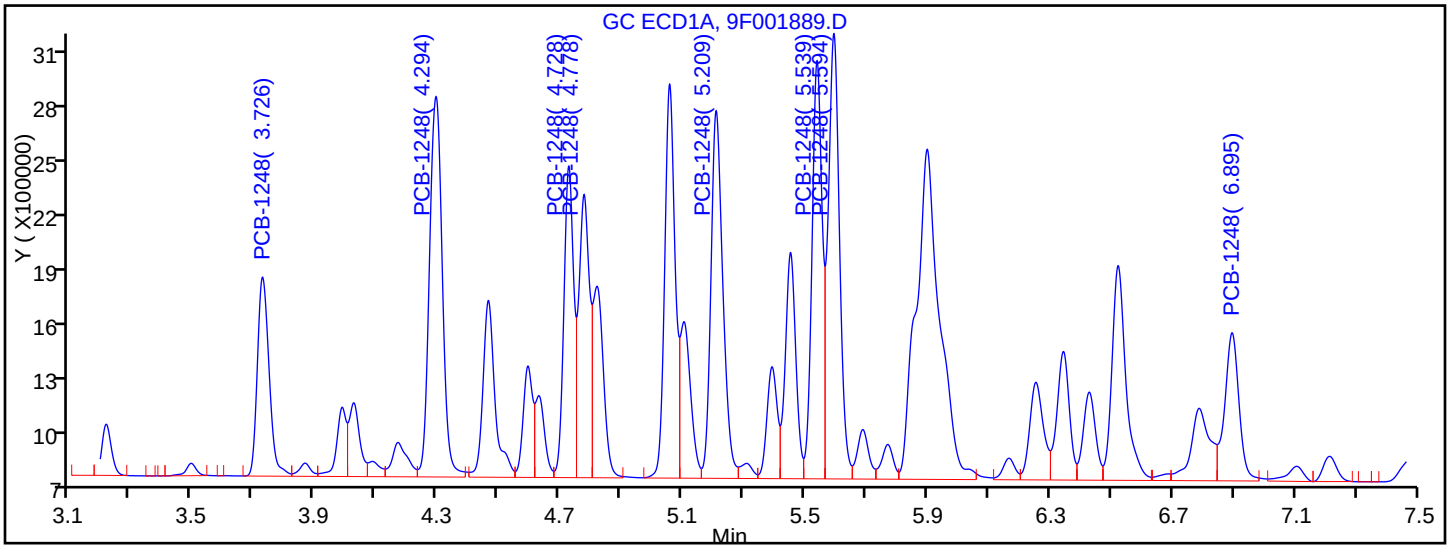
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

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

US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

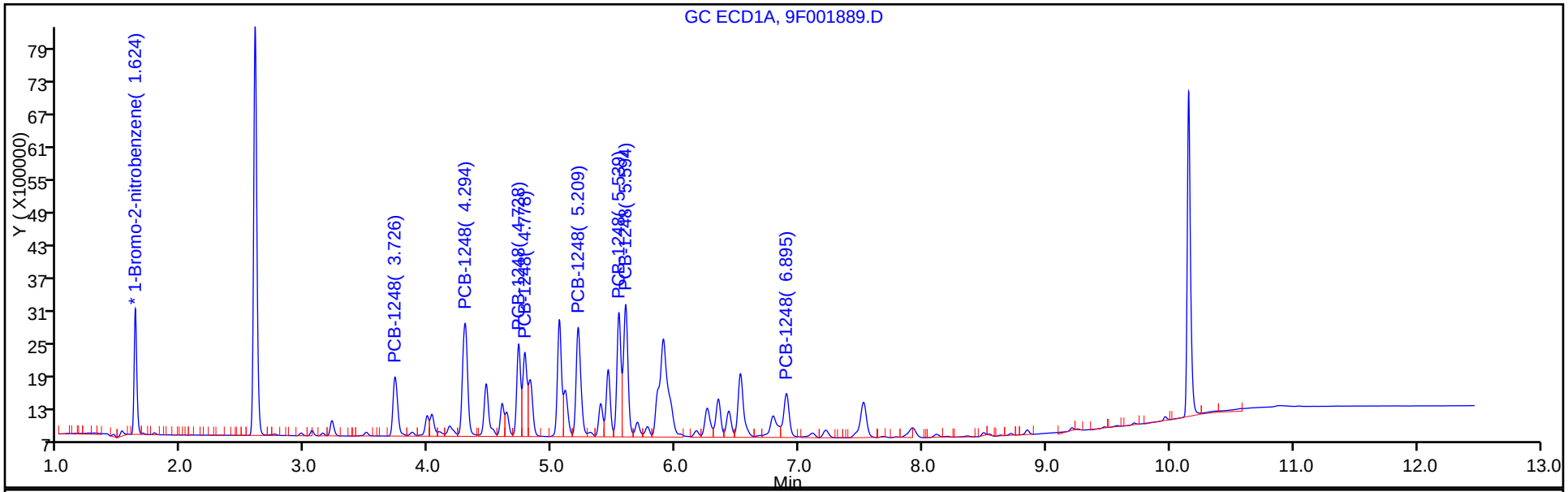
US EPA ARCHIVE DOCUMENT

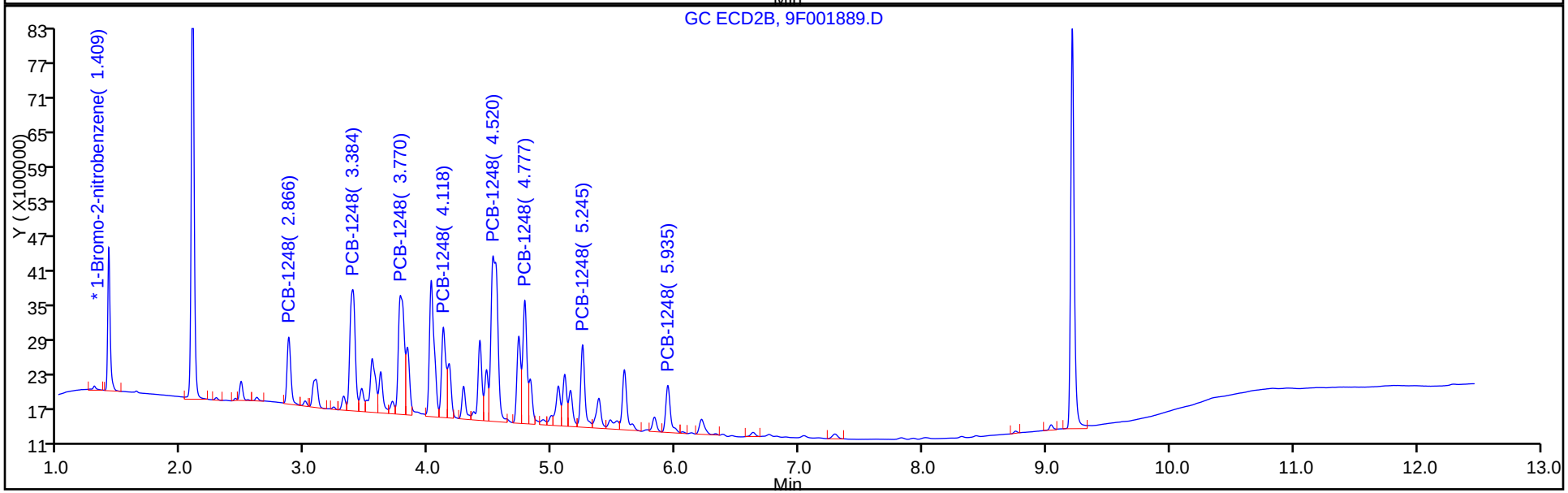
Report Date: 12-May-2016 15:22:23 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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:

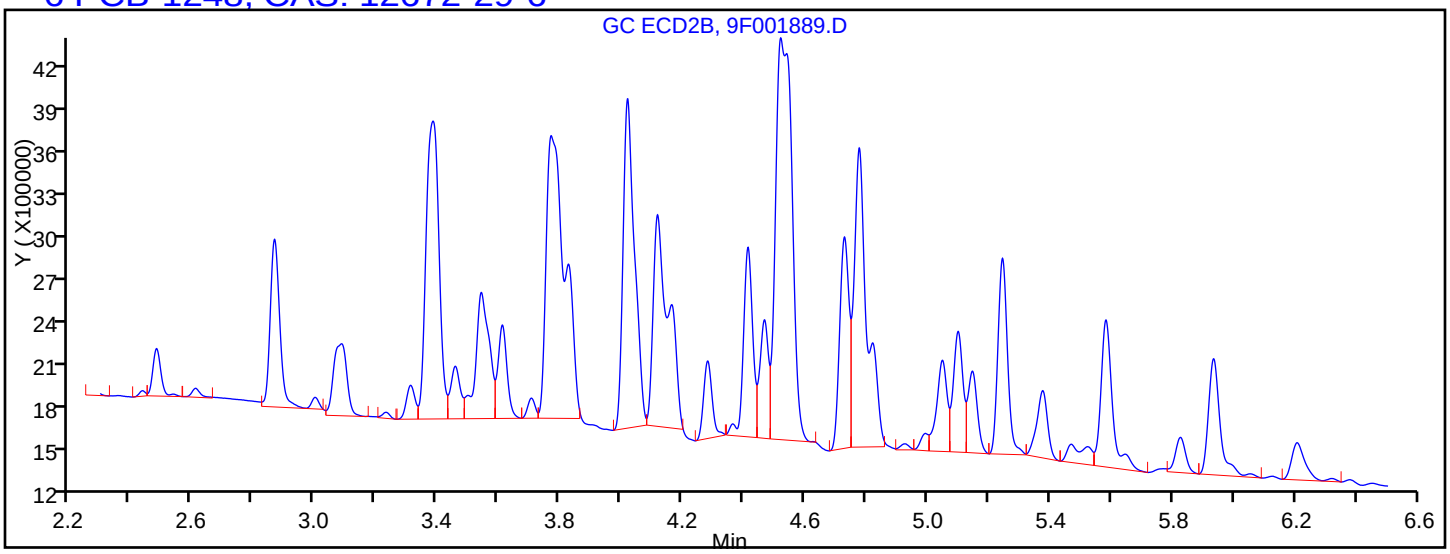
Operator ID: ALS Bottle#: 11 Worklist Smp#: 11

Injection Vol: 1.0 ul Dil. Factor: 1.0000

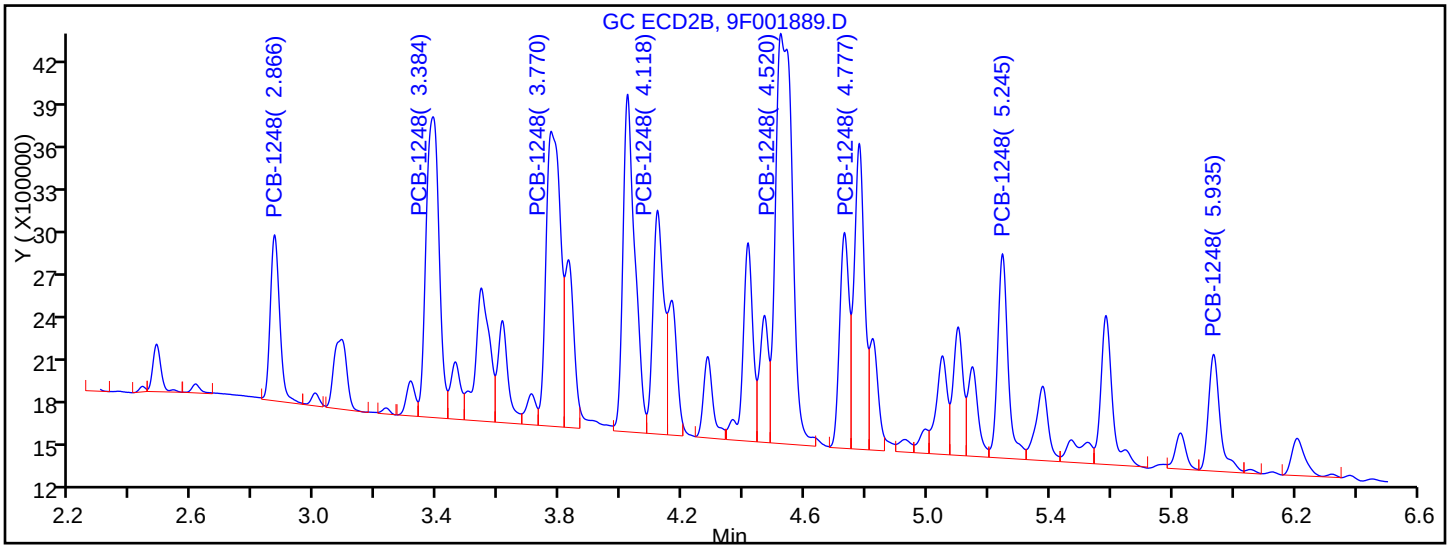
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

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



US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

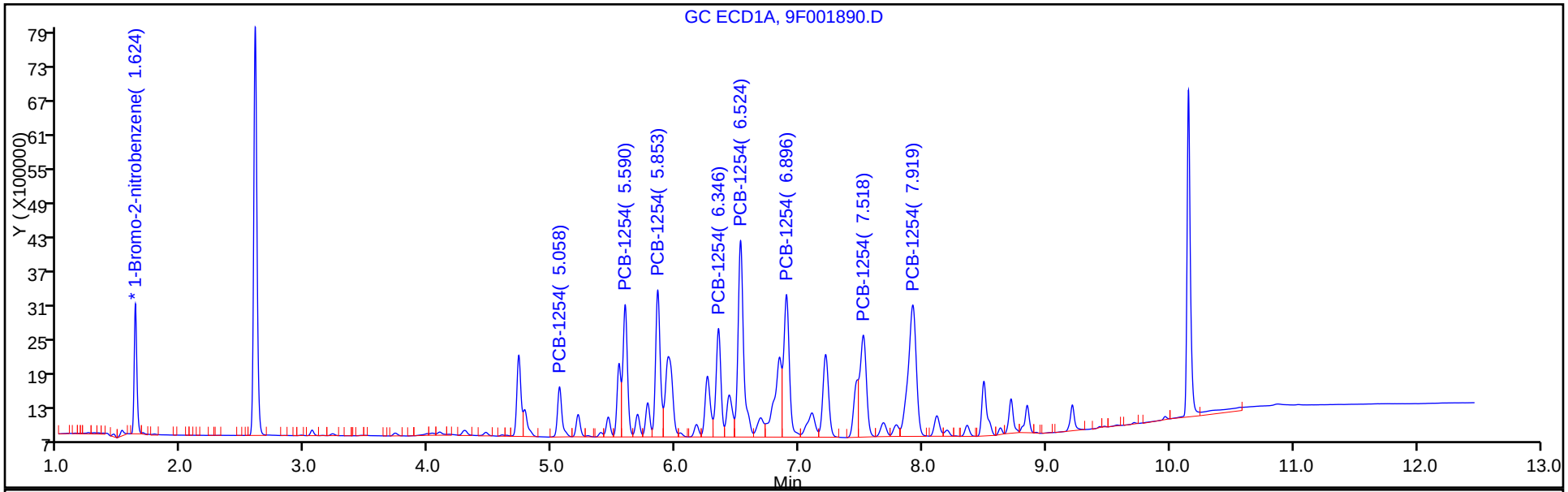
US EPA ARCHIVE DOCUMENT

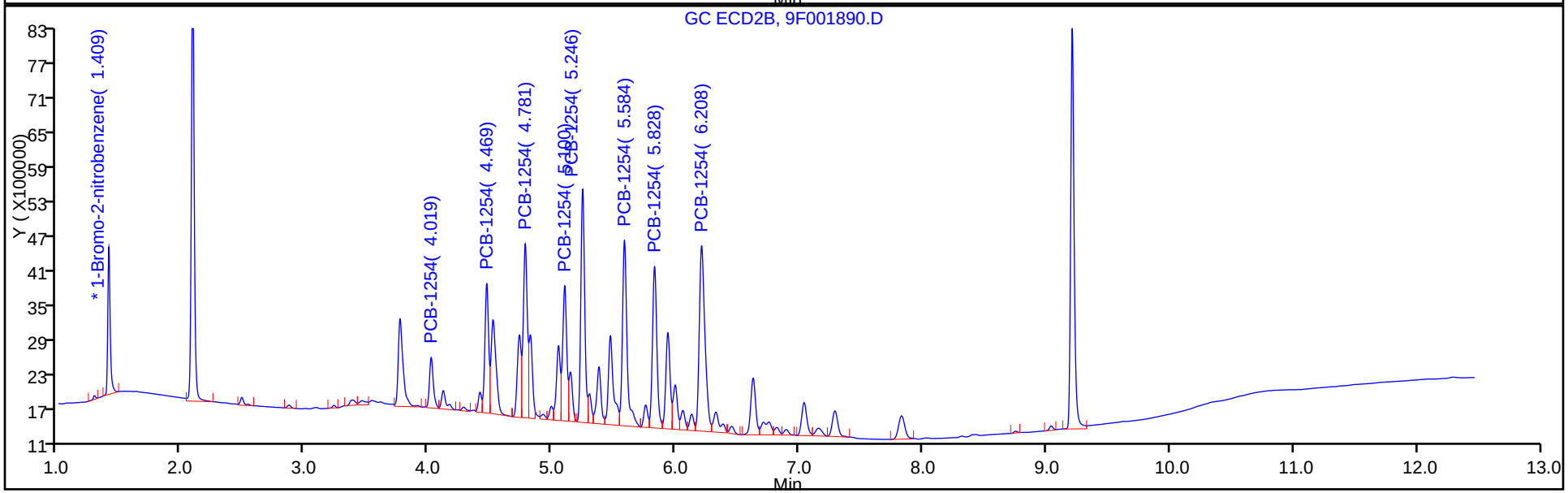
Report Date: 12-May-2016 15:22:31 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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

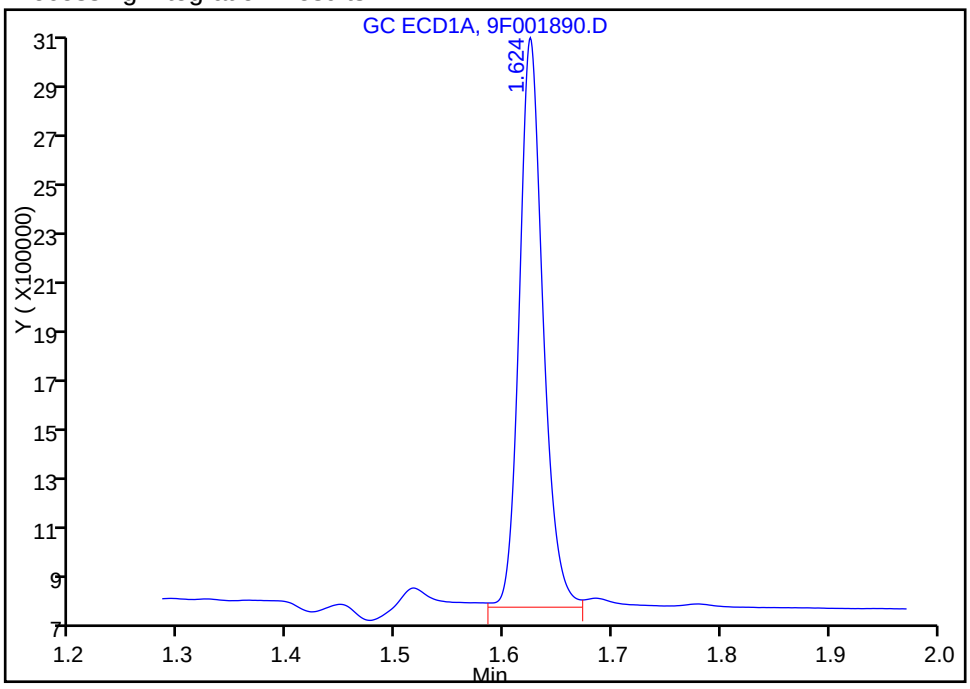
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001890.D
Injection Date: 12-May-2016 13:53:24 Instrument ID: CPESTGC9
Lims ID: IC 1254
Client ID:
Operator ID: ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD1A

## * 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 1

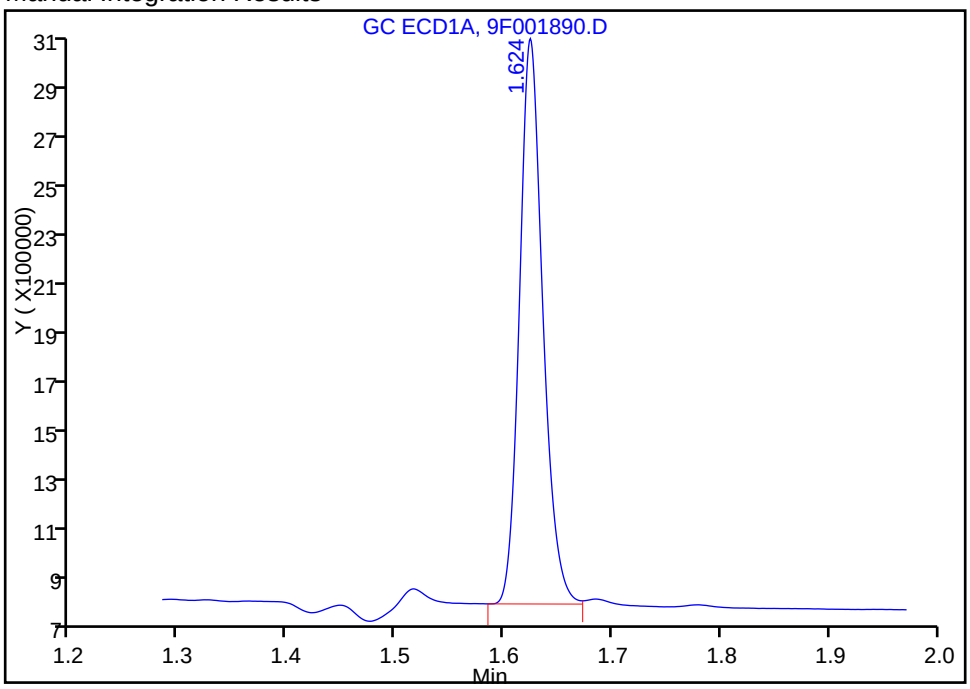
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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:

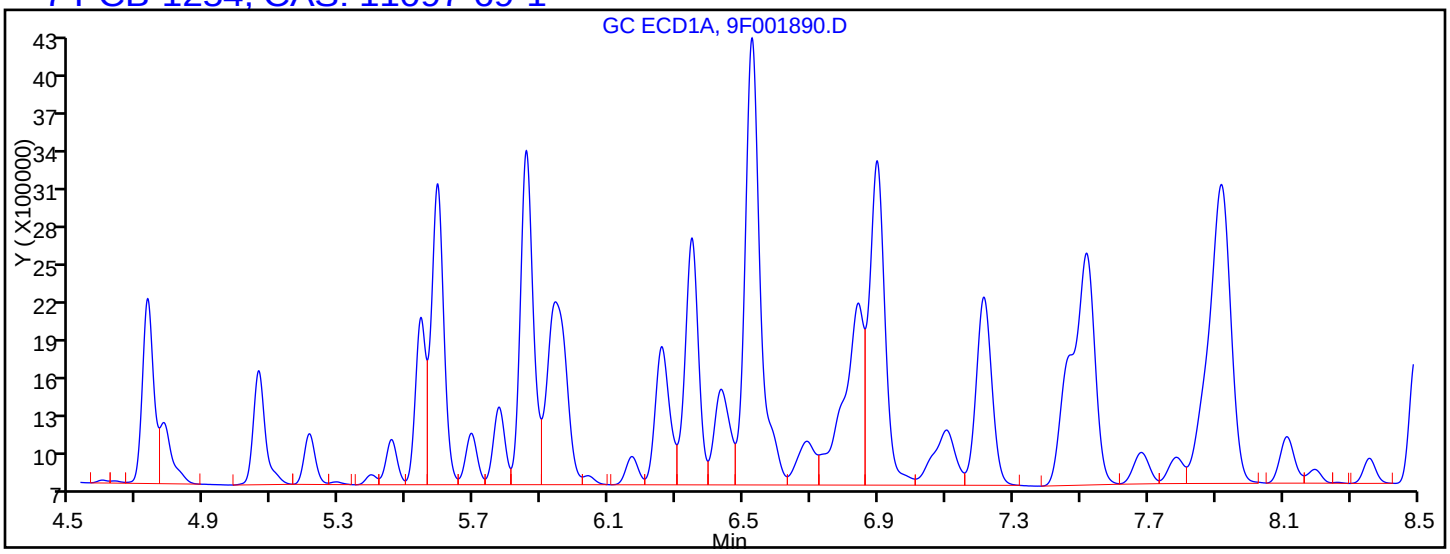
Operator ID: ALS Bottle#: 12 Worklist Smp#: 12

Injection Vol: 1.0 ul Dil. Factor: 1.0000

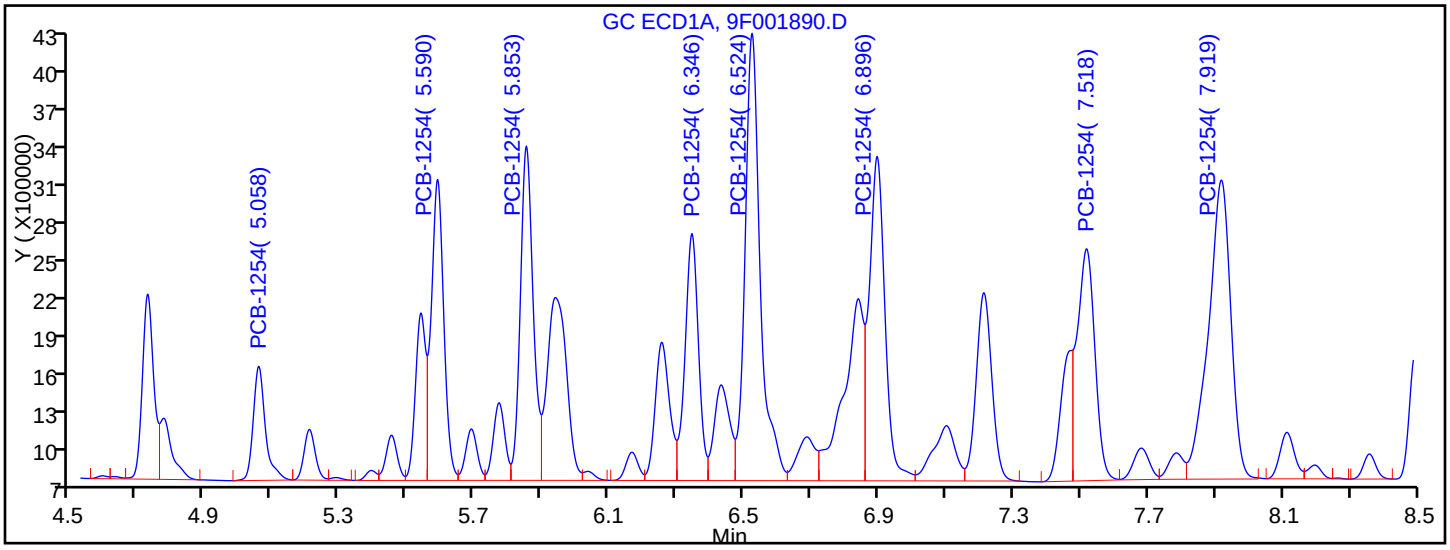
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

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

US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

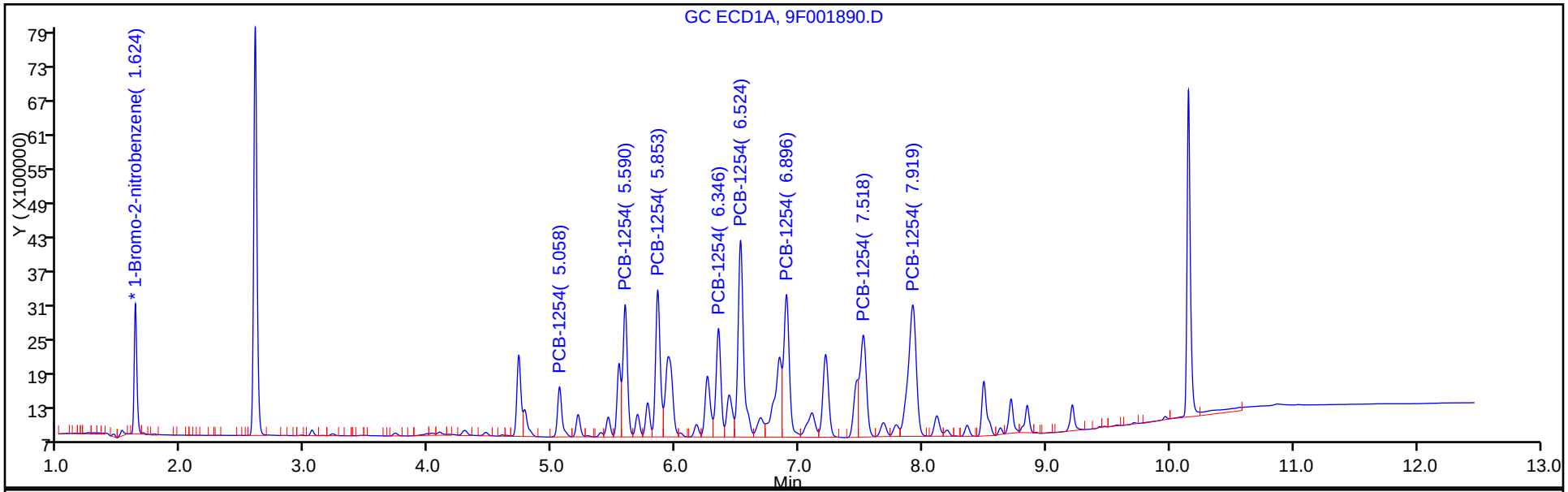
US EPA ARCHIVE DOCUMENT

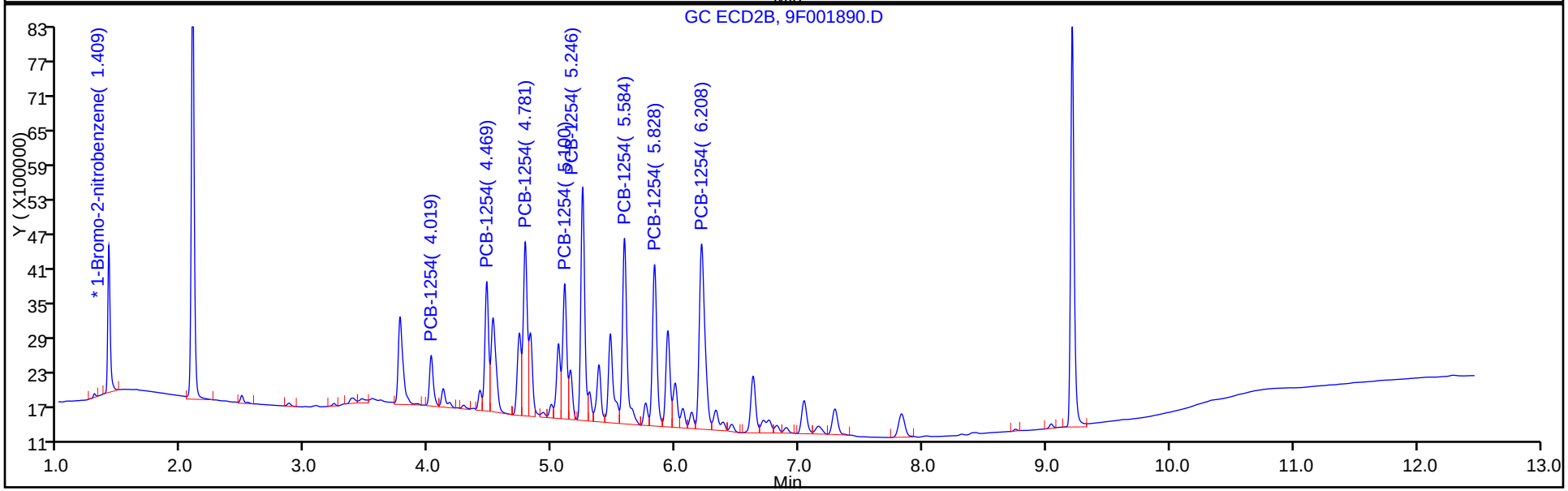
Report Date: 12-May-2016 15:22:32 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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 | | |



Manual Integration/User Assign Peak Report

TestAmerica Edison

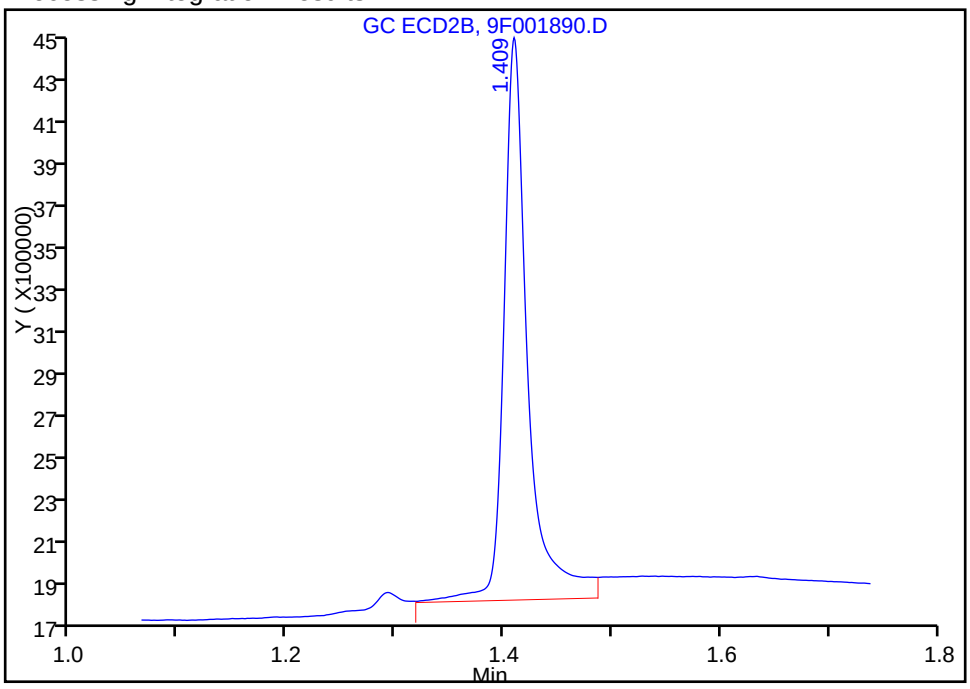
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001890.D
Injection Date: 12-May-2016 13:53:24 Instrument ID: CPESTGC9
Lims ID: IC 1254
Client ID:
Operator ID: ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD2B

## * 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

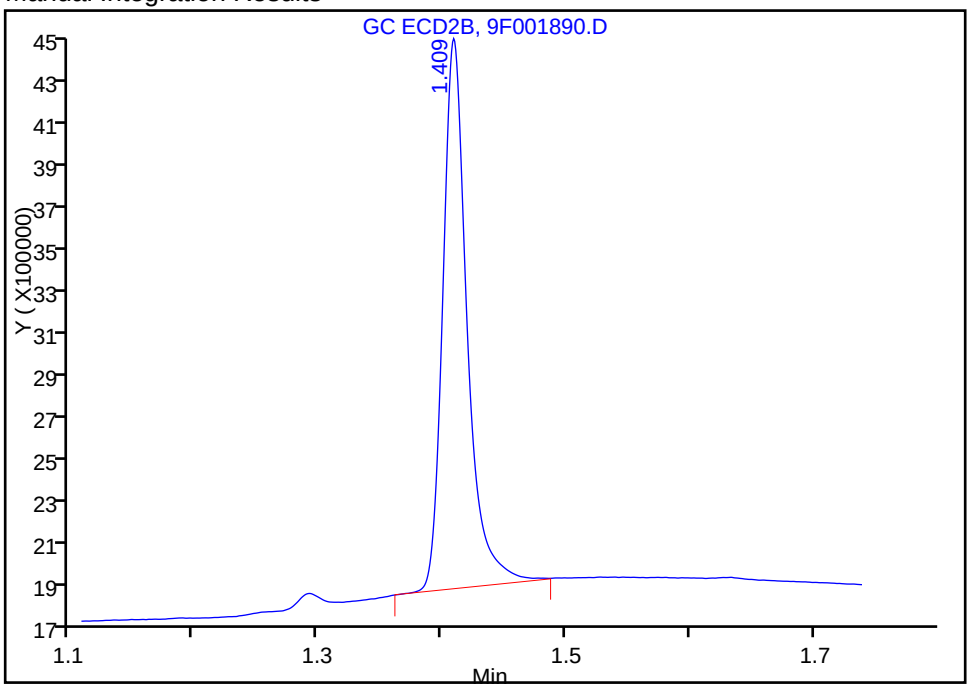
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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:

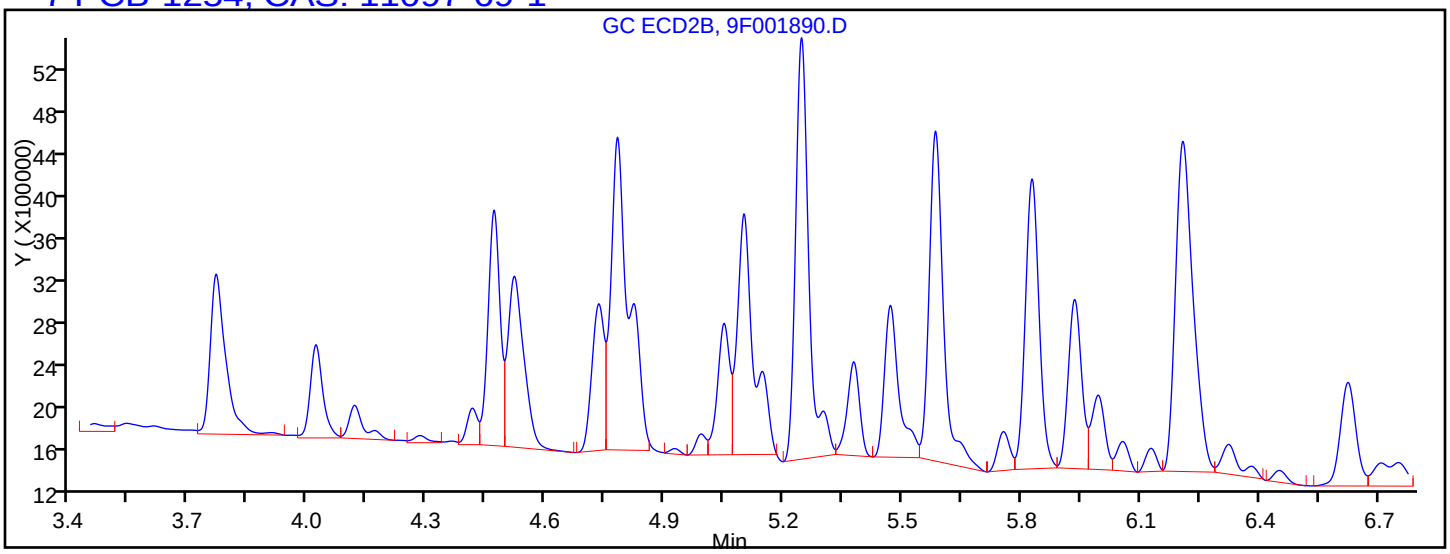
Operator ID: ALS Bottle#: 12 Worklist Smp#: 12

Injection Vol: 1.0 ul Dil. Factor: 1.0000

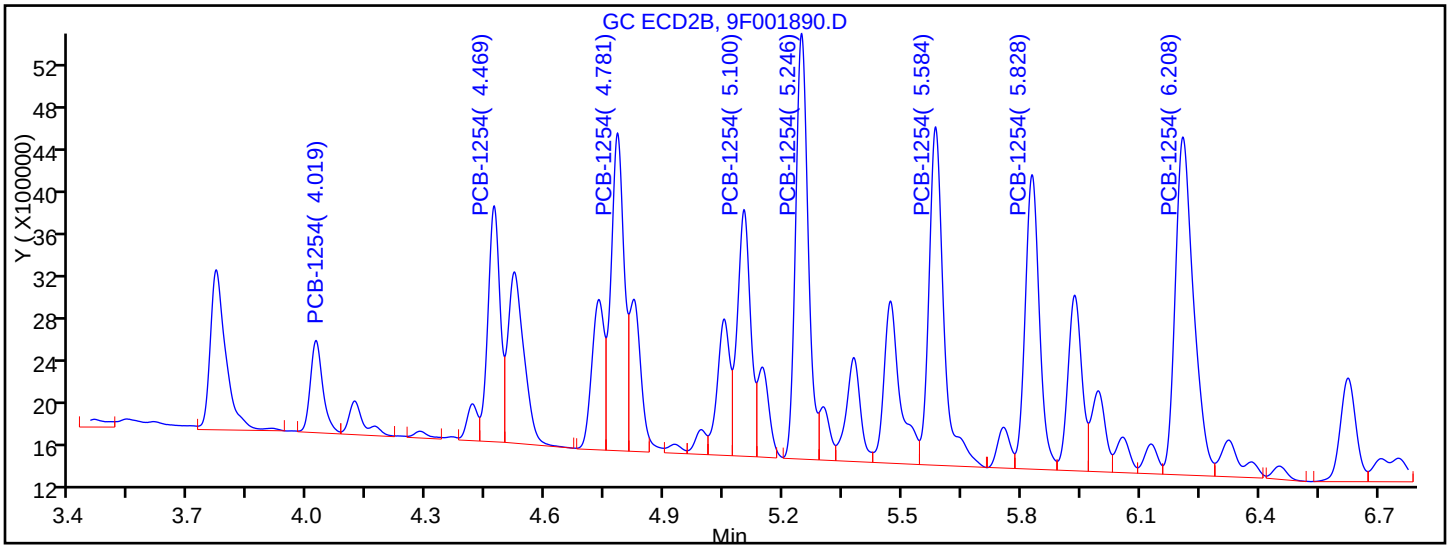
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

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

US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

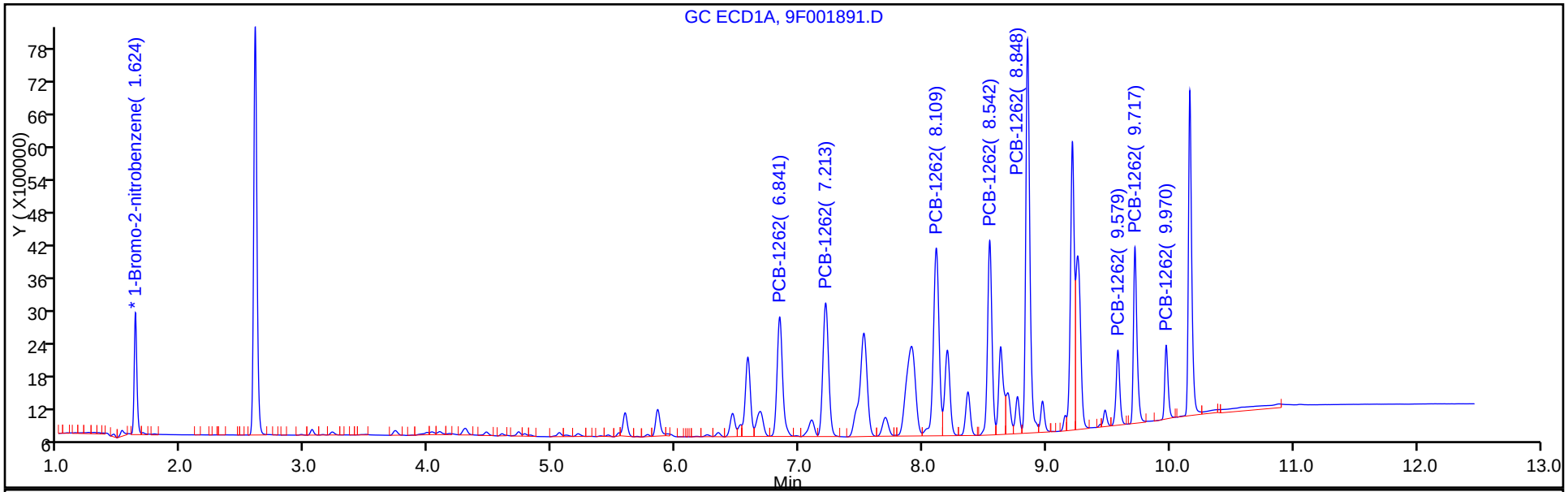
US EPA ARCHIVE DOCUMENT

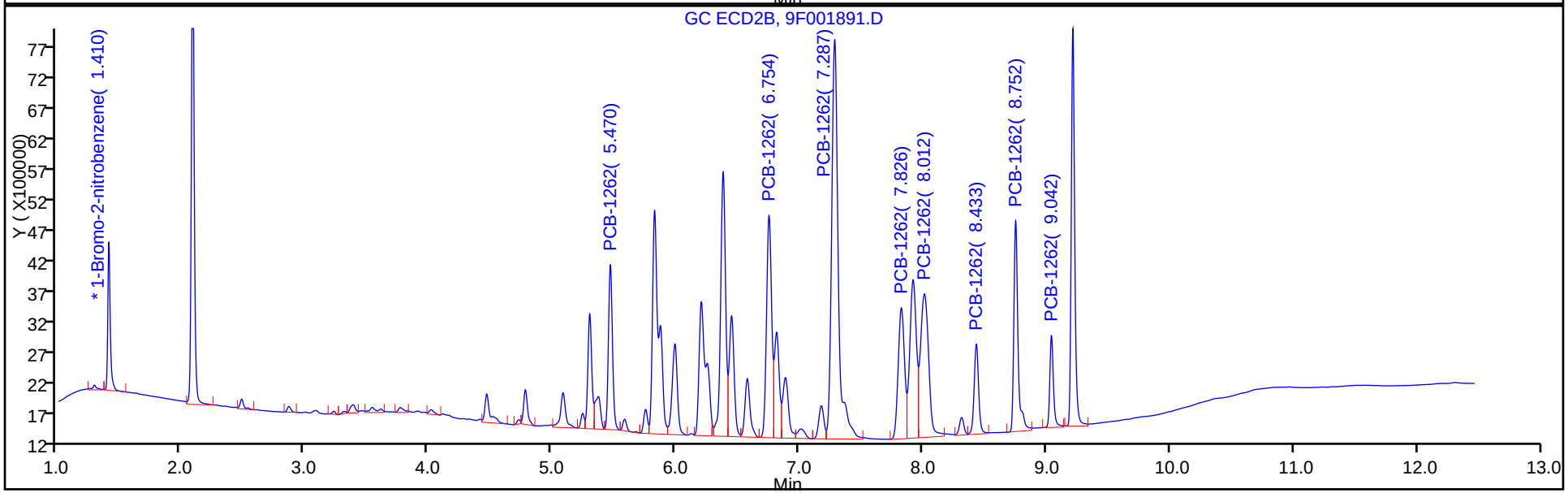
Report Date: 12-May-2016 15:22:38 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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:

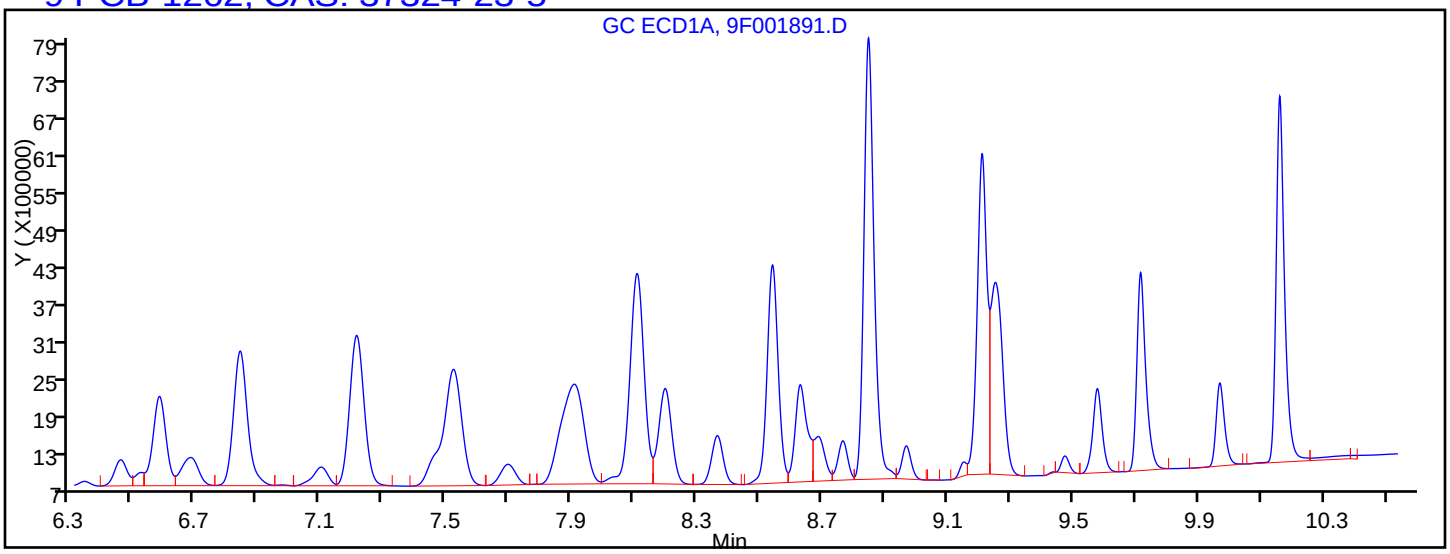
Operator ID: ALS Bottle#: 13 Worklist Smp#: 13

Injection Vol: 1.0 ul Dil. Factor: 1.0000

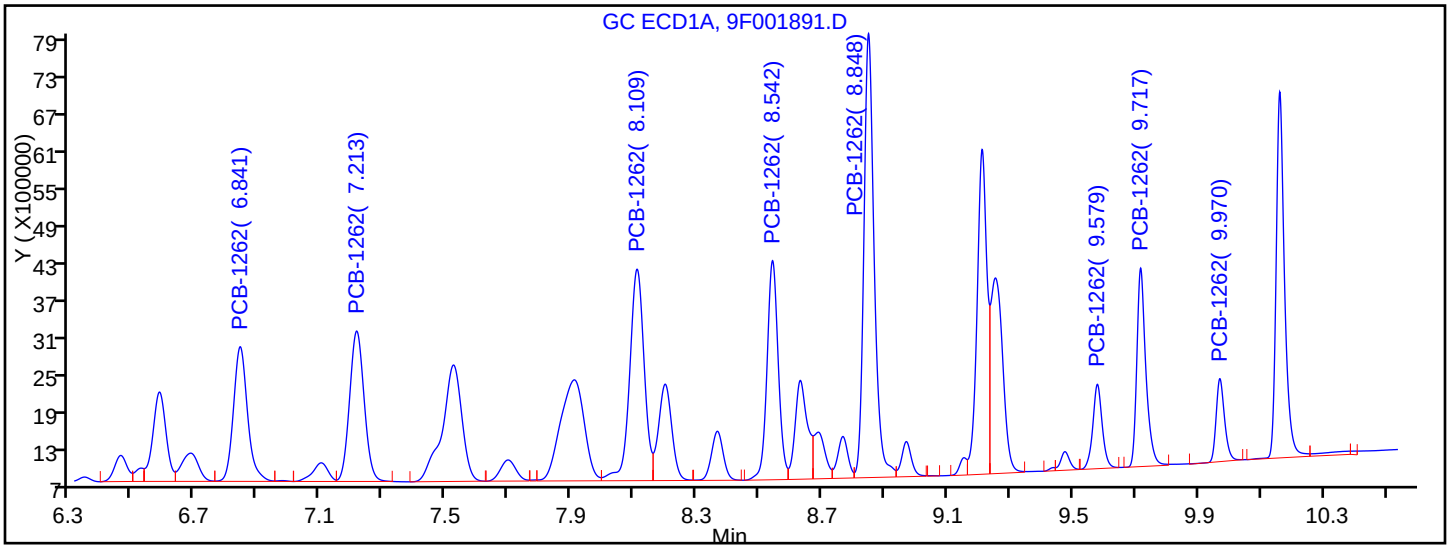
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

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

US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

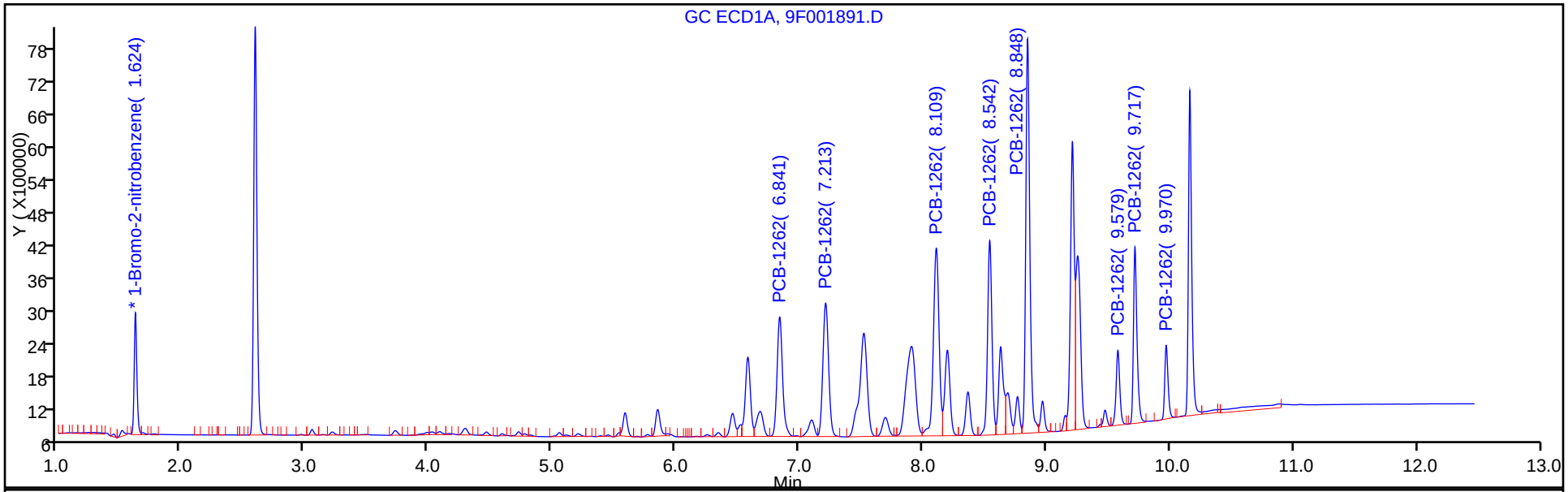
US EPA ARCHIVE DOCUMENT

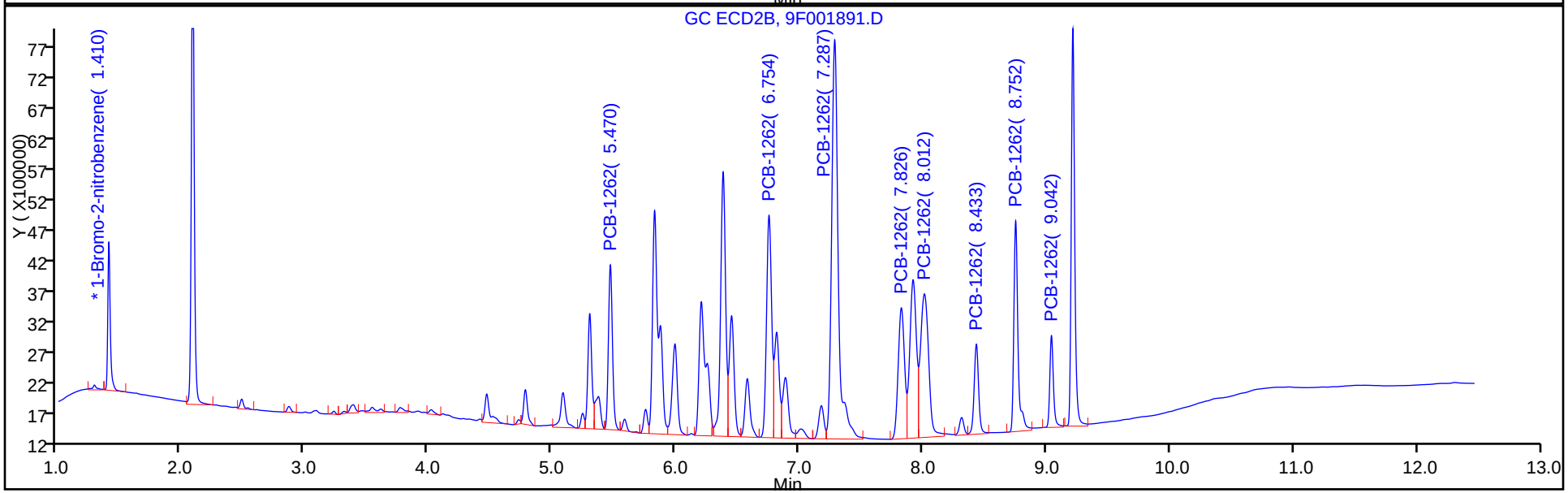
Report Date: 12-May-2016 15:22:39 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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 | | |



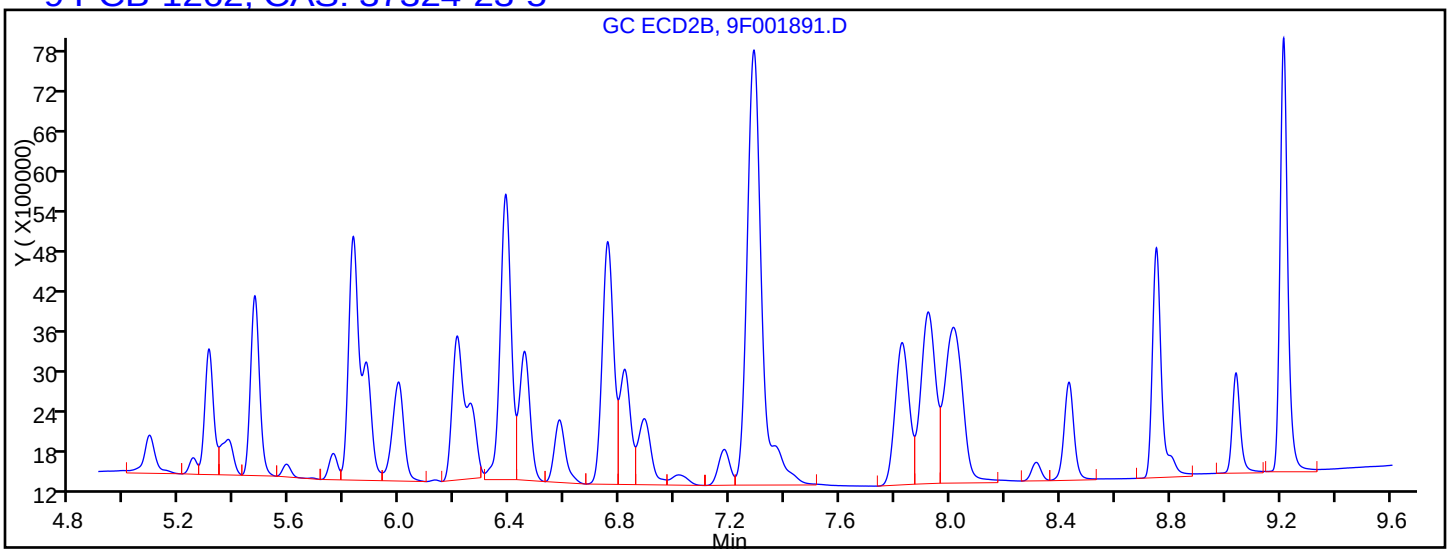
Report Date: 12-May-2016 15:22:39 Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Edison

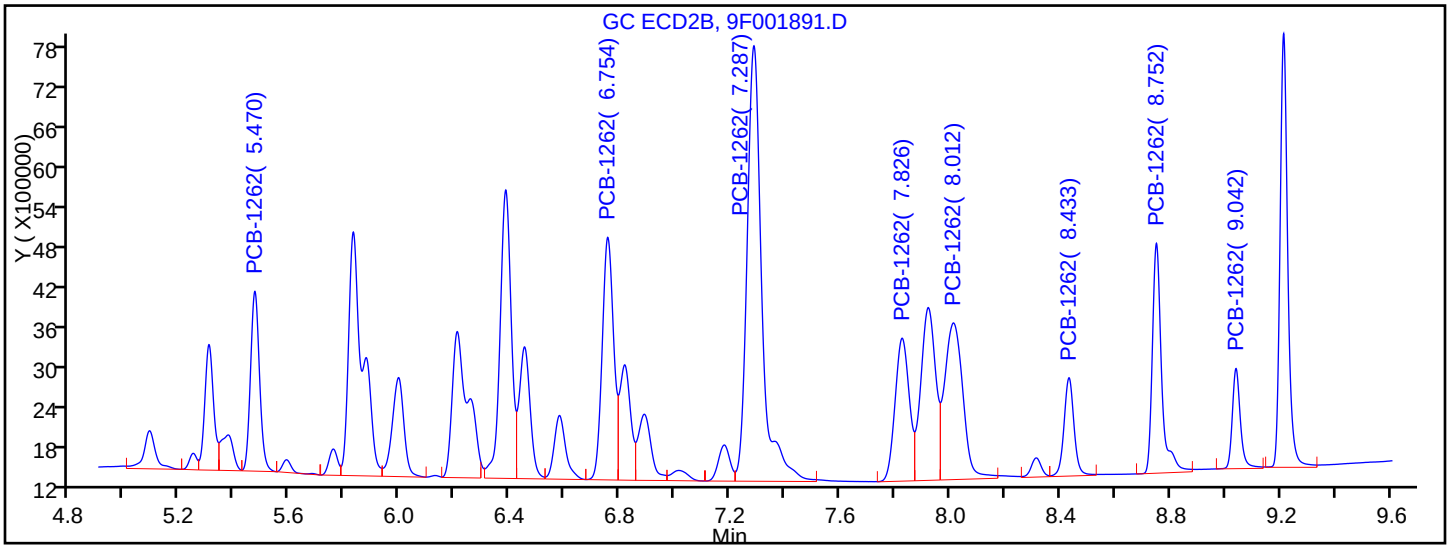
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160512-40924.b\9F001891.D

| | | | | | |
|---|---|---|---|---|---|
| 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

US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

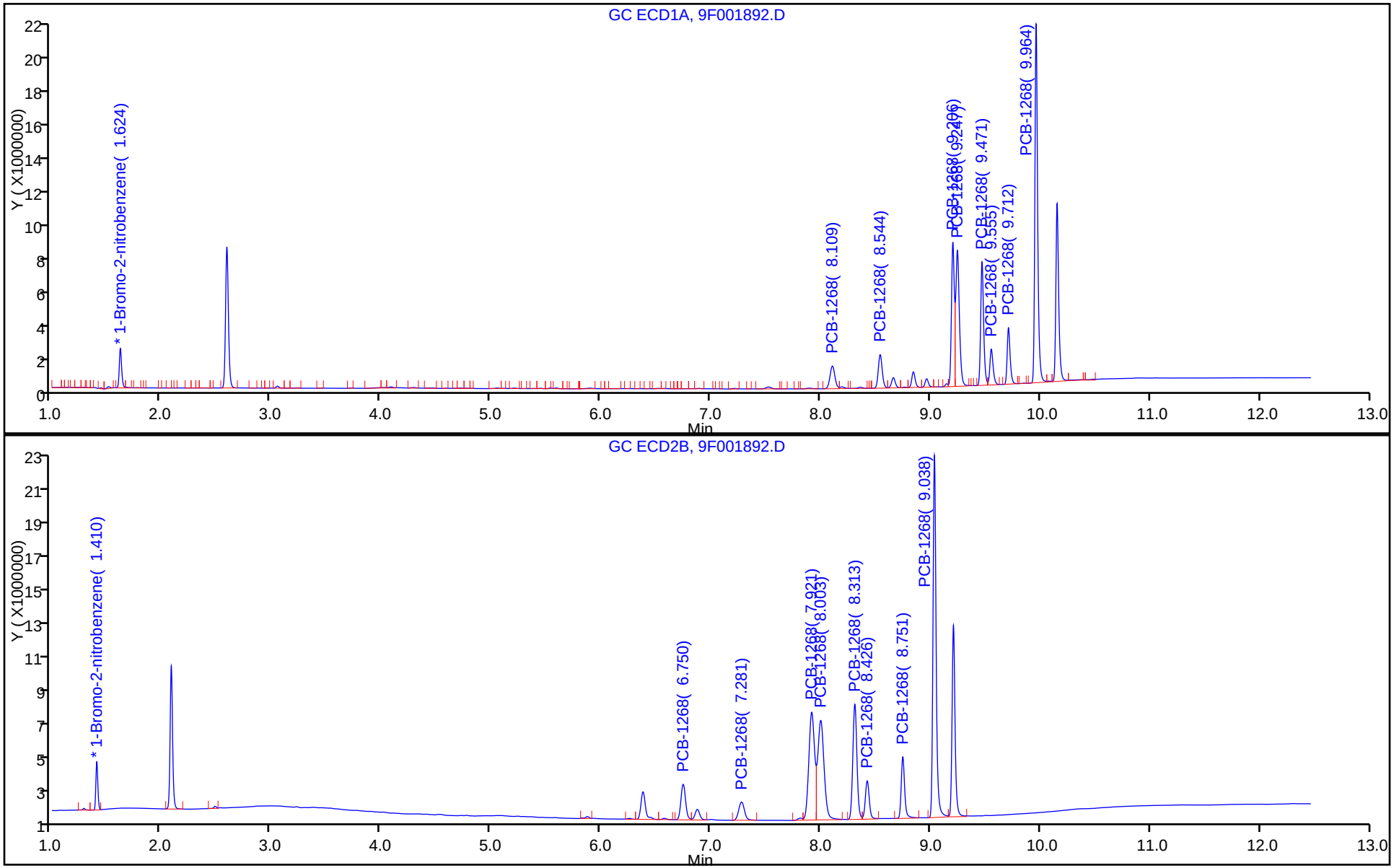
US EPA ARCHIVE DOCUMENT

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:

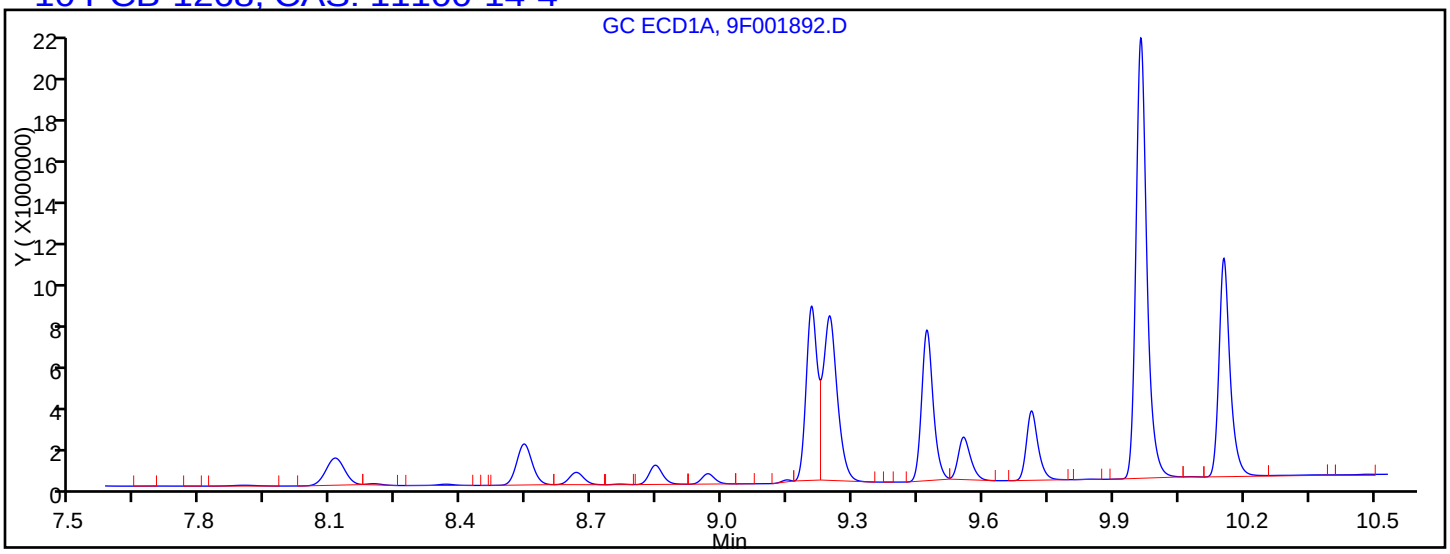
Operator ID: ALS Bottle#: 14 Worklist Smp#: 14

Injection Vol: 1.0 ul Dil. Factor: 1.0000

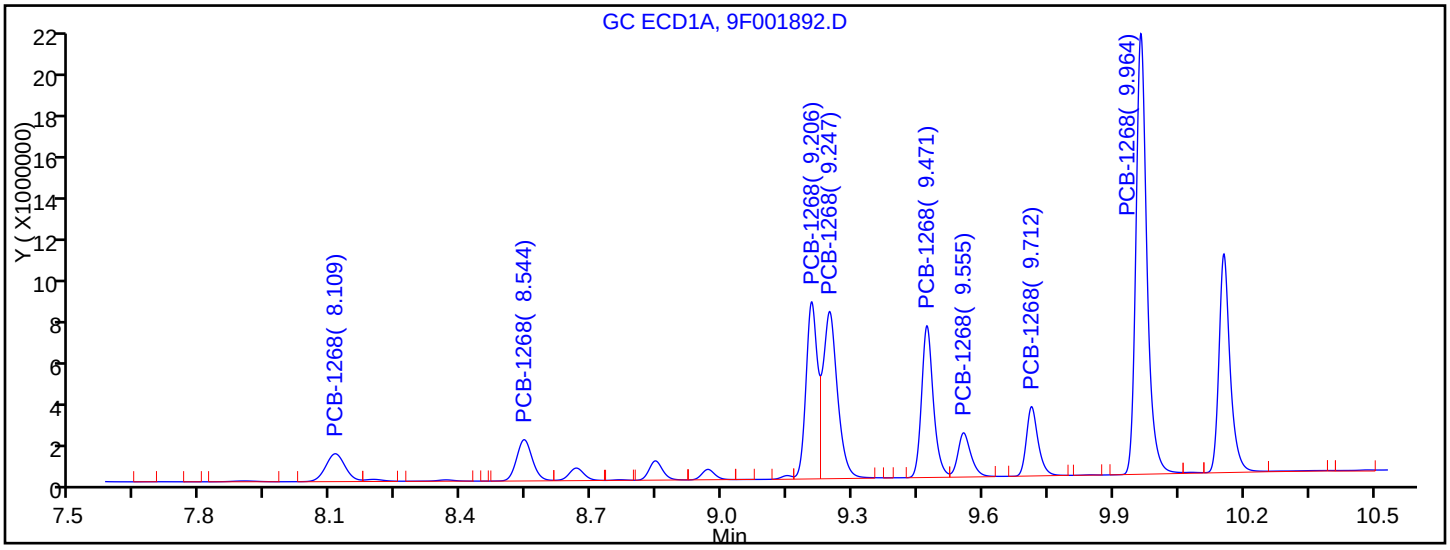
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

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

US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

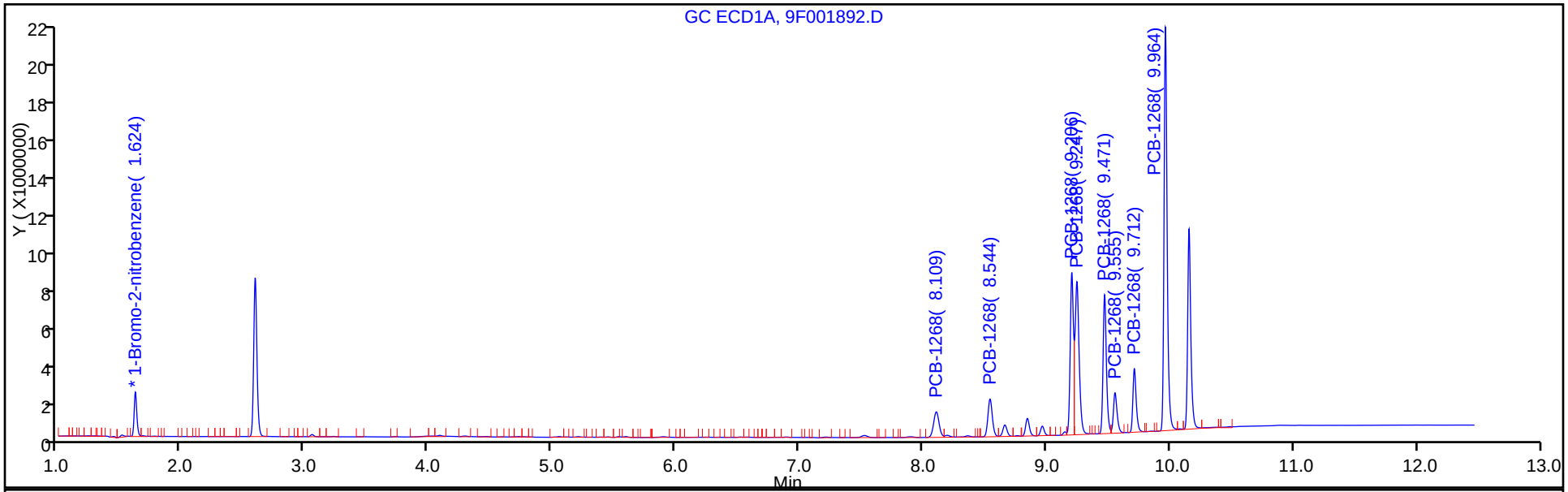
US EPA ARCHIVE DOCUMENT

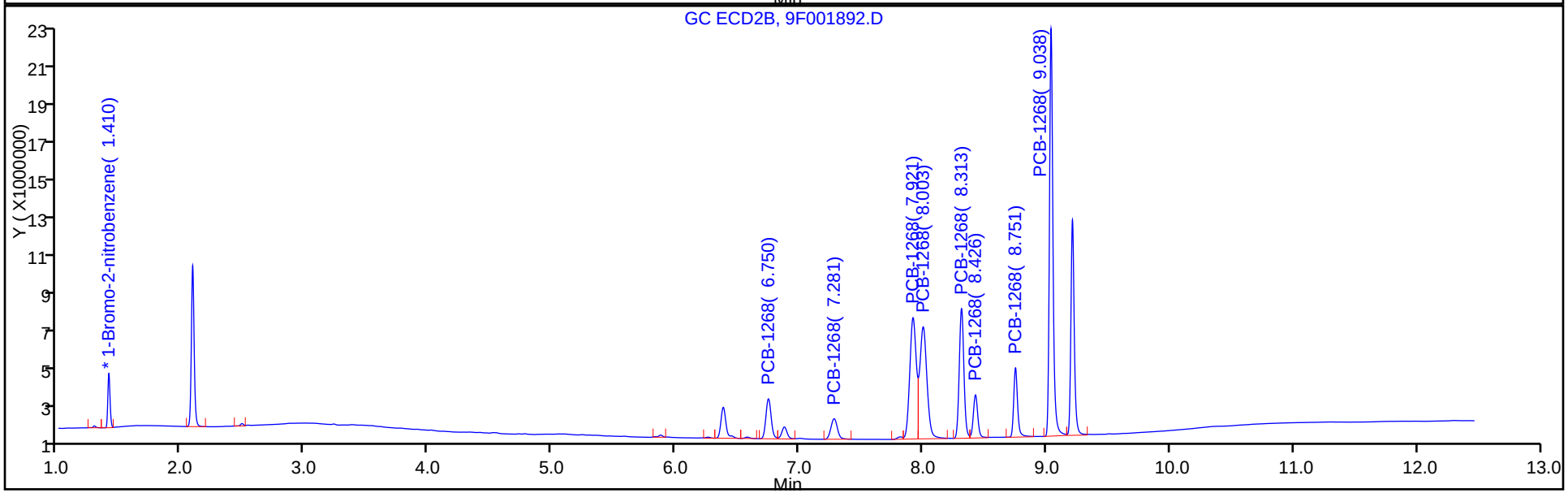
Report Date: 12-May-2016 15:22:44 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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:

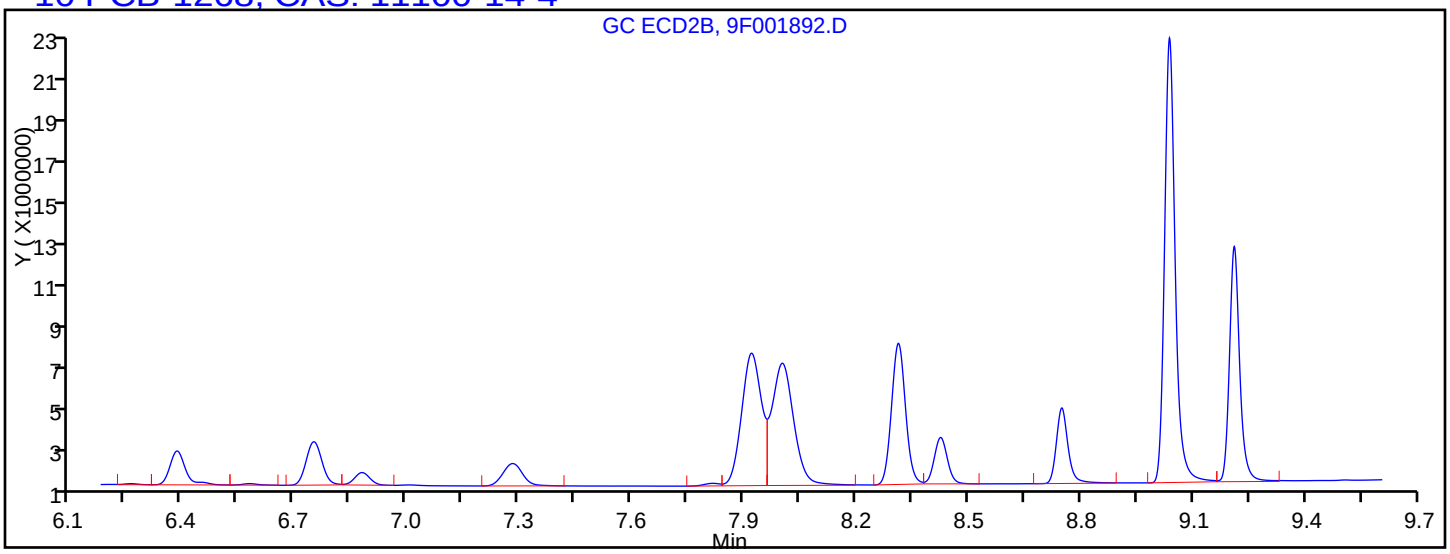
Operator ID: ALS Bottle#: 14 Worklist Smp#: 14

Injection Vol: 1.0 ul Dil. Factor: 1.0000

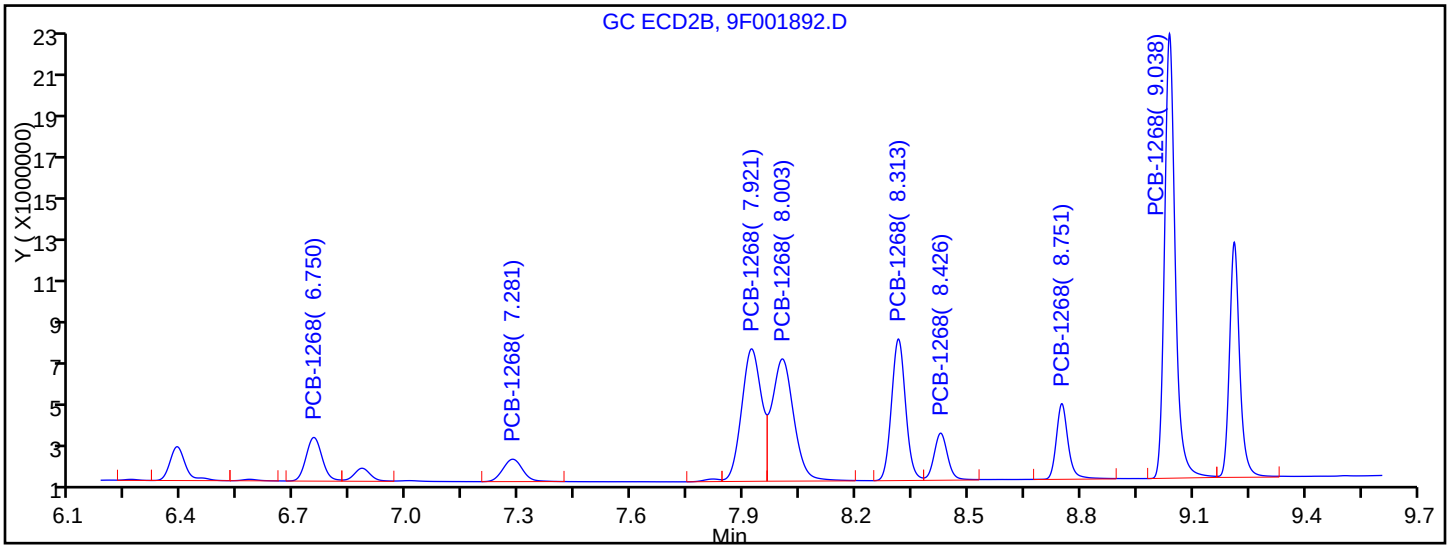
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

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

US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

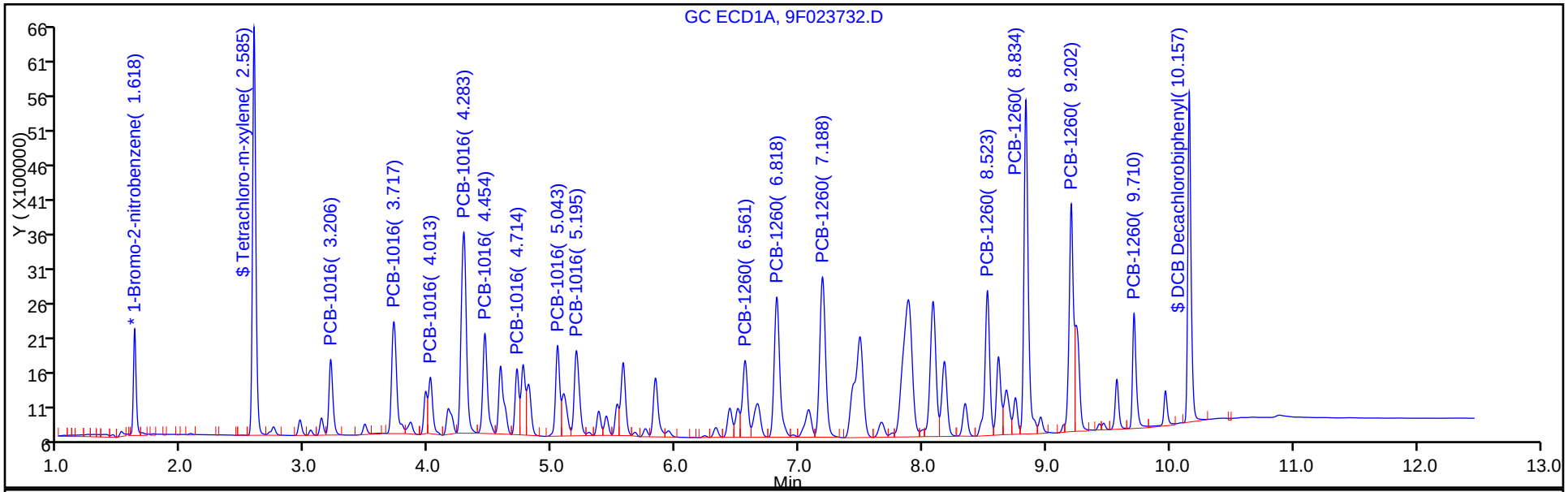
US EPA ARCHIVE DOCUMENT

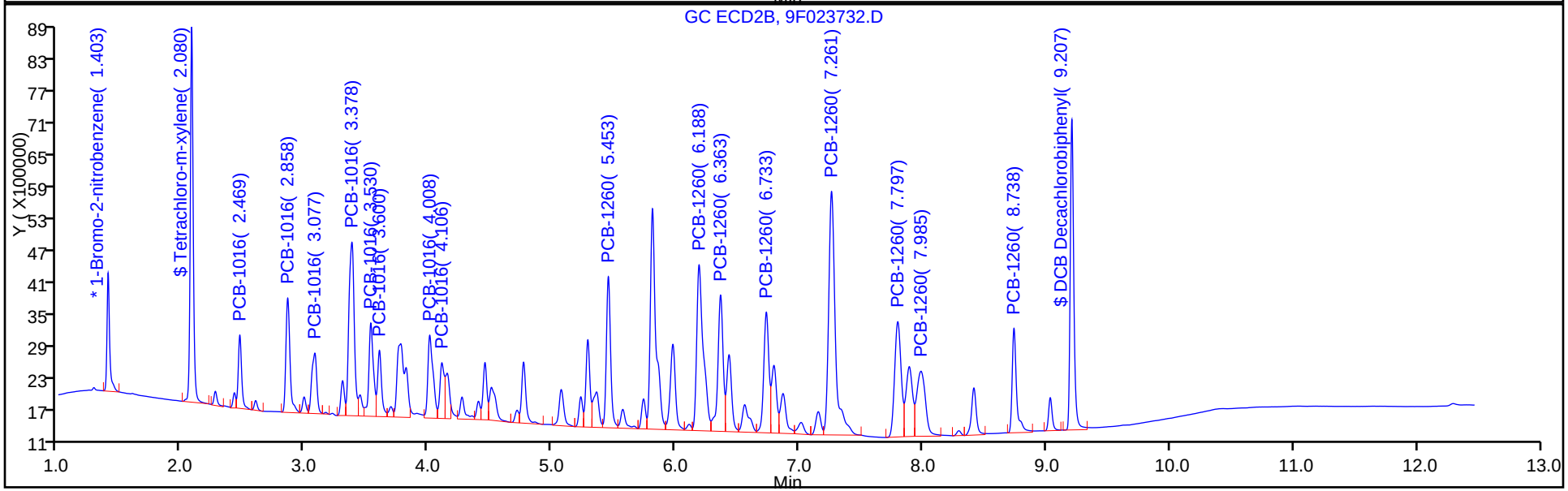
Report Date: 13-Jun-2016 09:03:06 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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 | | |



Manual Integration/User Assign Peak Report

TestAmerica Edison

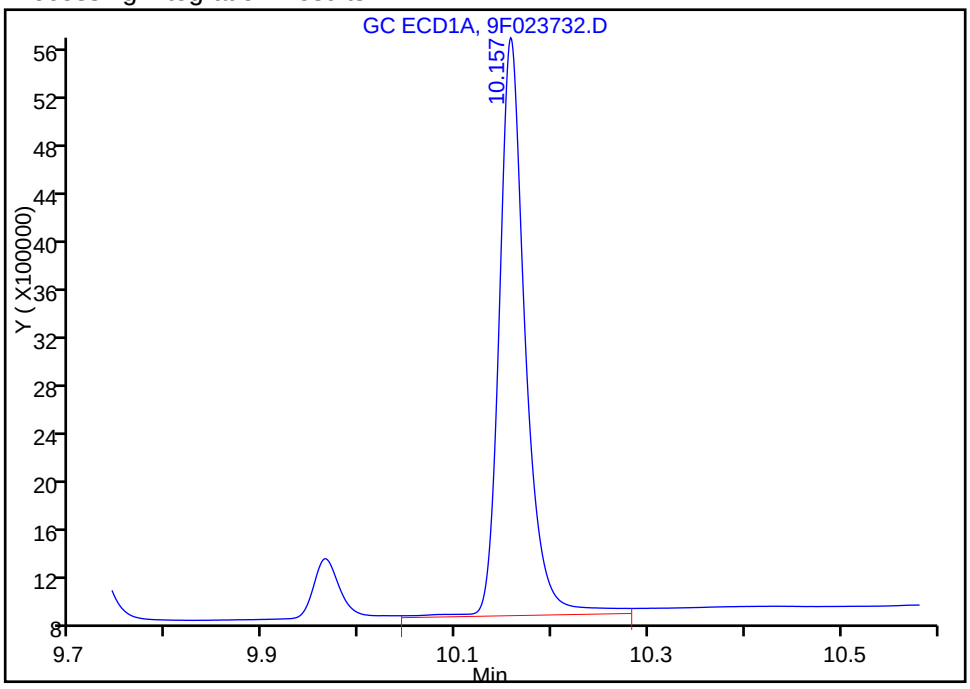
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023732.D
Injection Date: 11-Jun-2016 13:42:16 Instrument ID: CPESTGC9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD1A

## $ 11 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

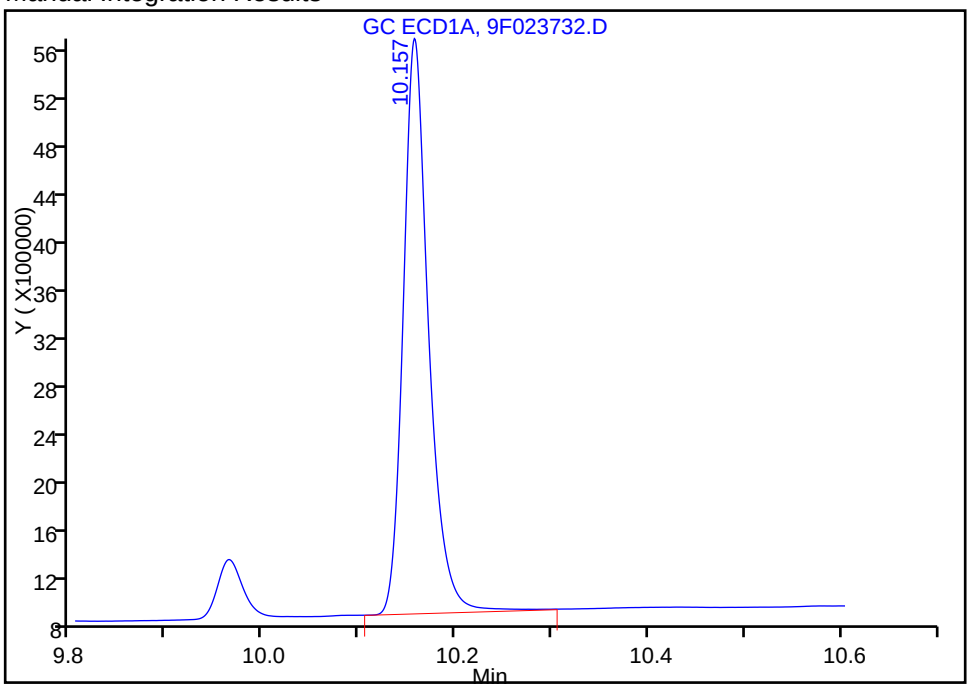
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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 | |

US EPA ARCHIVE DOCUMENT

## 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 |

US EPA ARCHIVE DOCUMENT

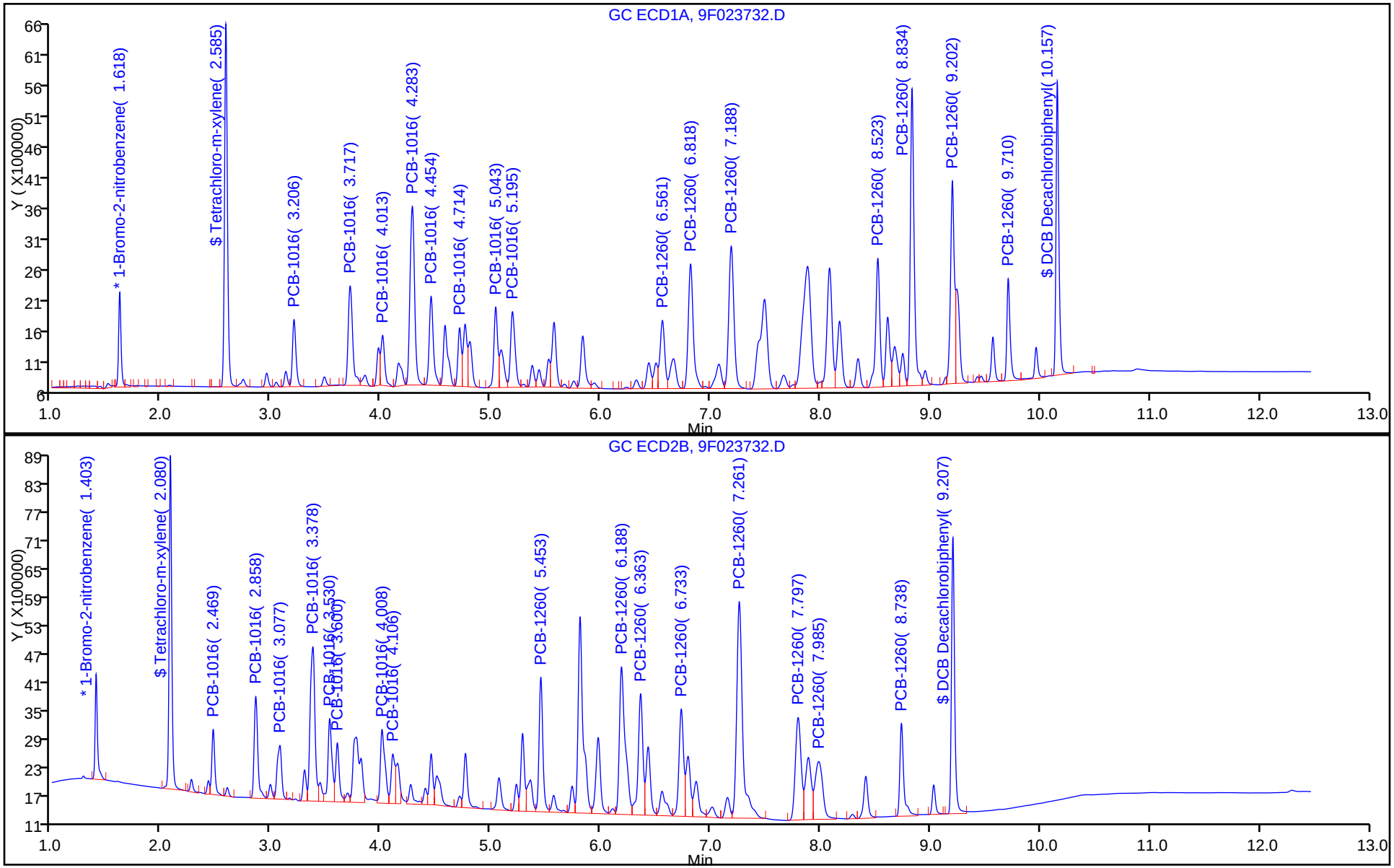
US EPA ARCHIVE DOCUMENT

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

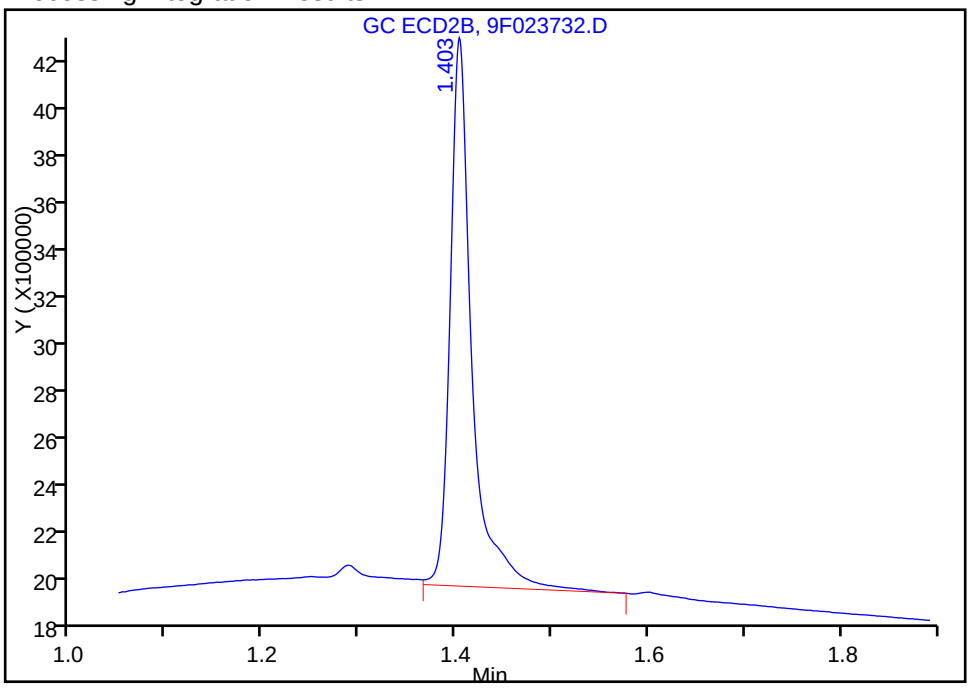
Data File: \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023732.D
Injection Date: 11-Jun-2016 13:42:16 Instrument ID: CPESTGC9
Lims ID: CCVIS
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD
Column: Detector GC ECD2B

## * 13 1-Bromo-2-nitrobenzene, CAS: 577-19-5

Signal: 2

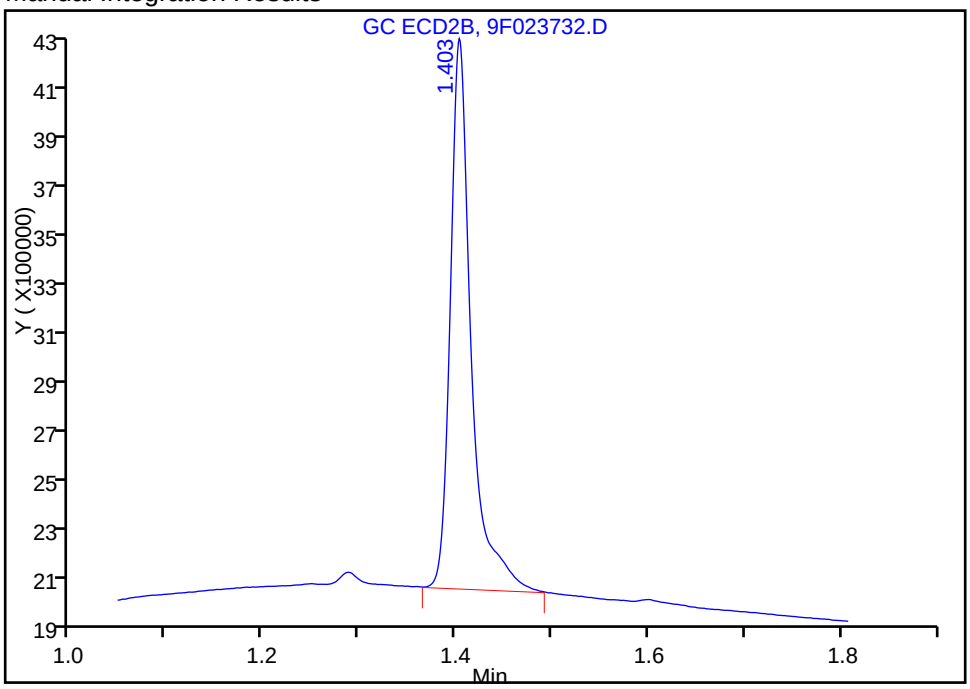
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

Manual Integration/User Assign Peak Report

TestAmerica Edison

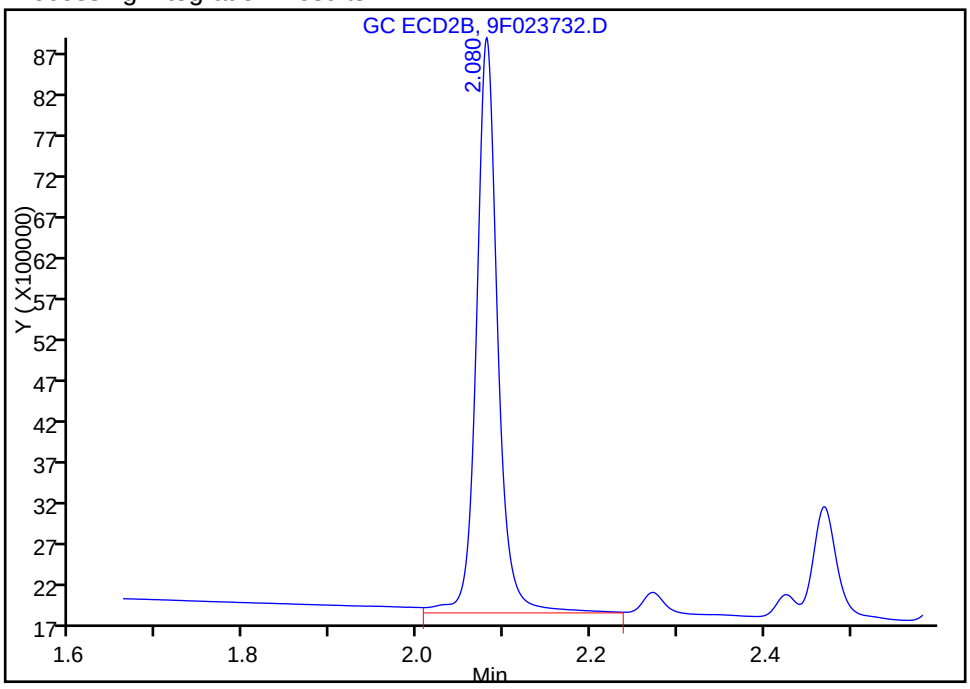
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023732.D | | | | |
| Injection Date: | 11-Jun-2016 13:42:16 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | CCVIS | | | | |
| Client ID: | | | | | |
| Operator ID: | | ALS Bottle#: | 3 | Worklist 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

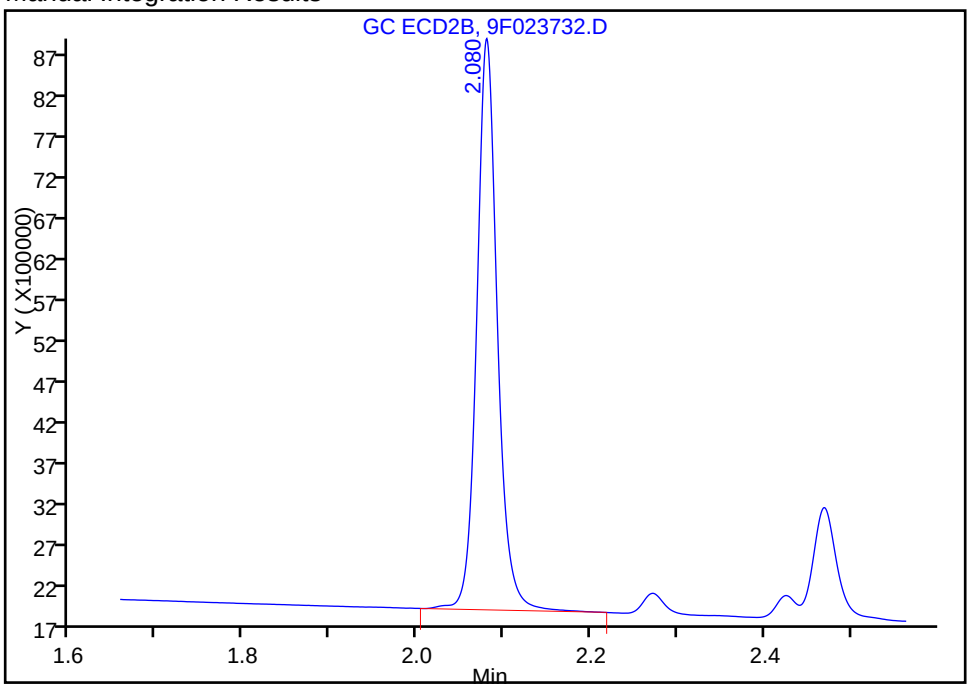
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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:

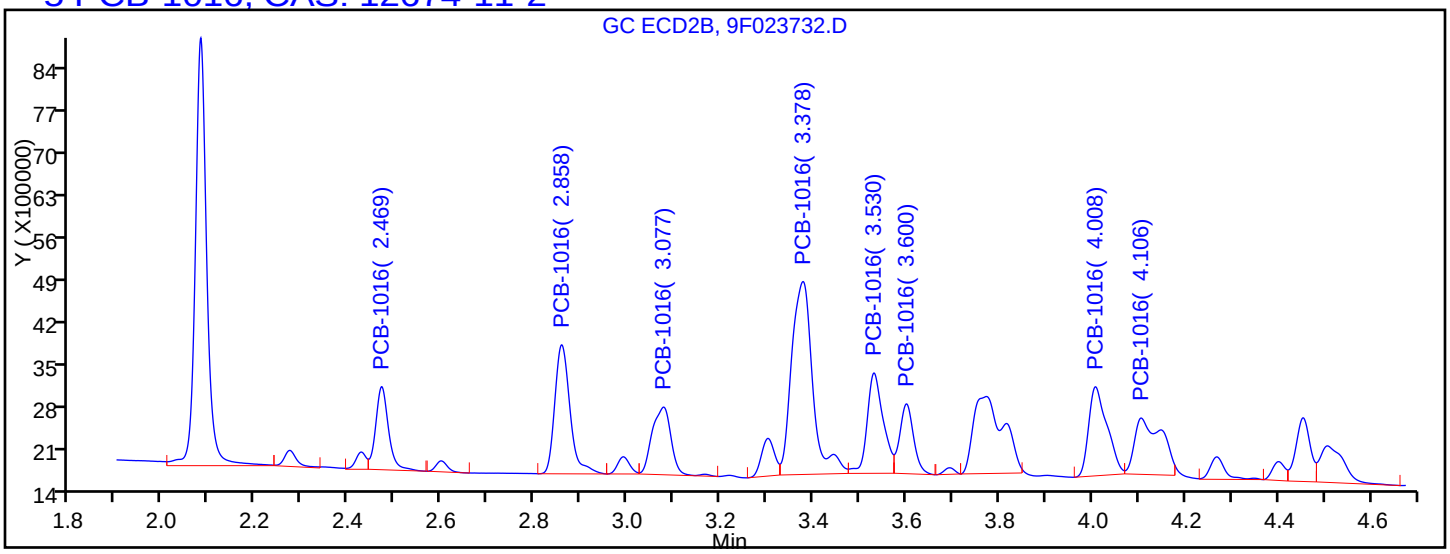
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

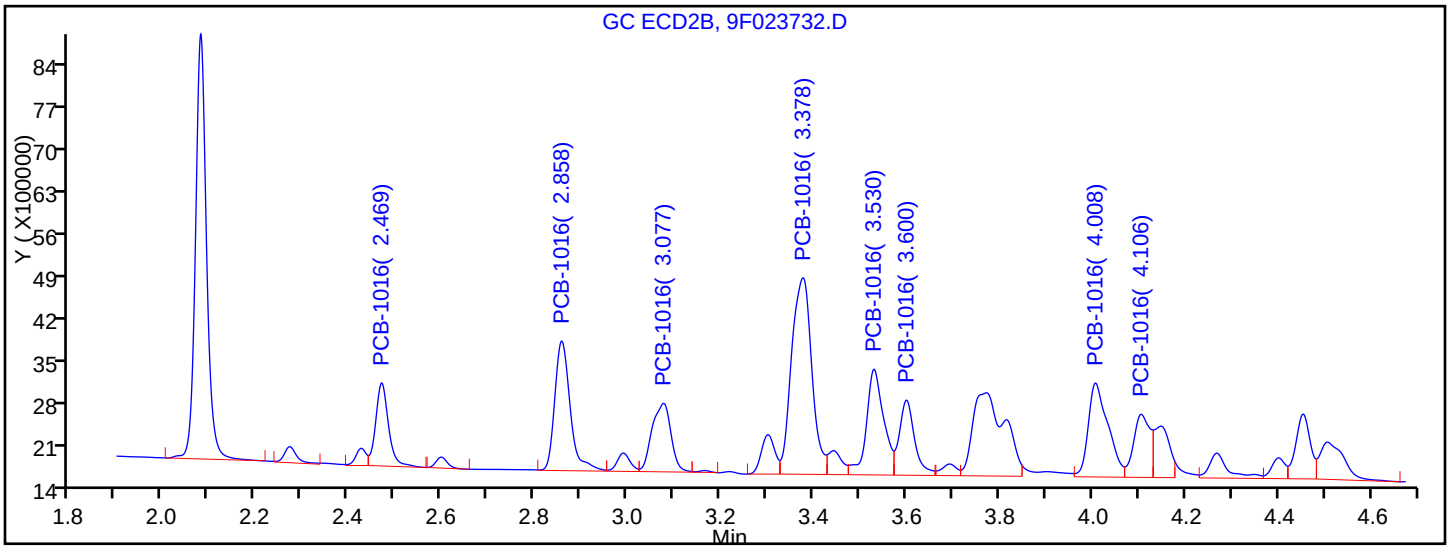
Column: Detector GC ECD2B

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 |



US EPA ARCHIVE DOCUMENT

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
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 | |

US EPA ARCHIVE DOCUMENT

| 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 |

US EPA ARCHIVE DOCUMENT

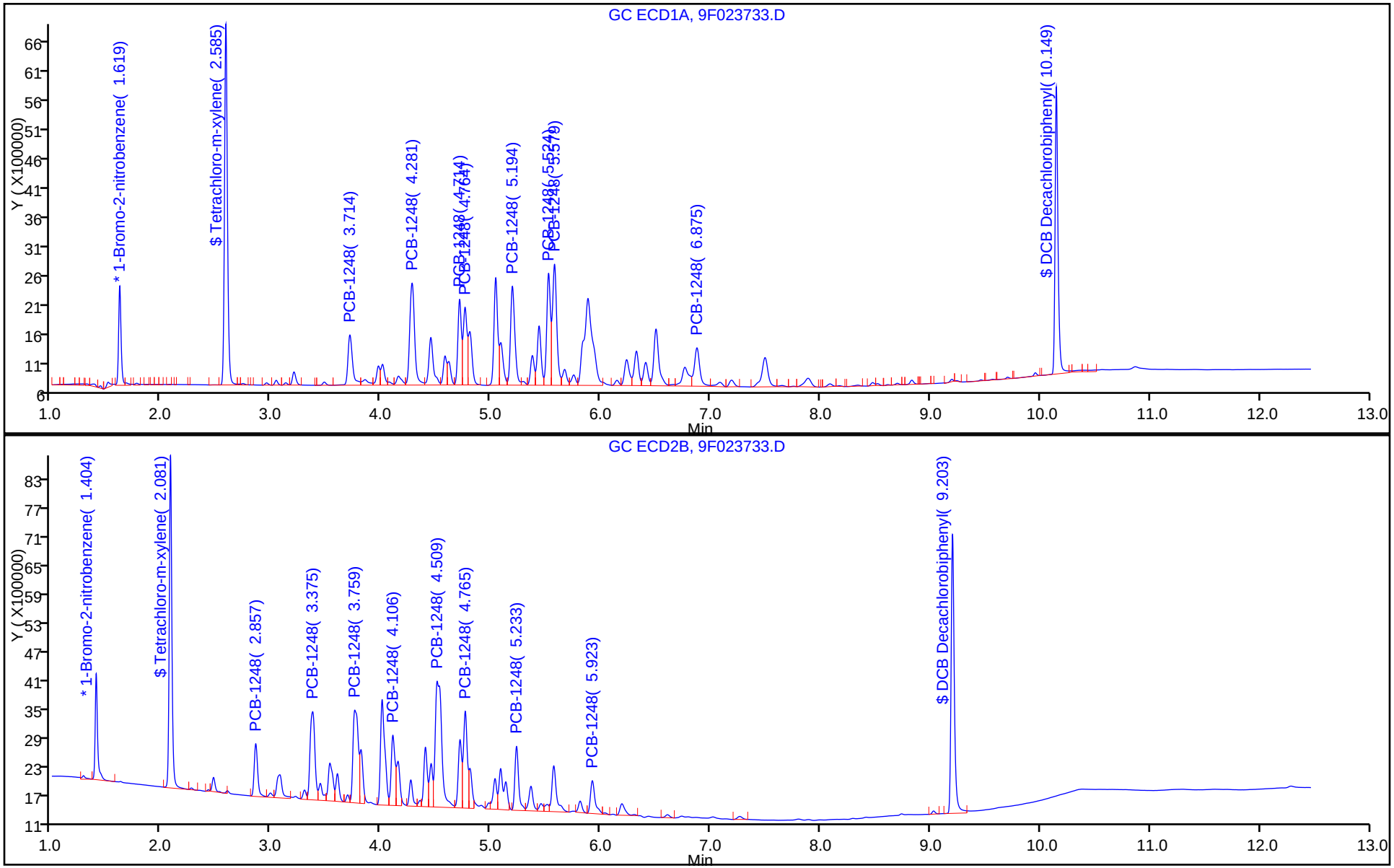
US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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 |

US EPA ARCHIVE DOCUMENT

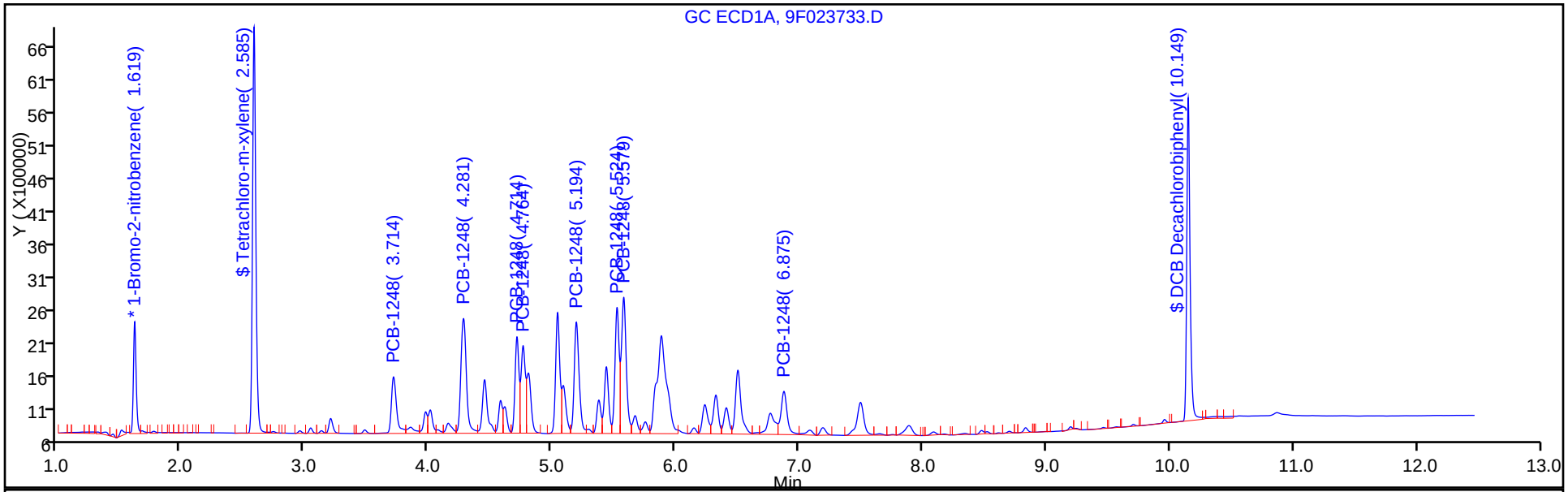
US EPA ARCHIVE DOCUMENT

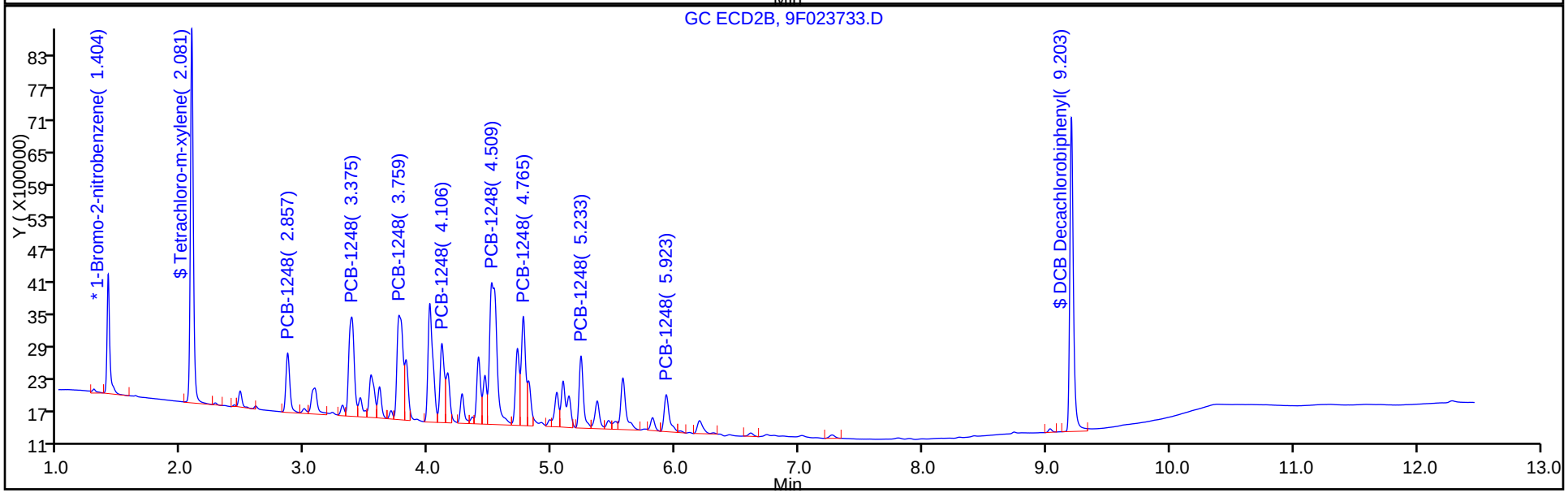
Report Date: 13-Jun-2016 08:53:25 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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:

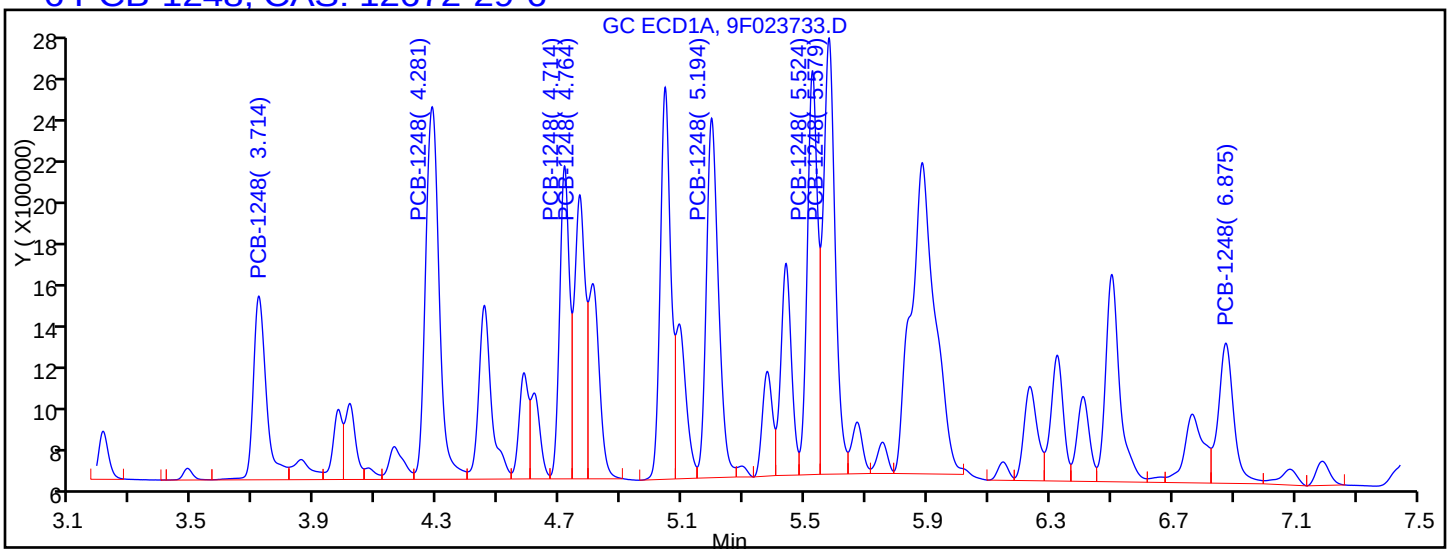
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

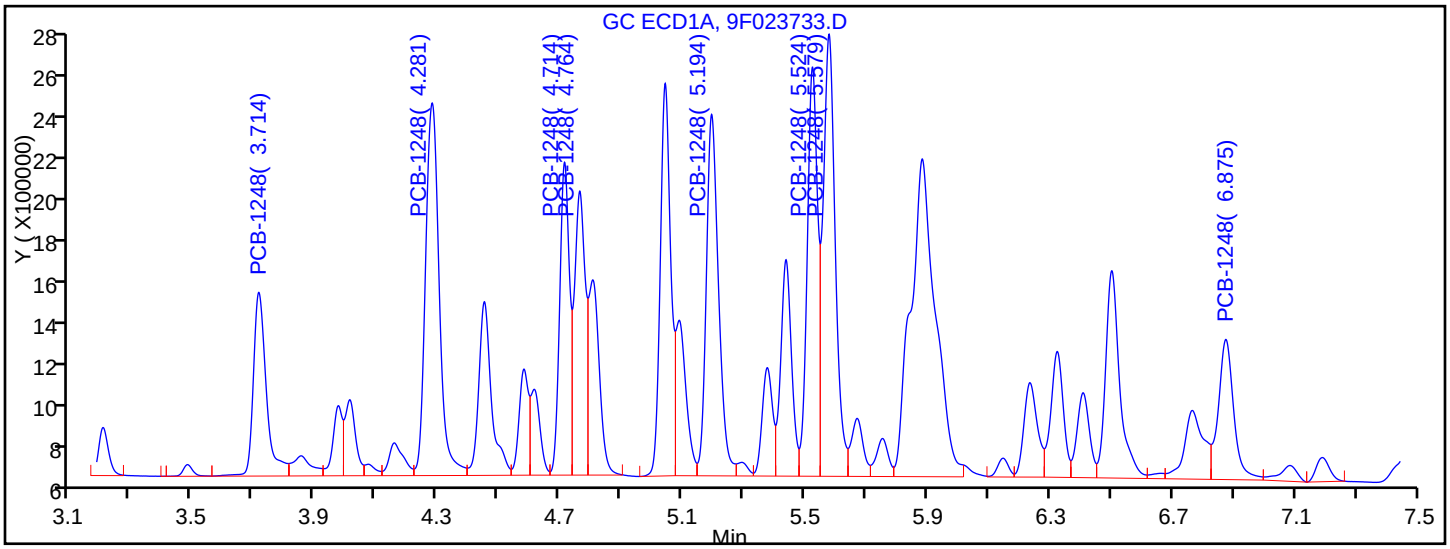
Column: Detector GC ECD1A

## 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 |



US EPA ARCHIVE DOCUMENT

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
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 |

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 | |

US EPA ARCHIVE DOCUMENT

| 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 |

US EPA ARCHIVE DOCUMENT

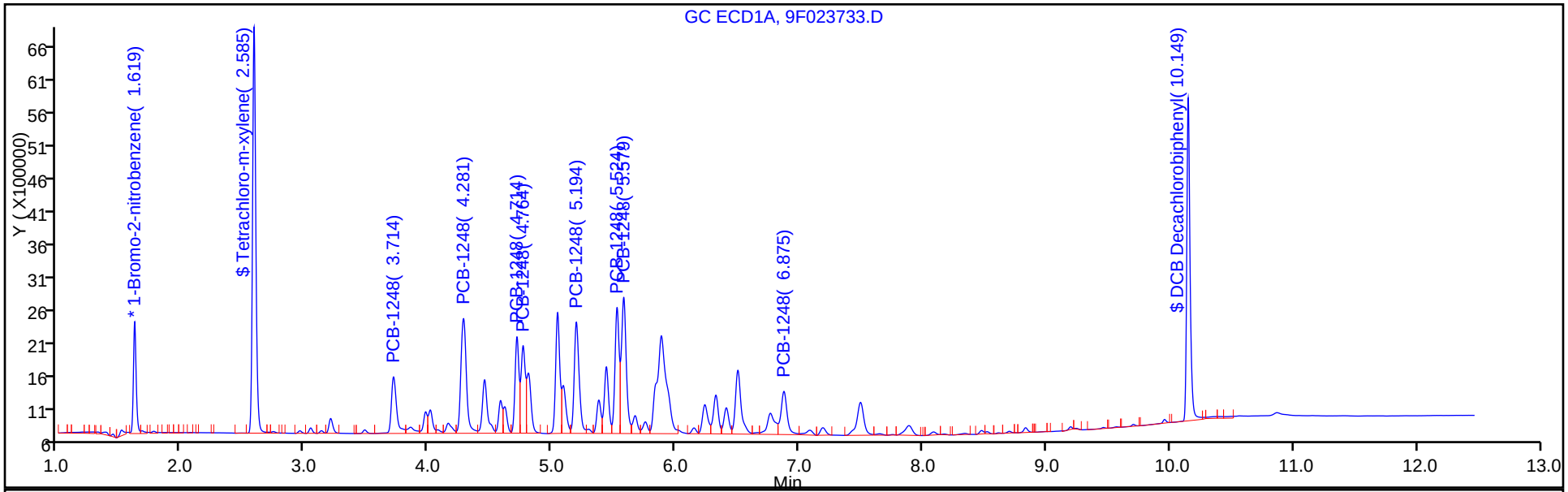
US EPA ARCHIVE DOCUMENT

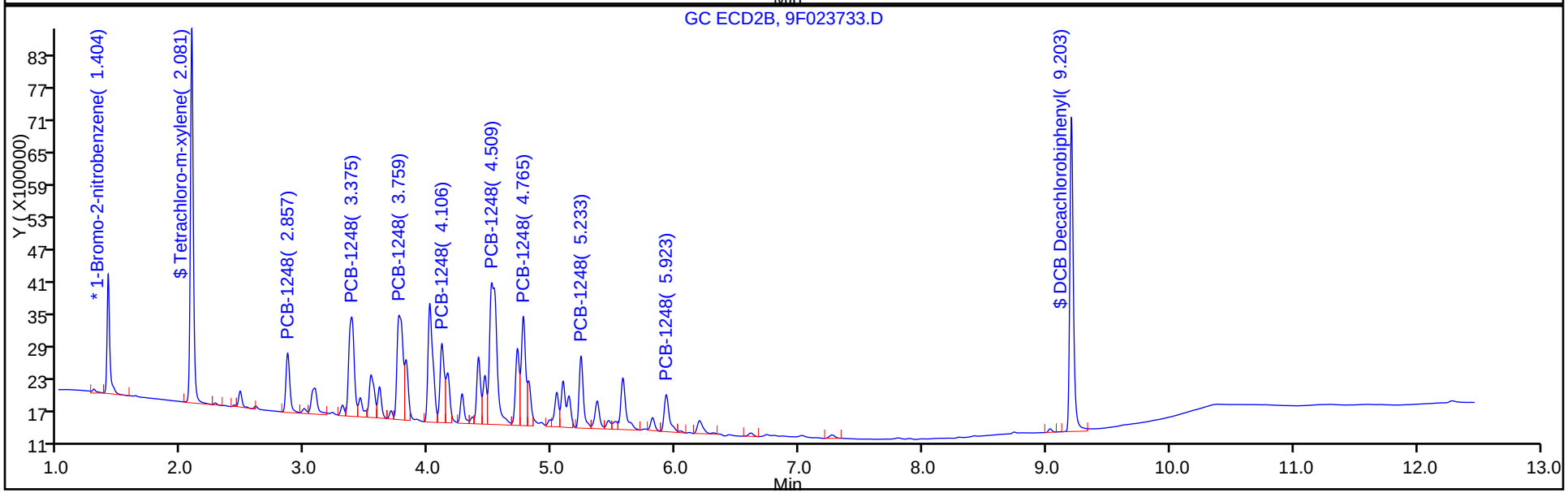
Report Date: 13-Jun-2016 08:53:26 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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

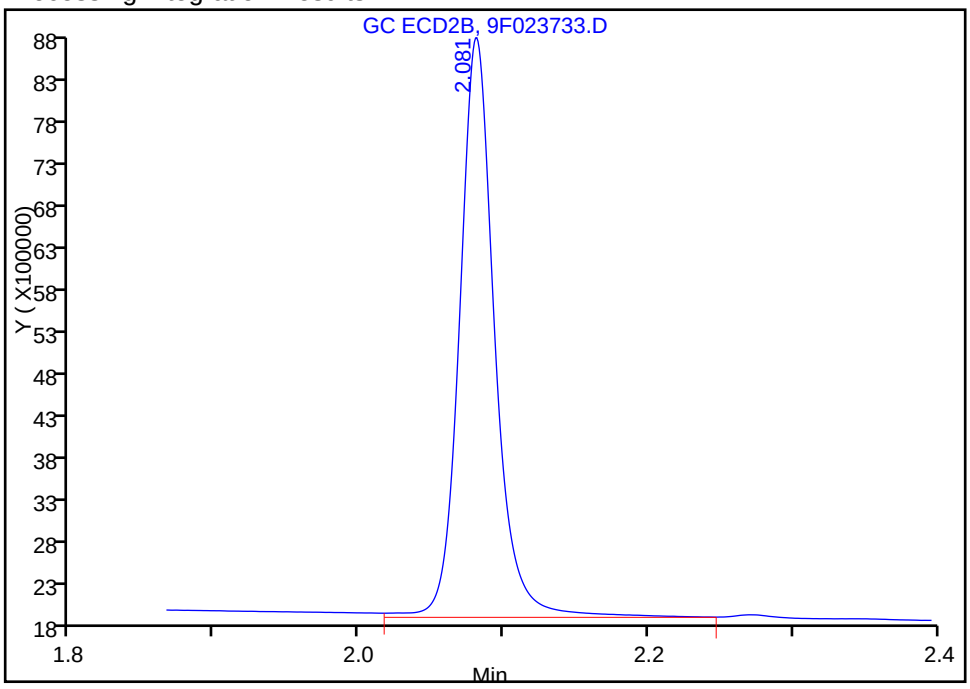
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Edison\ChromData\CPESTGC9\20160611-42042.b\9F023733.D | | | | |
| Injection Date: | 11-Jun-2016 14:02:35 | Instrument ID: | CPESTGC9 | | |
| Lims ID: | CCV AR1248 | | | | |
| Client ID: | | | | | |
| Operator ID: | | ALS Bottle#: | 4 | 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

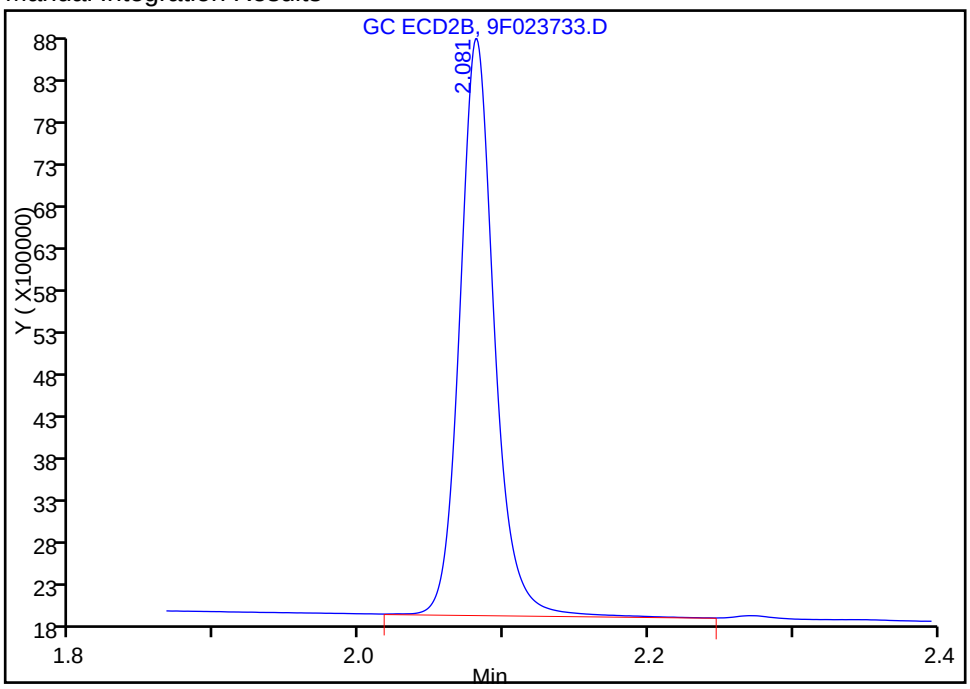
Processing Integration Results

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



US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

| 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 |

US EPA ARCHIVE DOCUMENT

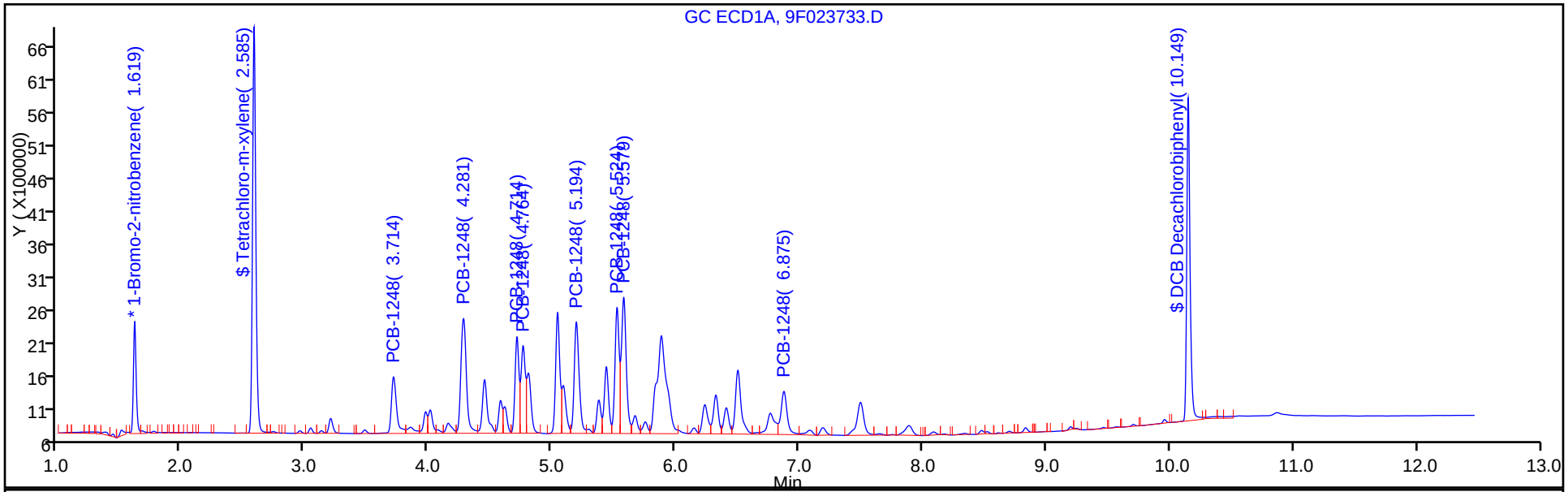
US EPA ARCHIVE DOCUMENT

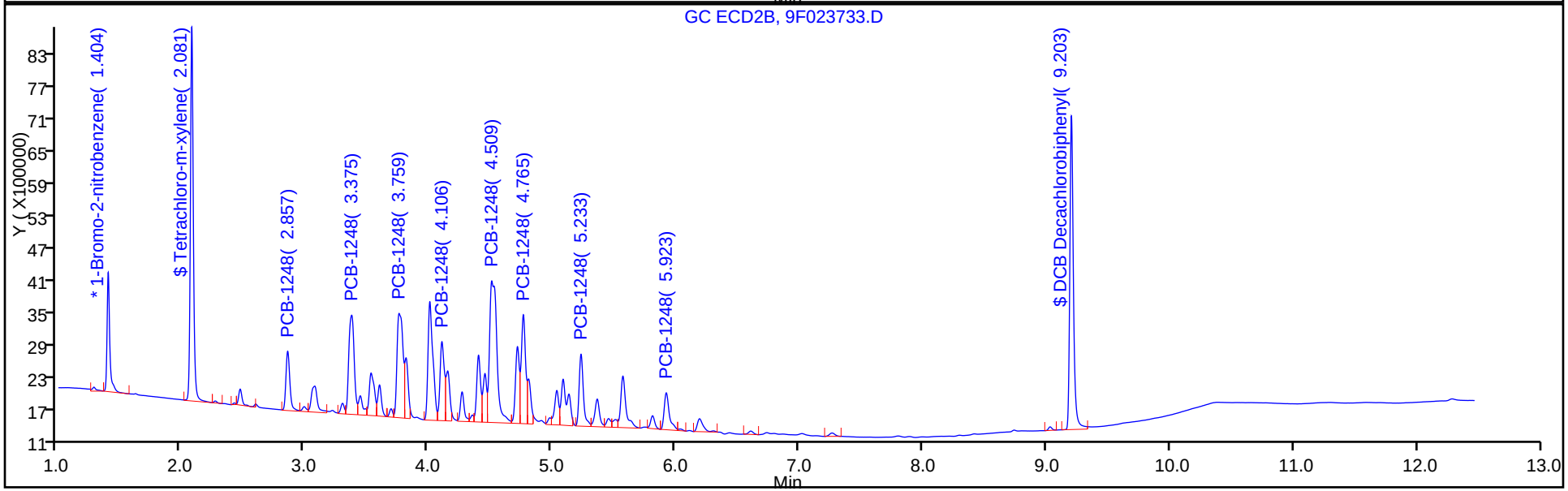
Report Date: 13-Jun-2016 08:53:26 Chrom Revision: 2.2 20-Apr-2016 13:59:46

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:

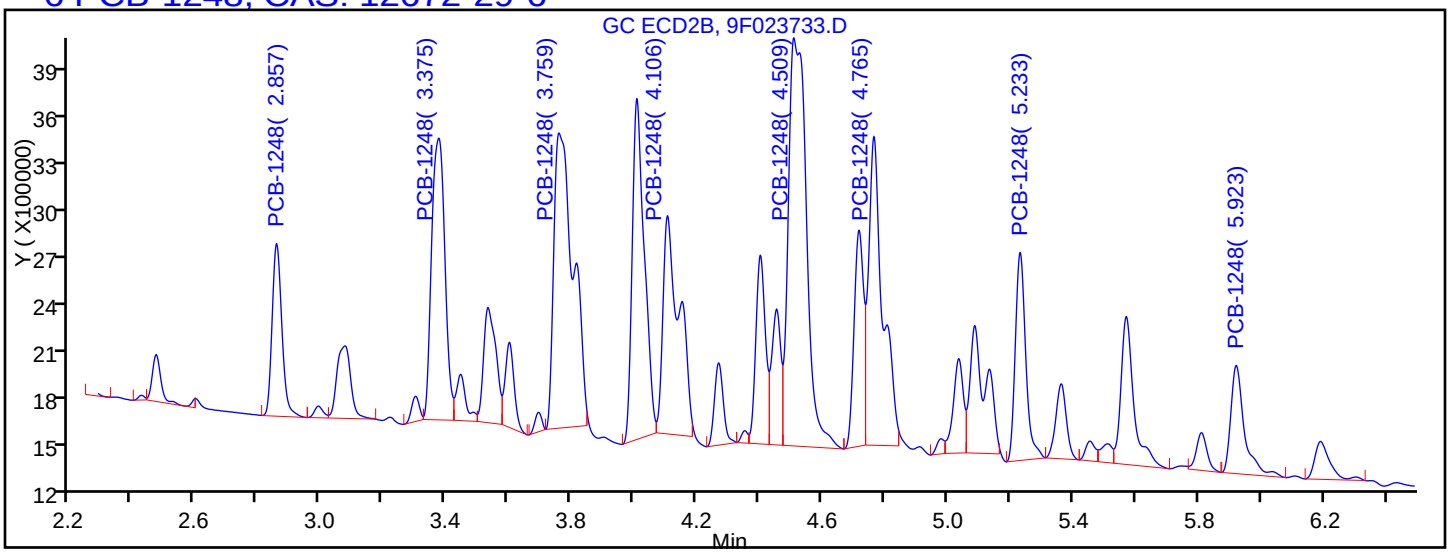
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8082-ISTD Limit Group: GC 8082A PCB ISTD

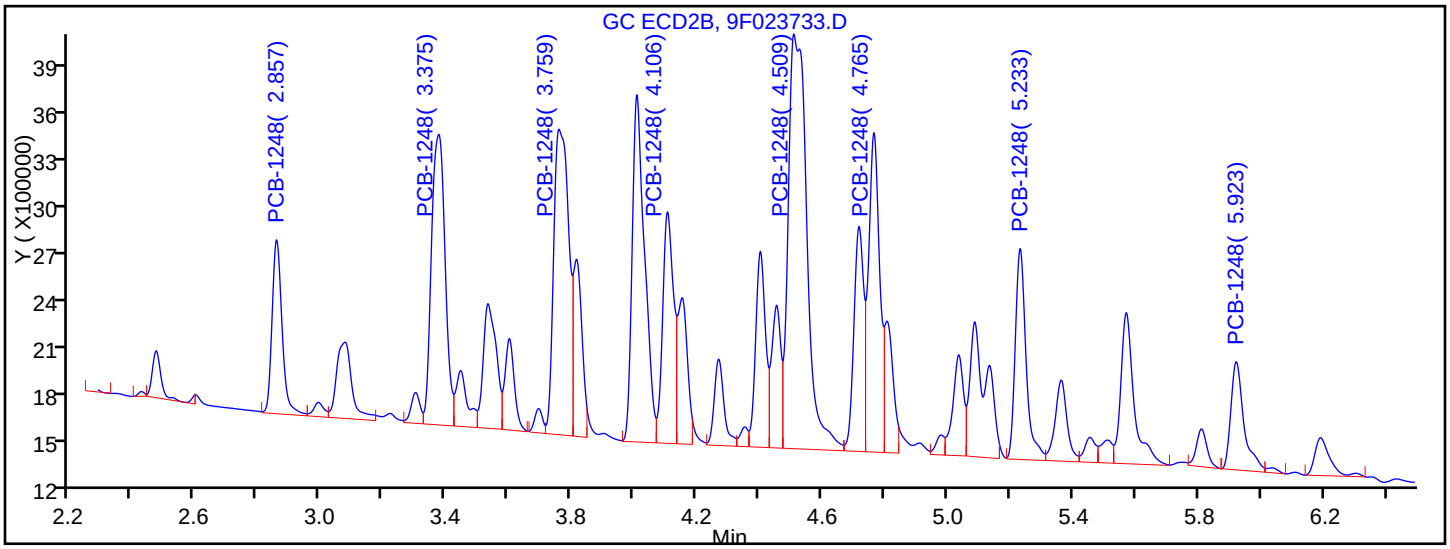
Column: Detector GC ECD2B

## 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 |



US EPA ARCHIVE DOCUMENT

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) |

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) |

# 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.

US EPA ARCHIVE DOCUMENT

# 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:

US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

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 | |

US EPA ARCHIVE DOCUMENT

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 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:45 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:45 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:45 | | | | | | | | | | | | | | | | | | | | | |
| 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

US EPA ARCHIVE DOCUMENT

# 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.

US EPA ARCHIVE DOCUMENT

# 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

Page 1 of 1

| | | |
|---|---|---|
| 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 | Analysis Turnaround Time: Standard X; Rush Charges Authorized For: 2 Week, 1 Week, Other | LAB USE ONLY Project No: |
| City Bridgewater State NJ | | Job No: 114699 |
| Phone 908-240-1984 Fax 908-450-7454 | | |

| 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 |
|---|---|---|---|---|
| 1) Patrizia Cornacchia | Appalachia | 6/1 1105 | 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). Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0715)

US EPA ARCHIVE DOCUMENT

# TestAmerica Edison
## Receipt Temperature and pH Log

Job Number: 114689

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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
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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



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# 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 | |

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**APPENDIX F**

**TRILLIUM DATA VALIDATION REPORT**
**CONCRETE CHIP SAMPLES**

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# 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

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## 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 part of the data package for all future distributions of the PCBs data.

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## 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.

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## 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.

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## 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).

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## 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.

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**ATTACHMENT A**

**DATA SUMMARY FORM**
**Laboratory Job No. 460-114699-1**
**Samples Collected May 31, 2016**

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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 | | | | | | | | | | |

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**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 |



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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 8082A



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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 |



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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 |



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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. Drehmann 7/8/16

FORM I 8082A



US EPA ARCHIVE DOCUMENT

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 |



US EPA ARCHIVE DOCUMENT

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



US EPA ARCHIVE DOCUMENT

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 |



US EPA ARCHIVE DOCUMENT

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**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 JC13575

# 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



| 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

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# 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 |
| **Matrix:** | SO - Soil |
| **Method:** | SW846 8082A SW846 3546 |
| **Project:** | Alcoa Building 12, 734 River Road, Edgewater, NJ |
| **Date Sampled:** | 02/02/16 |
| **Date Received:** | 02/02/16 |
| **Percent Solids:** | 88.1 |

| | 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
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

# 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

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# 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
MCL = Maximum Contamination Level (40 CFR 261 6/96)
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

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
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

SGS Accutest

# Report of Analysis





**Client Sample ID:** BORING AL020216-N1
**Lab Sample ID:** JC13575-2
**Matrix:** SO - Soil
**Method:** SW846 8015C SW846 3546
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Date Sampled:** 02/02/16
**Date Received:** 02/02/16
**Percent Solids:** 90.2

| | 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
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

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
MCL = Maximum Contamination Level (40 CFR 261 6/96)
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

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
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

# 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
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

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
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

SGS Accutest

# Report of Analysis





| | |
|---|---|
| **Client Sample ID:** | COMPOSITE SOILPILE AI020216 BORINGS:AL020216-N6,N7,N8,N9,N10 |
| **Lab Sample ID:** | JC13575-5 |
| **Matrix:** | SO - Soil |
| **Method:** | SW846 8082A SW846 3546 |
| **Project:** | Alcoa Building 12, 734 River Road, Edgewater, NJ |
| **Date Sampled:** | 02/02/16 |
| **Date Received:** | 02/02/16 |
| **Percent Solids:** | 91.2 |

| | 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
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

# 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
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

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
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

SGS Accutest

# Report of Analysis





| | |
|---|---|
| **Client Sample ID:** | COMPOSITE SOILPILE AI020216 BORINGS:AL020216-S6,S7,S8,S9,S10 |
| **Lab Sample ID:** | JC13575-7 |
| **Matrix:** | SO - Soil |
| **Method:** | SW846 8082A SW846 3546 |
| **Project:** | Alcoa Building 12, 734 River Road, Edgewater, NJ |
| **Date Sampled:** | 02/02/16 |
| **Date Received:** | 02/02/16 |
| **Percent Solids:** | 88.8 |

| | 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
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

# 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
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

SGS Accutest

# Report of Analysis





**Client Sample ID:** BORING AL020216-S6
**Lab Sample ID:** JC13575-8
**Matrix:** SO - Soil
**Method:** SW846 8015C SW846 3546
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Date Sampled:** 02/02/16
**Date Received:** 02/02/16
**Percent Solids:** 85.8

| | 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
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

## 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

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# 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 | B8015 DRO
less Pest & Herb
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 | FOS | Lab to Composite all bottles into one Sample | LAB USE ONLY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Composite Soil Pile AI020216** | | | | | | | | | | | | | | | 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
- ☒ 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)
- ☒ NJ Reduced
- ☐ Commercial "C"
- ☐ Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format

**Comments / Special Instructions**

**Sample Custody must be documented below each time samples change possession, including courier delivery.**

| | Relinquished by Sampler: | Date Time: | Received By: | Relinquished By: | Date Time: | Received By: |
|---|---|---|---|---|---|---|
| 1 | of Accutest | 02/02/16 19:00 | 1 | 2 | | |
| 2 | Relinquished by Sampler: | Date Time: | Received By: | Relinquished By: | Date Time: | Received By: |
| 3 | | | 3 | 4 | | |
| 4 | Relinquished by: | Date Time: | Received By: | Custody Seal # 200 ☐ Intact ☐ Not intact | Preserved where applicable ☐ | Cooler Temp. 1.9 °C |
| 5 | | | 5 | | | |

# 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: Little Egg Harbor Twsp. State: N.J. Zip: 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: Edgewater, State: 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

Lab to Composite all bottles into one 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 | Number of preserved Bottles: HCl | NaOH | HNO3 | H2SO4 | NONE | DI Water | MEOH | ENCORE | FCS | LAB USE ONLY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Composite Soil Pile AI020216 | | | | | | | | | | | | | | | 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 | | | | | 2 | | | | | 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 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 | KS of Accutest | 02/02/16 1910 | 1 | 2 | | |
| 3 | | | 3 | 4 | | |
| 5 | | | 5 | Custody Seal # 200 Intact / Not intact | Preserved where applicable | Cooler Temp. 1-8°C (g) |

# 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

**Client / Reporting Information**

Company Name: LSRP Consulting
Street Address: 11 Lake Michigan Drive
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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: Edgewater, State: 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 | Time | Sampled by | Matrix | # of bottles | Number of preserved Bottles: HCl | NaOH | HNO3 | H2SO4 | NONE | DI Water | MEOH | ENCORE | FOS | Lab to Composite all bottles into one Sample | LAB USE ONLY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Composite Soil Pile AI020216 | | | | | | | | | | | | | | | | |
| | Borings: AL020216-S6 ,S7, S8, S9, S10. | | | | | | | | | | | | | | | X | |
| | Boring AL020216- S6 | 2/2/16 | 11:10 | HM | soil | 1 | | | | | 1 | | | | | | |
| | 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 | | | | | | |

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 Instr Special Instructions

**Sample Custody must be documented below each time samples change possession, including courier delivery.**

| | | | | | |
|---|---|---|---|---|---|
| Relinquished by Sampler: 1 of Accutest | Date Time: 02/02/16 1700 | Received By: 1 | Relinquished By: 2 | Date Time: | Received By: |
| 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. 1.5°C/G |

# 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 | or | N | | Y | or | N |
|---|---|---|---|---|---|---|---|
| 1. Custody Seals Present: | ☑ | | ☐ | 3. COC Present: | ☑ | | ☐ |
| 2. Custody Seals Intact: | ☑ | | ☐ | 4. Smpl Dates/Time OK | ☑ | | ☐ |

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

| Quality Control Preservation | Y | or | 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 | or | N |
|---|---|---|---|
| 1. Sample labels present on bottles: | ☑ | | ☐ |
| 2. Container labeling complete: | ☑ | | ☐ |
| 3. Sample container label / COC agree: | ☑ | | ☐ |

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

| Sample Integrity - Instructions | Y | or | 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

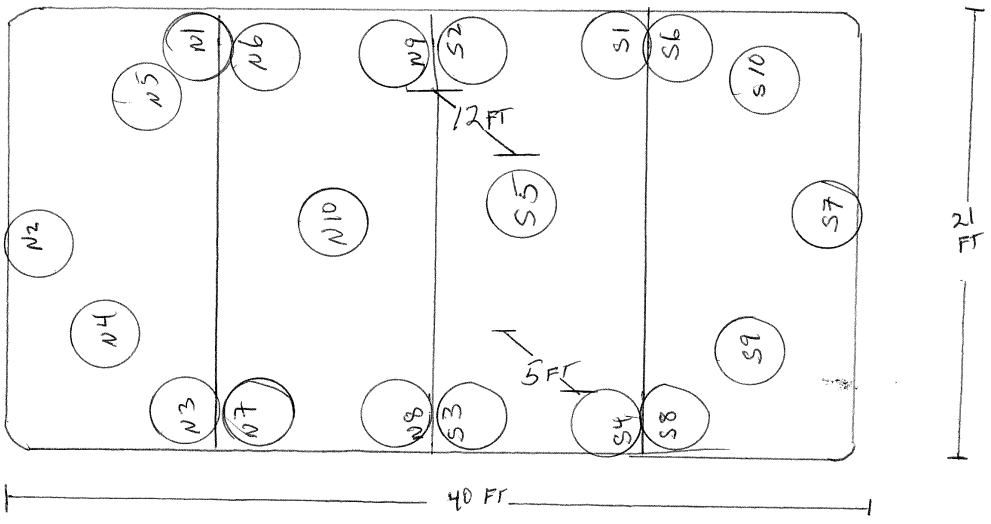
Dayton, New Jersey
www/accutest.com

JC13575

RIVER ROAD

L = 40FT = 13.33yrd
W = 21FT = 07.00yrd
ha = 8.5FT = 02.83yrd
measure as Flat Top Pile
V = (L)(W)(h)
= (13.33)(07.00)(02.83)
= 264yrd3
≈ 300yrd3

N




CEMETARY

LSRP
ARCOM Edgewater NJ
Bld 12 Soil Pile
Feb 2, 2016
Not To Scale
HFM

Bing Maps

JC13575

Page 1 of 2

bing maps

Notes

Former Alcoa Building 12
Edgewater, NJ







https://www.bing.com/mapspreview

2/1/2016

**Harold Meissner** JC13575

**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
- 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<br>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<br>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<br>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<br>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

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### 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 | **Injection Date:** | 01/12/16 |
| **Lab File ID:** | 2V29041.D | **Injection Time:** | 17:03 |
| **Instrument ID:** | GCMS2V | | |

| 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 | **Injection Date:** | 02/04/16 |
| **Lab File ID:** | 2V29709.D | **Injection Time:** | 08:02 |
| **Instrument ID:** | GCMS2V | | |

| 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 **Sample:** V2V1156-ICC1156
**Account:** LSRPNJL LSRP Consulting, LLC **Lab FileID:** 2V29049.D
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ



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
```

```
      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
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** V2V1156-ICV1156
**Lab FileID:** 2V29054.D

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
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** V2V1156-ICV1156
**Lab FileID:** 2V29054.D

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 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

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

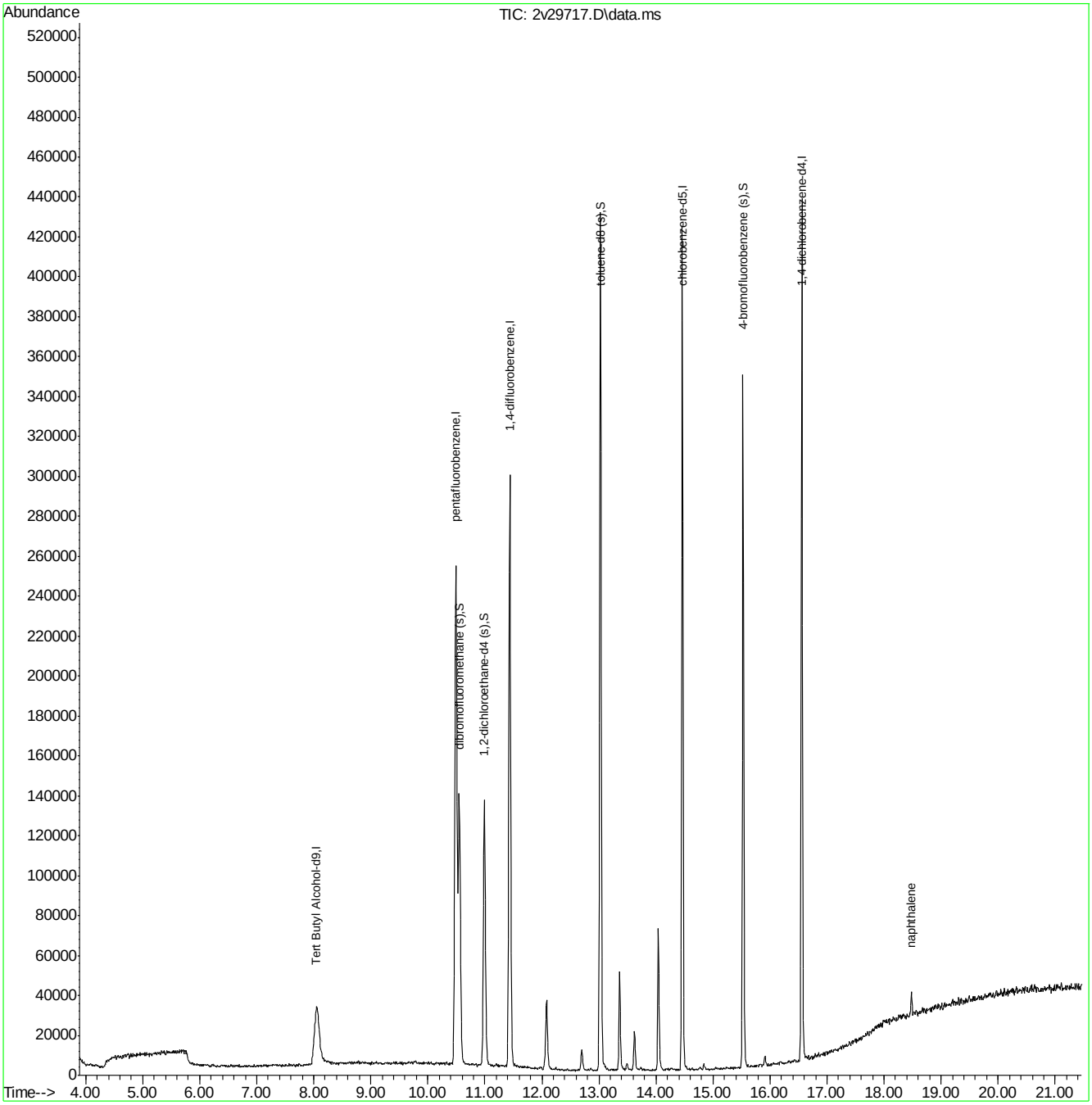
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Tert Butyl Alcohol-d9 | 8.045 | 65 | 104039 | 500.00 | ug/L | 0.00 |
| 5) pentafluorobenzene | 10.493 | 168 | 228034 | 50.00 | ug/L | 0.00 |
| 51) 1,4-difluorobenzene | 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 |

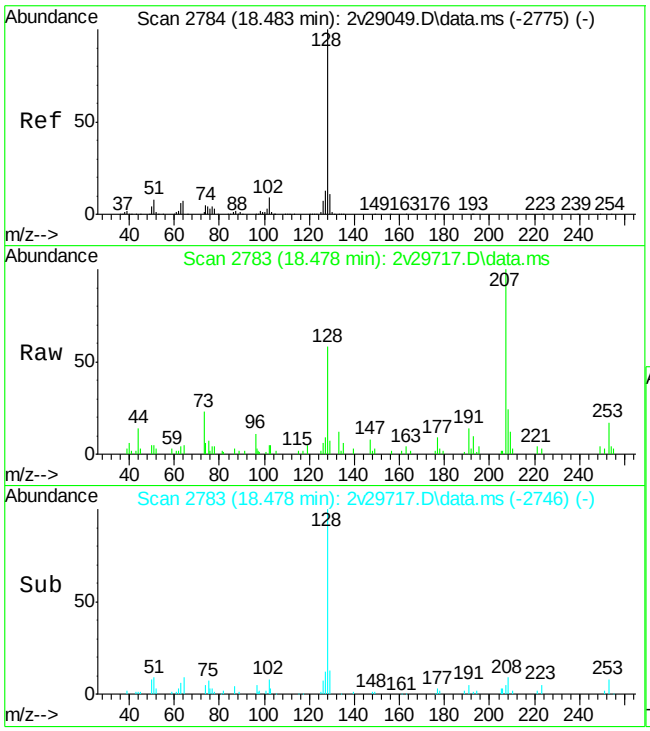
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

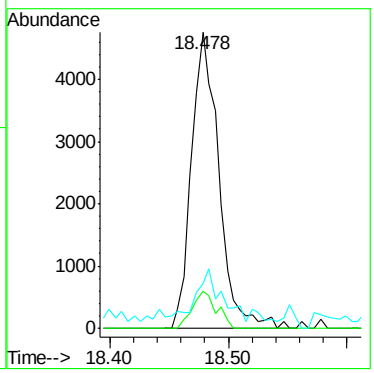





#122
naphthalene
Concen: 1.26 ug/L
RT: 18.478 min Scan# 2783
Delta R.T. -0.005 min
Lab File: 2v29717.D
Acq: 4 Feb 2016 2:11 pm

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 |







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

| 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

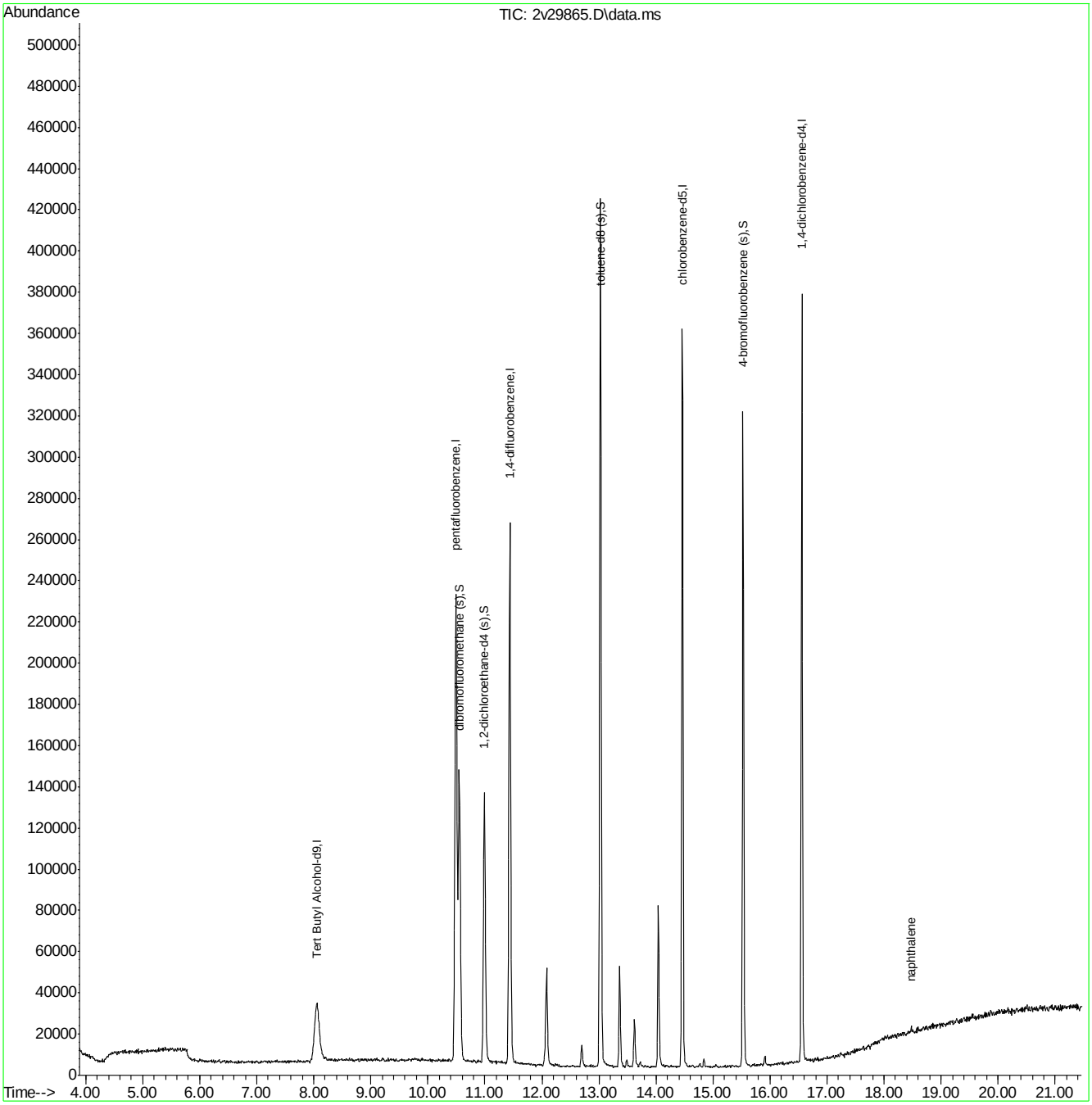


SGS ACCUTEST JC13575

Quantitation Report (QT Reviewed)

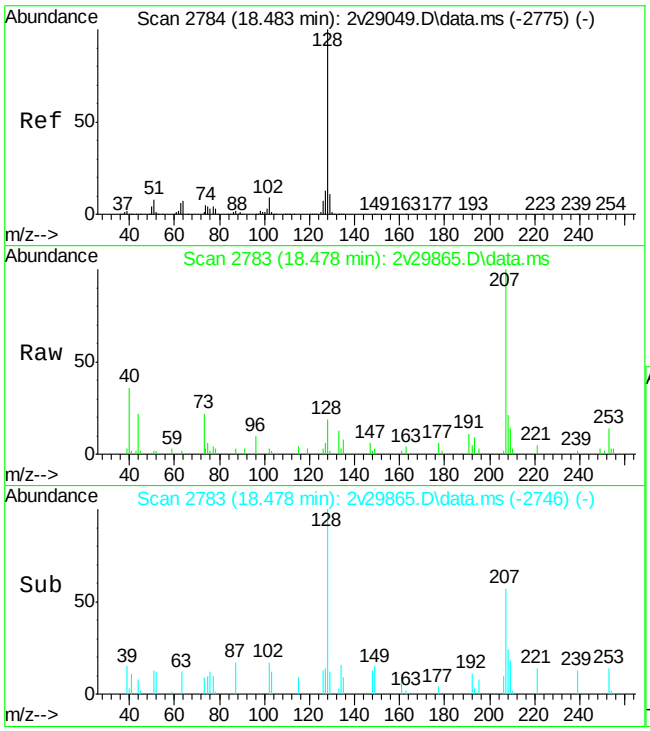
Data Path : C:\msdchem\1\DATA\
Data File : 2v29865.D
Acq On : 9 Feb 2016 11:22 am
Operator : HeeEunA
Sample : jc13575-4
Misc : MS98089,V2V1180,5,,,,5
ALS Vial : 7 Sample Multiplier: 1

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





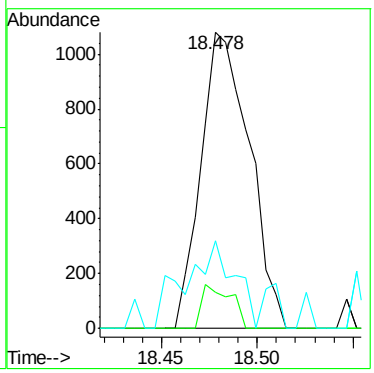

SGS ACCUTEST JC13575




#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 |







SGS ACCUTEST JC13575

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

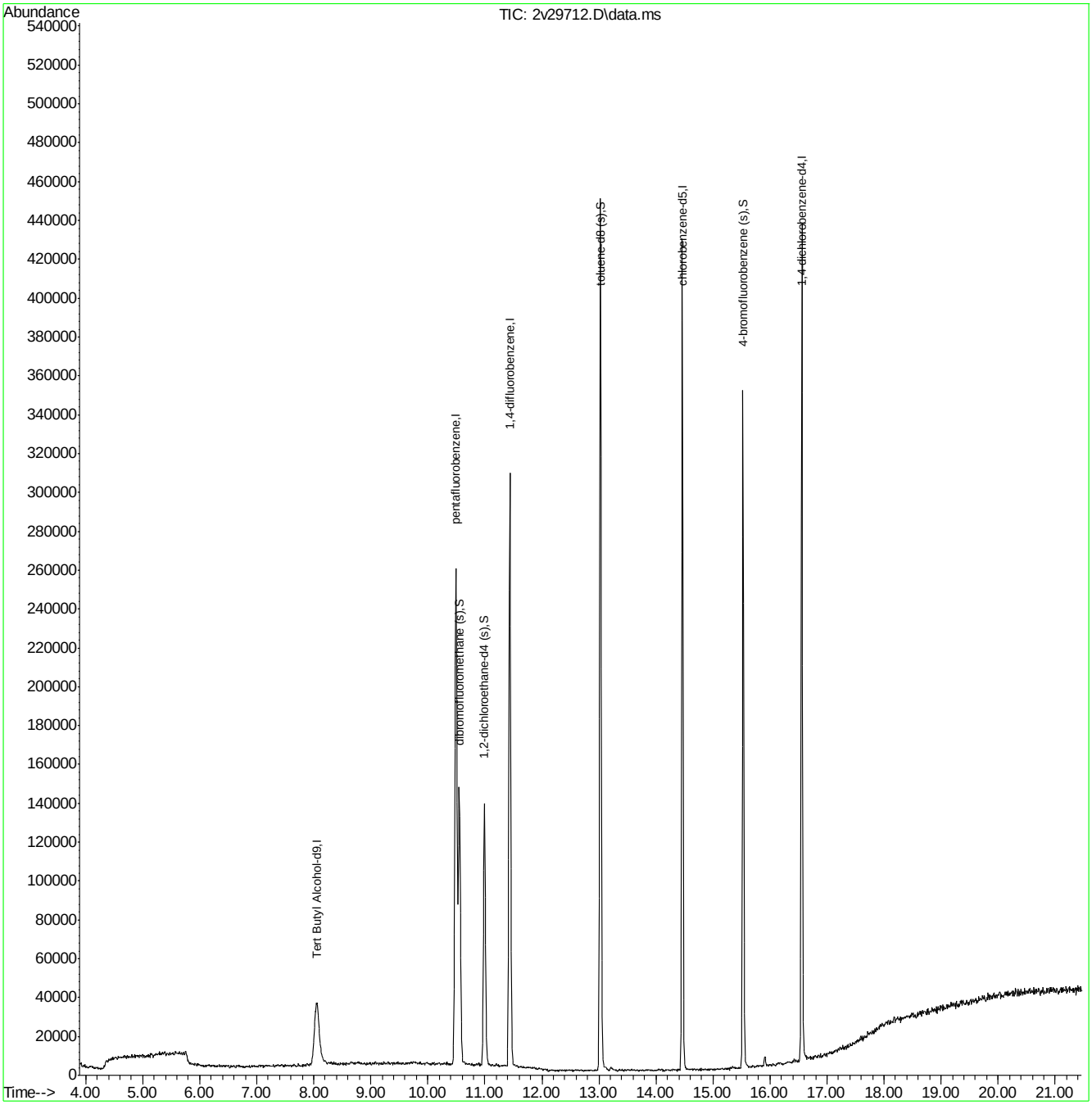
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Tert Butyl Alcohol-d9 | 8.060 | 65 | 110597 | 500.00 | ug/L | 0.01 |
| 5) pentafluorobenzene | 10.493 | 168 | 227816 | 50.00 | ug/L | -0.01 |
| 51) 1,4-difluorobenzene | 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



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

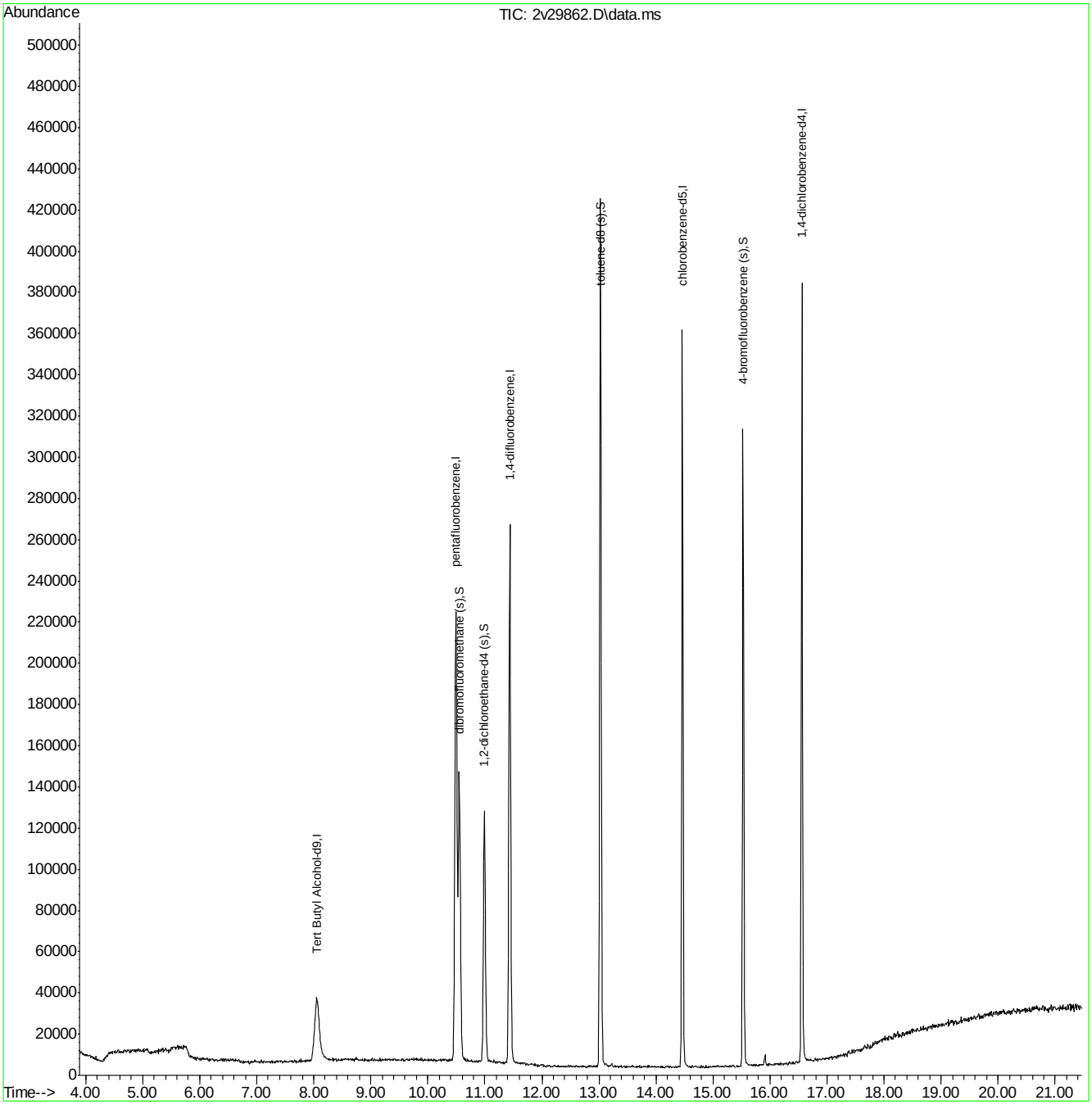
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) Tert Butyl Alcohol-d9 | 8.055 | 65 | 102441 | 500.00 | ug/L | 0.00 |
| 5) pentafluorobenzene | 10.493 | 168 | 208883 | 50.00 | ug/L | -0.01 |
| 51) 1,4-difluorobenzene | 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

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






SGS ACCUTEST JC13575

## 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 | **Injection Date:** | 01/12/16 |
| **Lab File ID:** | 3P49876.D | **Injection Time:** | 10:07 |
| **Instrument ID:** | GCMS3P | | |

| 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 | **Injection Date:** | 01/13/16 |
| **Lab File ID:** | 3P49905.D | **Injection Time:** | 10:43 |
| **Instrument ID:** | GCMS3P | | |

| 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 |

8.6.3

8

# Instrument Performance Check (DFTPP)



**Job Number:** JC13575
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

| | | | |
|---|---|---|---|
| **Sample:** | E3P2295-DFTPP | **Injection Date:** | 02/05/16 |
| **Lab File ID:** | 3P50573.D | **Injection Time:** | 20:11 |
| **Instrument ID:** | GCMS3P | | |

| 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 | **Injection Date:** | 12/04/15 |
| **Lab File ID:** | P100854.D | **Injection Time:** | 20:16 |
| **Instrument ID:** | GCMSP | | |

| 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 | **Injection Date:** | 12/07/15 |
| **Lab File ID:** | P100865.D | **Injection Time:** | 08:47 |
| **Instrument ID:** | GCMSP | | |

| 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 | **Injection Date:** | 02/05/16 |
| **Lab File ID:** | P102430.D | **Injection Time:** | 11:30 |
| **Instrument ID:** | GCMSP | | |

| 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
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** E3P2260-ICC2260
**Lab FileID:** 3P49878.D

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

# Initial Calibration Summary

**Job Number:** JC13575
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** E3P2260-ICC2260
**Lab FileID:** 3P49878.D

```
 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


SGS ACCUTEST JC13575

# Initial Calibration Verification

**Job Number:** JC13575
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** E3P2261-ICV2260
**Lab FileID:** 3P49896.D

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

# Initial Calibration Verification

**Job Number:** JC13575
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** E3P2261-ICV2260
**Lab FileID:** 3P49898.D

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

# Initial Calibration Verification

**Job Number:** JC13575
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** E3P2261-ICV2260
**Lab FileID:** 3P49899.D

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
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** E3P2261-ICV2260
**Lab FileID:** 3P49899.D

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 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
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** E3P2261-ICV2260
**Lab FileID:** 3P49900.D



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

# Initial Calibration Verification

**Job Number:** JC13575
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** E3P2261-ICV2260
**Lab FileID:** 3P49902.D

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


SGS ACCUTEST JC13575

# Initial Calibration Verification

**Job Number:** JC13575
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** E3P2262-ICV2260
**Lab FileID:** 3P49906.D

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

# Initial Calibration Verification

**Job Number:** JC13575
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** E3P2262-ICV2260
**Lab FileID:** 3P49909.D

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

# 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 |

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

```
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


SGS ACCUTEST JC13575

# Initial Calibration Verification

**Job Number:** JC13575
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** EP4412-ICV4411
**Lab FileID:** P100874.D

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 |

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-ICV4411
**Lab FileID:** P100874.D

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 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


SGS ACCUTEST JC13575

# 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


SGS ACCUTEST JC13575

# Initial Calibration Verification

**Job Number:** JC13575
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** EP4412-ICV4411
**Lab FileID:** P100875.D

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


SGS ACCUTEST JC13575

# 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


SGS ACCUTEST JC13575

# 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


SGS ACCUTEST JC13575

# 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 |

8.9.20
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

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 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 |

8.9.20

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

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 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

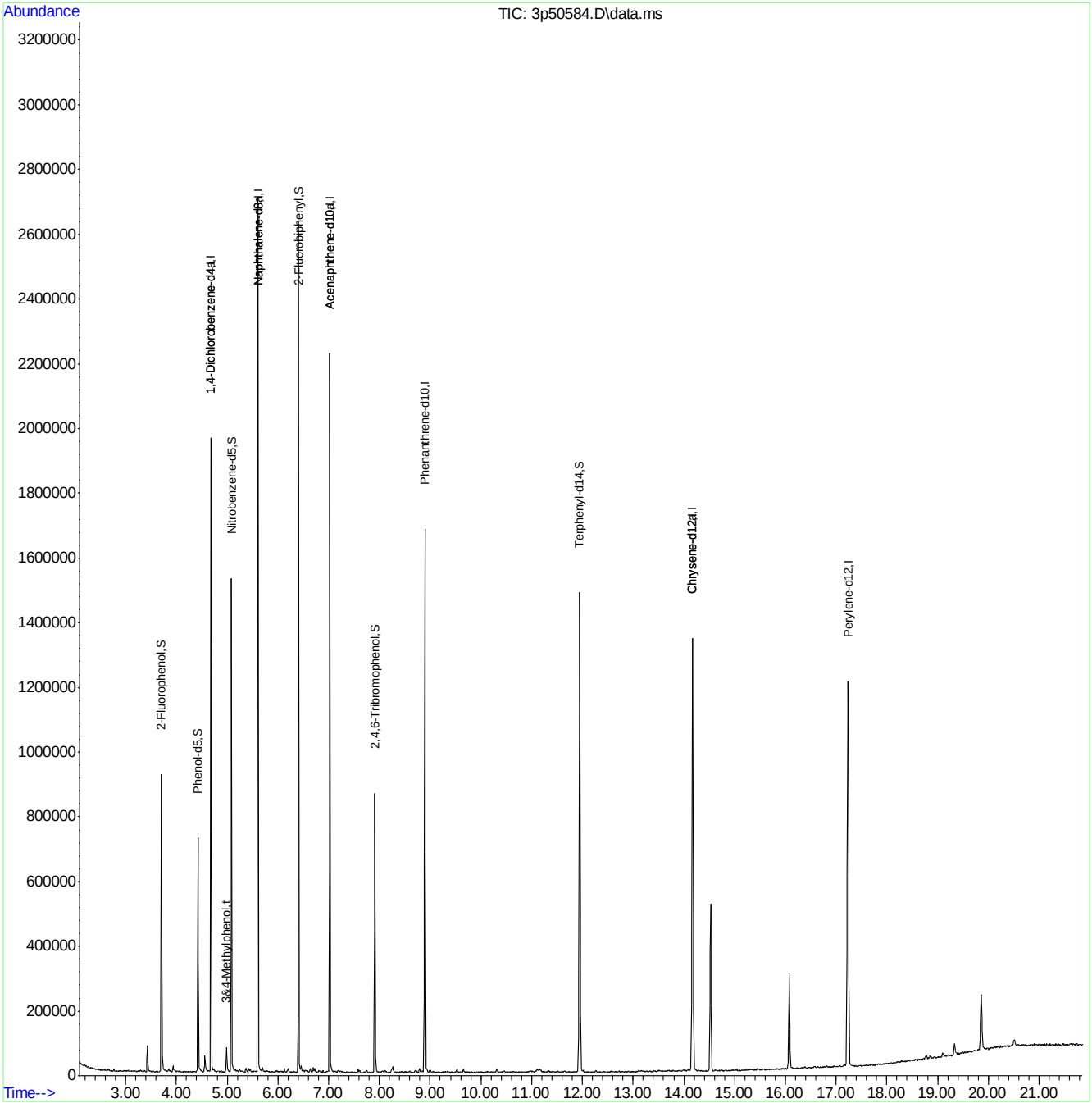
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 4.681 | 152 | 209384 | 40.00 | ppm | 0.07 |
| 24) Naphthalene-d8 | 5.606 | 136 | 795098 | 40.00 | ppm | 0.06 |
| 47) Acenaphthene-d10 | 7.024 | 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 |

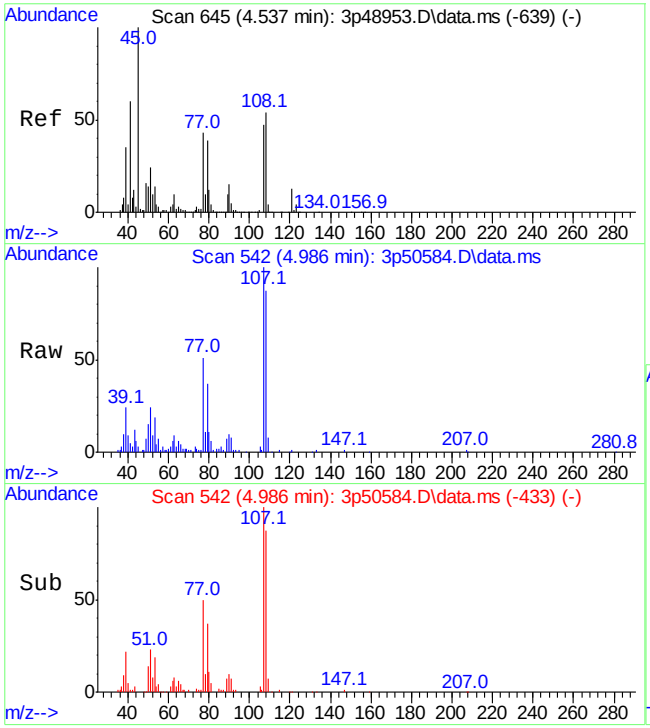
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

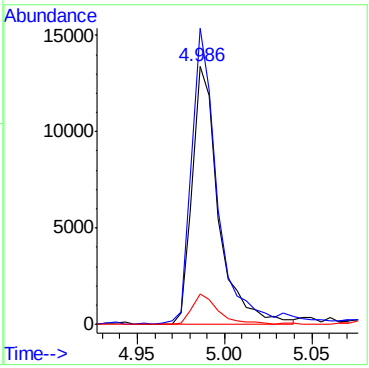





#21
3&4-Methylphenol
Concen: 1.89 ppm
RT: 4.986 min Scan# 542
Delta R.T. 0.085 min
Lab File: 3p50584.D
Acq: 6 Feb 2016 12:58 am

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 |



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

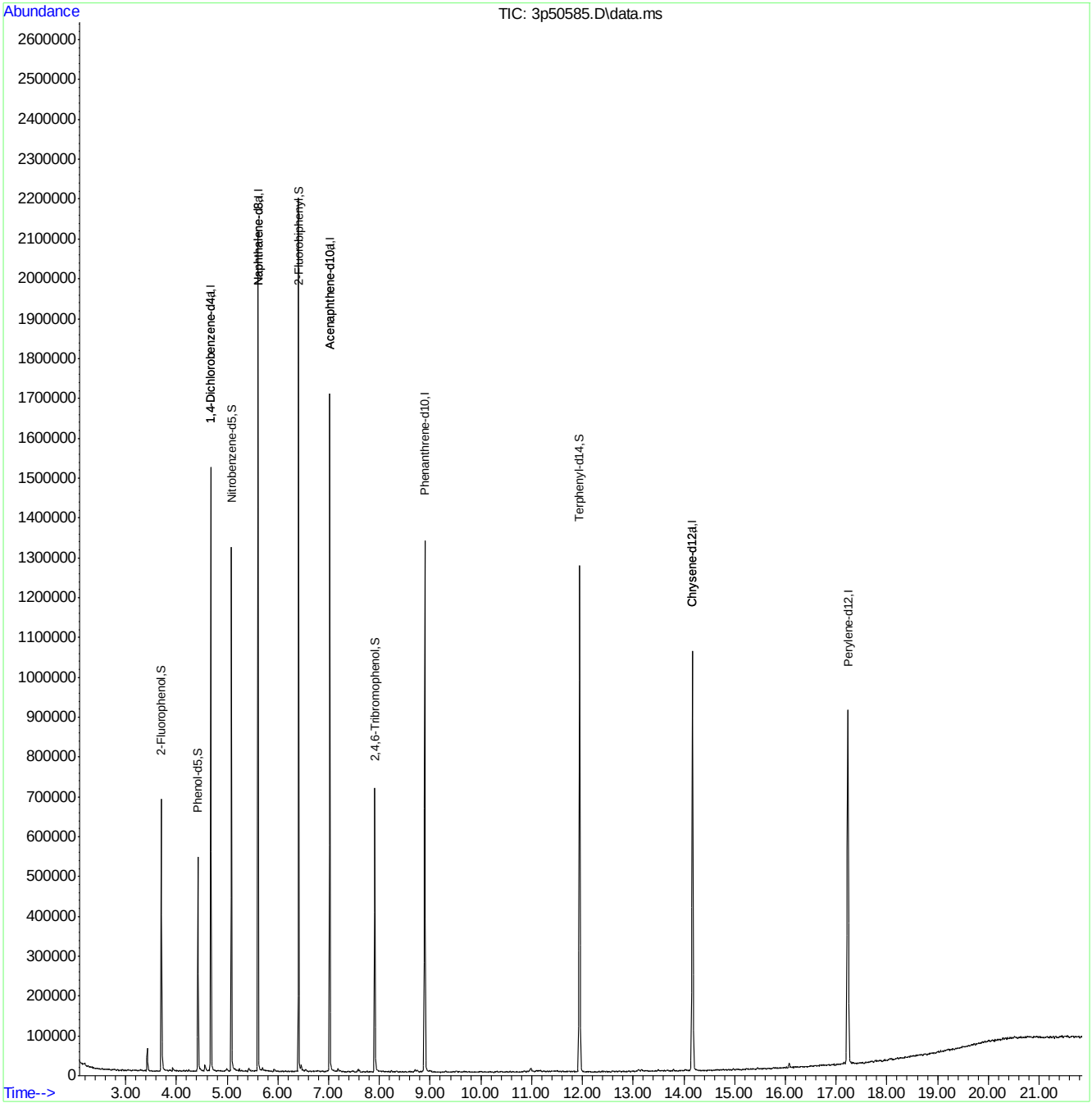
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 4.681 | 152 | 173039 | 40.00 | ppm | 0.07 |
| 24) Naphthalene-d8 | 5.606 | 136 | 644607 | 40.00 | ppm | 0.06 |
| 47) Acenaphthene-d10 | 7.024 | 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



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

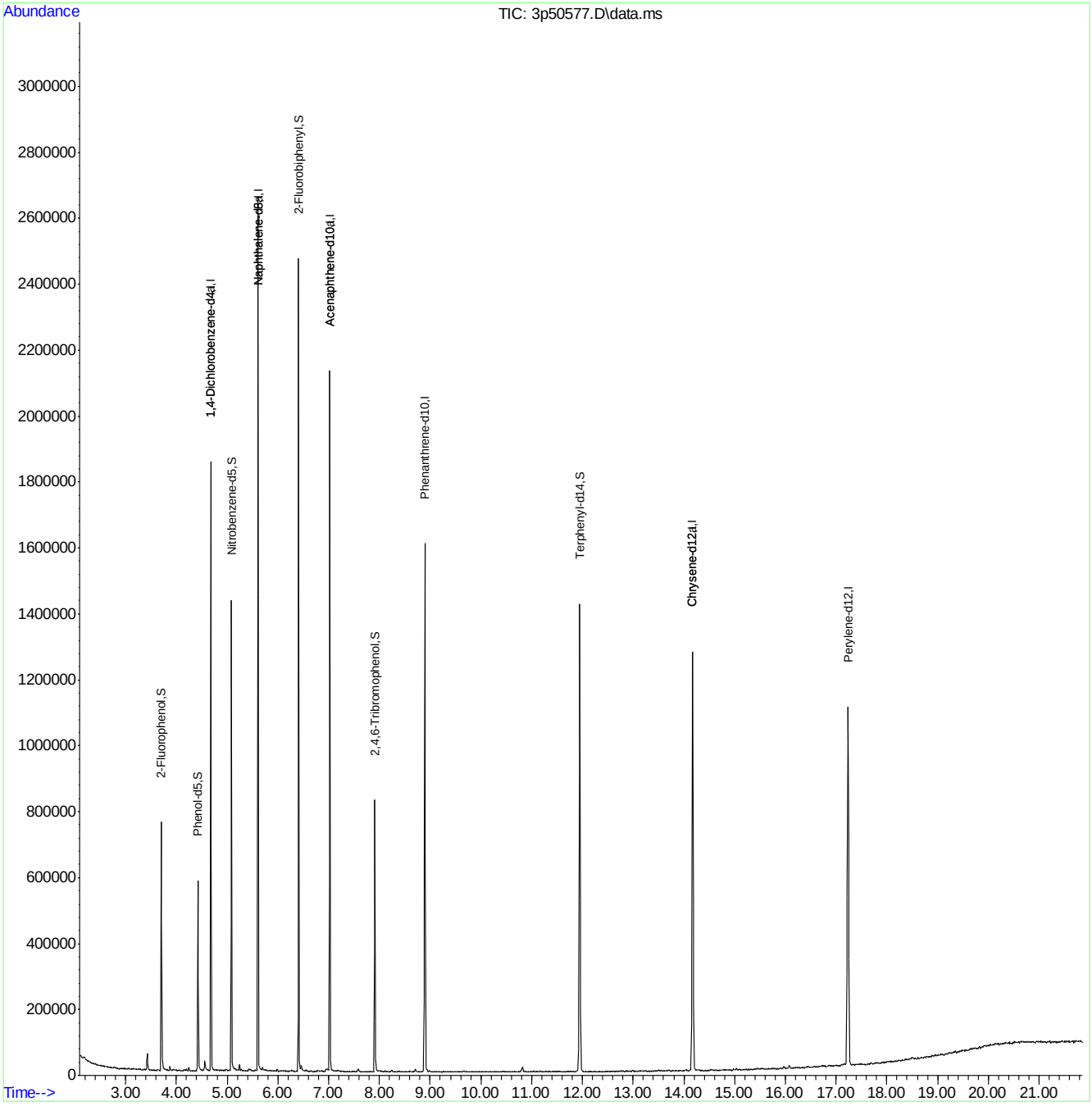
| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| Internal Standards | | | | | | |
| 1) 1,4-Dichlorobenzene-d4 | 4.681 | 152 | 210330 | 40.00 | ppm | 0.07 |
| 24) Naphthalene-d8 | 5.606 | 136 | 768357 | 40.00 | ppm | 0.06 |
| 47) Acenaphthene-d10 | 7.024 | 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

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



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

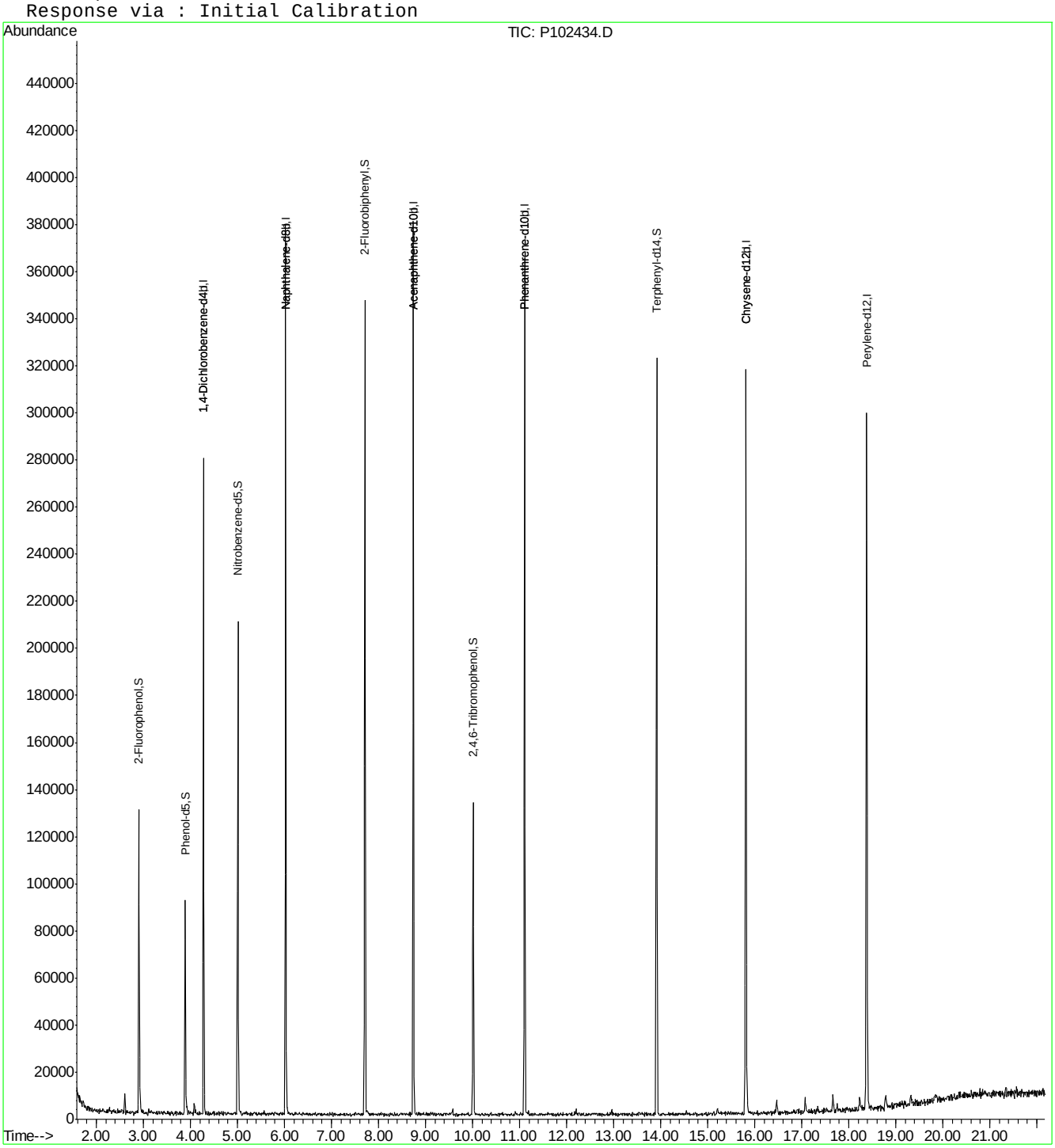
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 4.28 | 152 | 41631 | 40.00 | ppm | 0.05 |
| 24) Naphthalene-d8 | 6.02 | 136 | 168311 | 40.00 | ppm | 0.05 |
| 47) Acenaphthene-d10 | 8.74 | 164 | 94184 | 40.00 | ppm | 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

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










SGS ACCUTEST JC13575

## 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% |

* = 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% |



* = 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

# 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

# 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

# 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 | | | |

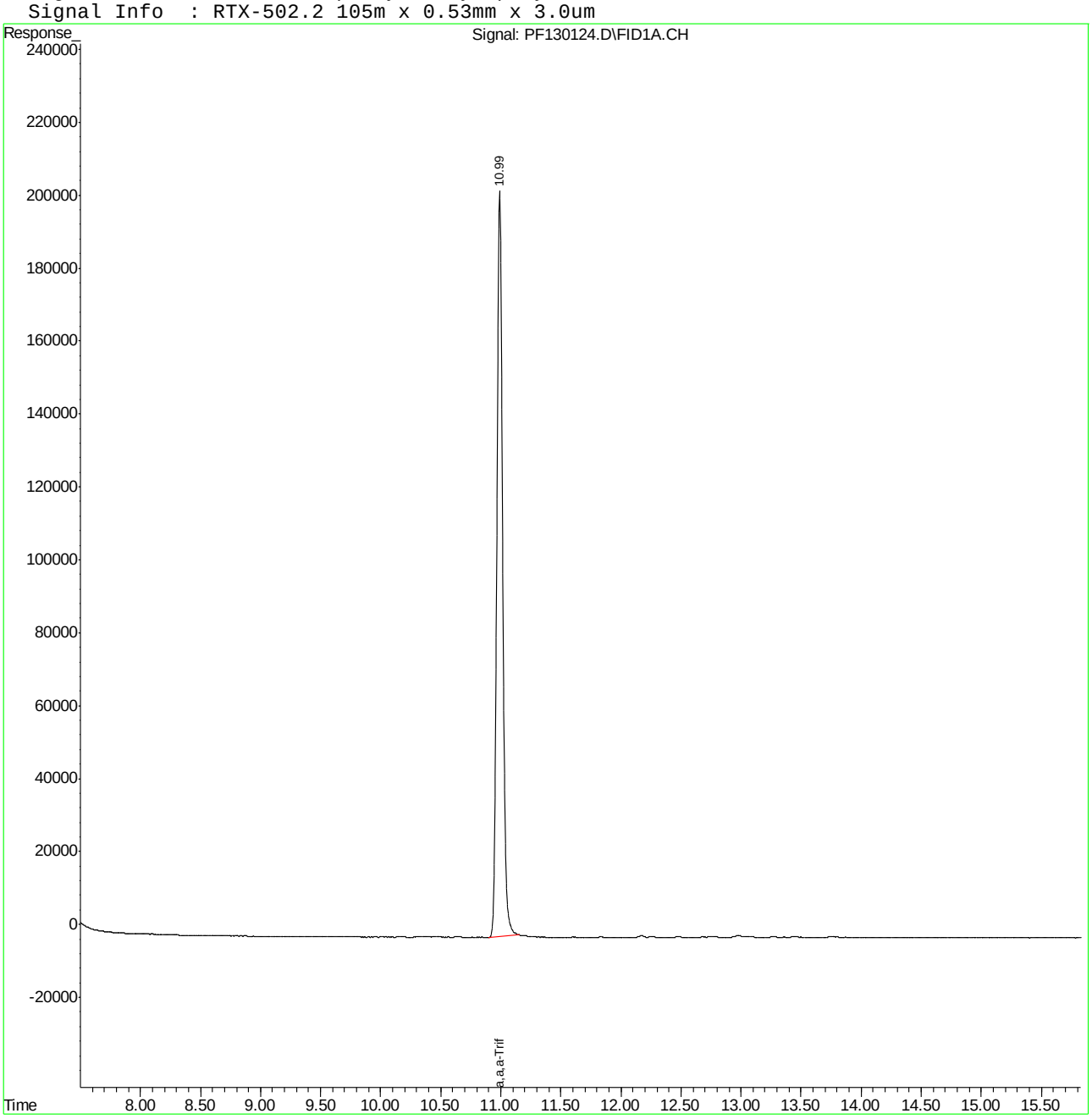
(f)=RT Delta > 1/2 Window (m)=manual int.

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










SGS ACCUTEST JC13575

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 | | | |

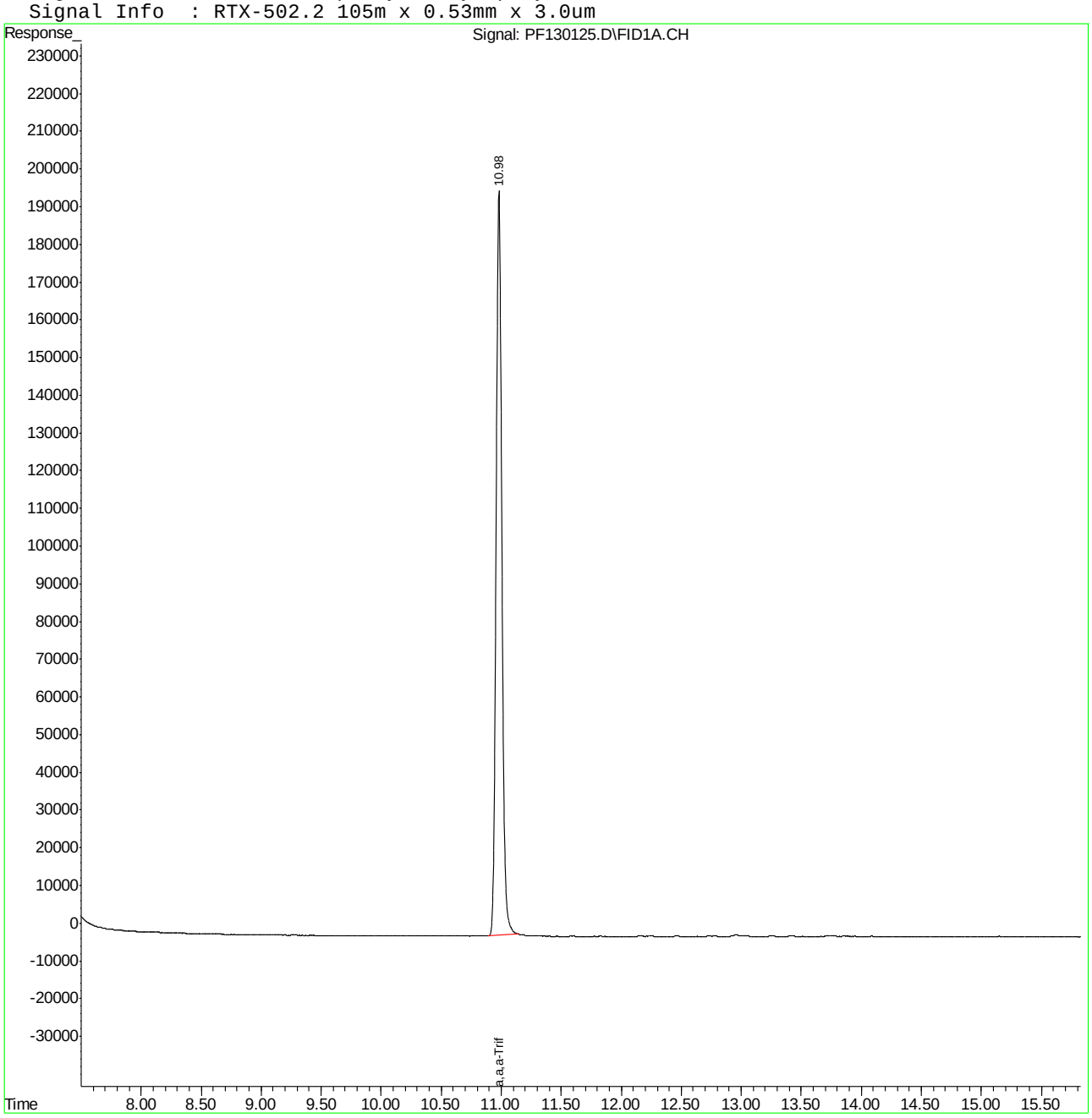
(f)=RT Delta > 1/2 Window (m)=manual int.
PF130125.D MPF3880.M Thu Feb 04 08:15:27 2016 RPT1 Page 1

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 | | | |

(f)=RT Delta > 1/2 Window (m)=manual int.



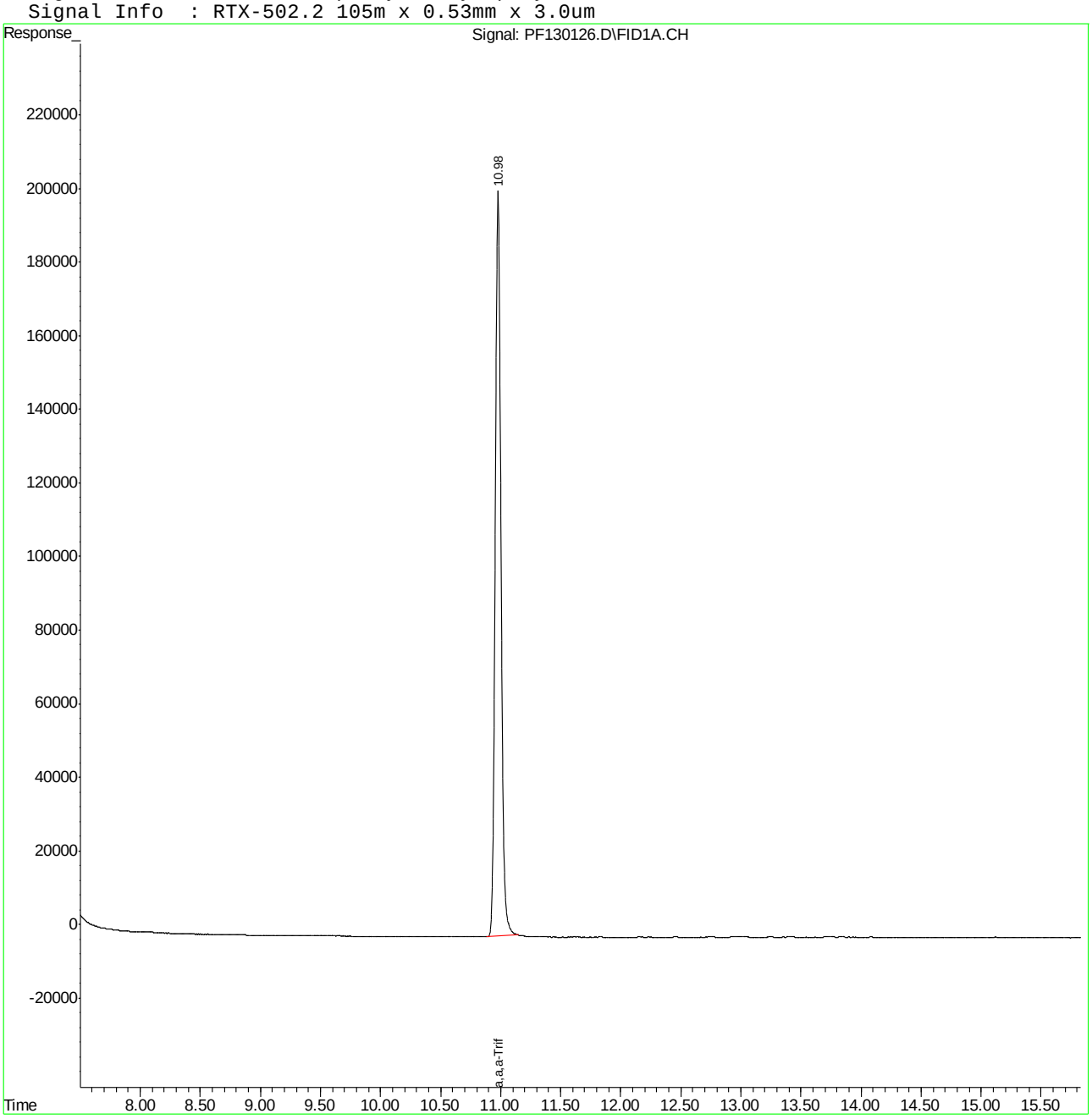
SGS ACCUTEST JC13575

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 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\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 | | | |

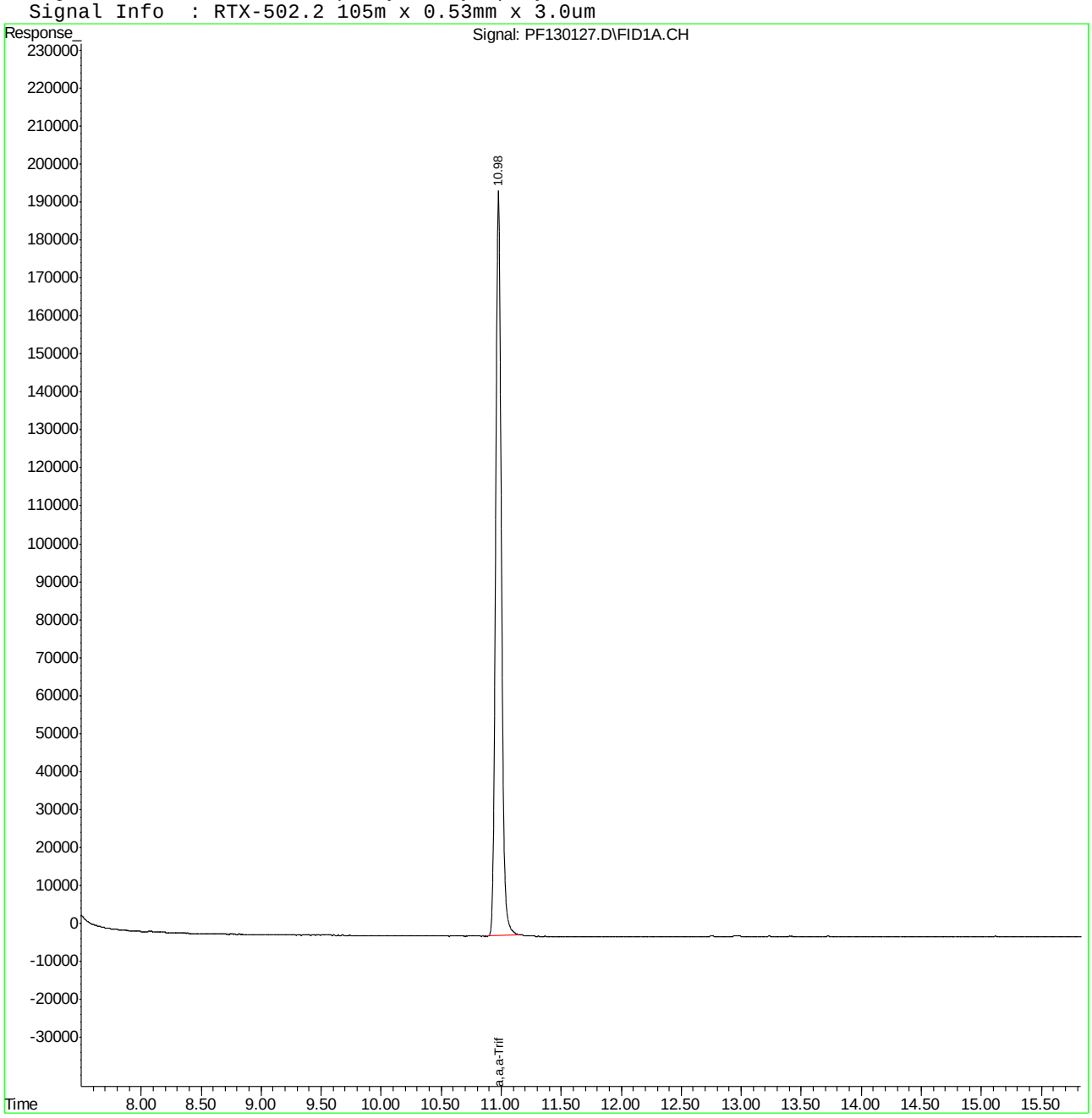
(f)=RT Delta > 1/2 Window (m)=manual int.
PF130127.D MPF3880.M Thu Feb 04 08:15:55 2016 RPT1 Page 1

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









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 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 | | | |

(f)=RT Delta > 1/2 Window (m)=manual int.
PF130123.D MPF3880.M Thu Feb 04 08:14:58 2016 RPT1 Page 1





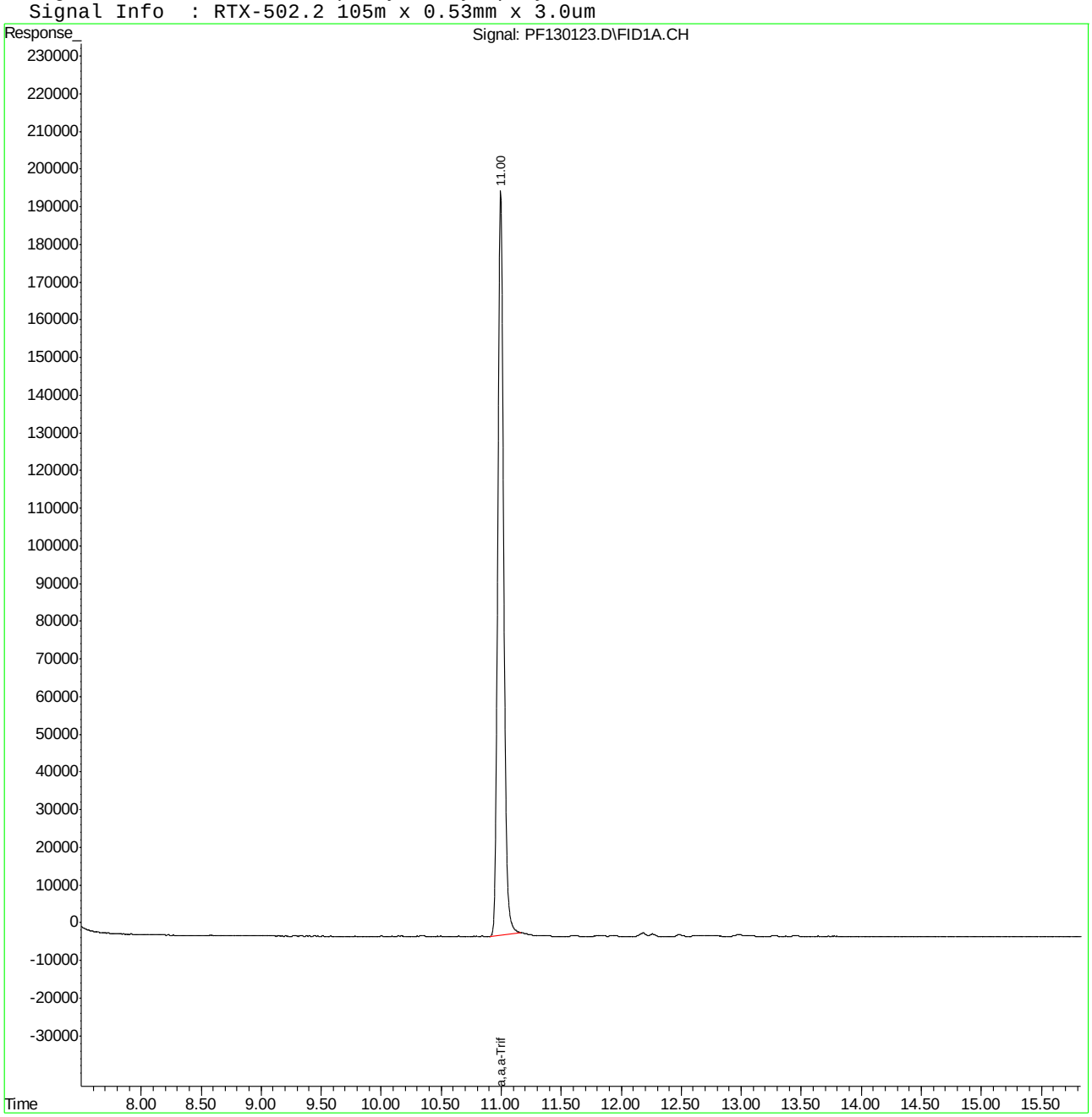
SGS ACCUTEST JC13575

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% |



* = 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% |

* = 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% |

* = 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

# 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


SGS ACCUTEST JC13575

# Initial Calibration Verification



**Job Number:** JC13575
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** G2Y2871-ICV2871
**Lab FileID:** 2Y73978.D

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

# 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
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** G2Z1906-ICV1906
**Lab FileID:** 2Z50579.D

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


SGS ACCUTEST JC13575

# 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

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

# 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
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** GEF5560-ICV5560
**Lab FileID:** EF153485.D

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
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** GEF5560-ICV5560
**Lab FileID:** EF153486.D

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
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** GEF5560-ICV5560
**Lab FileID:** EF153487.D

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
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** GEF5560-ICV5560
**Lab FileID:** EF153488.D

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
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** GEF5560-ICV5560
**Lab FileID:** EF153489.D

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
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** GEF5560-ICV5560
**Lab FileID:** EF153490.D

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
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# 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
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# 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

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SGS ACCUTEST JC13575

# Continuing Calibration Summary

**Job Number:** JC13575
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** GEF5564-CC5560
**Lab FileID:** EF153616.D

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 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

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# 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
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# 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 |

12.6.17

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SGS ACCUTEST JC13575

# 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
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# 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 |

# Continuing Calibration Summary

**Job Number:** JC13575
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** GEF5564-CC5560
**Lab FileID:** EF153635.D

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 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

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# 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
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# 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

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SGS ACCUTEST JC13575

# Continuing Calibration Summary

**Job Number:** JC13575
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** GEF5564-CC5560
**Lab FileID:** EF153668.D

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 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

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SGS ACCUTEST JC13575

# 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
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# 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
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** GEF5564-CC5560
**Lab FileID:** EF153679.D

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 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

# 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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SGS ACCUTEST JC13575

# 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 |

12.6.21
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# Continuing Calibration Summary

**Job Number:** JC13575
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** GEF5564-CC5560
**Lab FileID:** EF153684.D

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 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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SGS ACCUTEST JC13575

# 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
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SGS ACCUTEST JC13575

# 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 |

12.6.22
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SGS ACCUTEST JC13575

# Continuing Calibration Summary

**Job Number:** JC13575
**Account:** LSRPNJL LSRP Consulting, LLC
**Project:** Alcoa Building 12, 734 River Road, Edgewater, NJ

**Sample:** GEF5565-CC5560
**Lab FileID:** EF153695.D

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 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 |

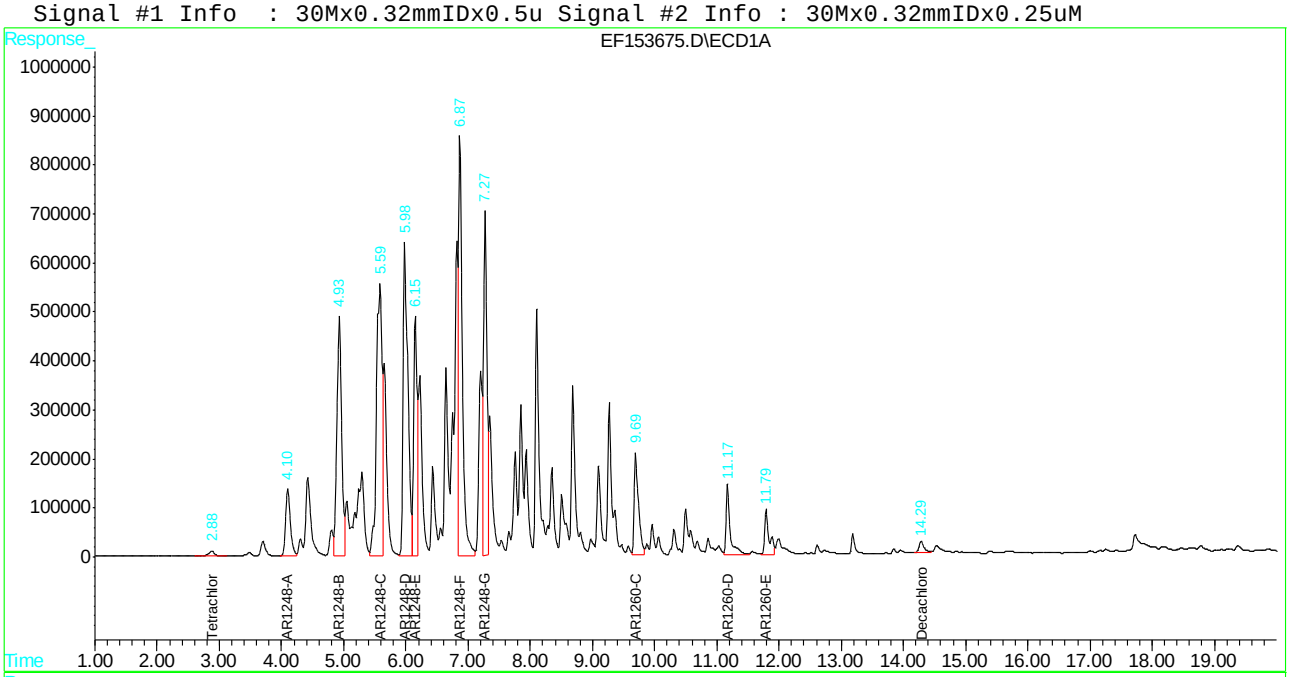
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

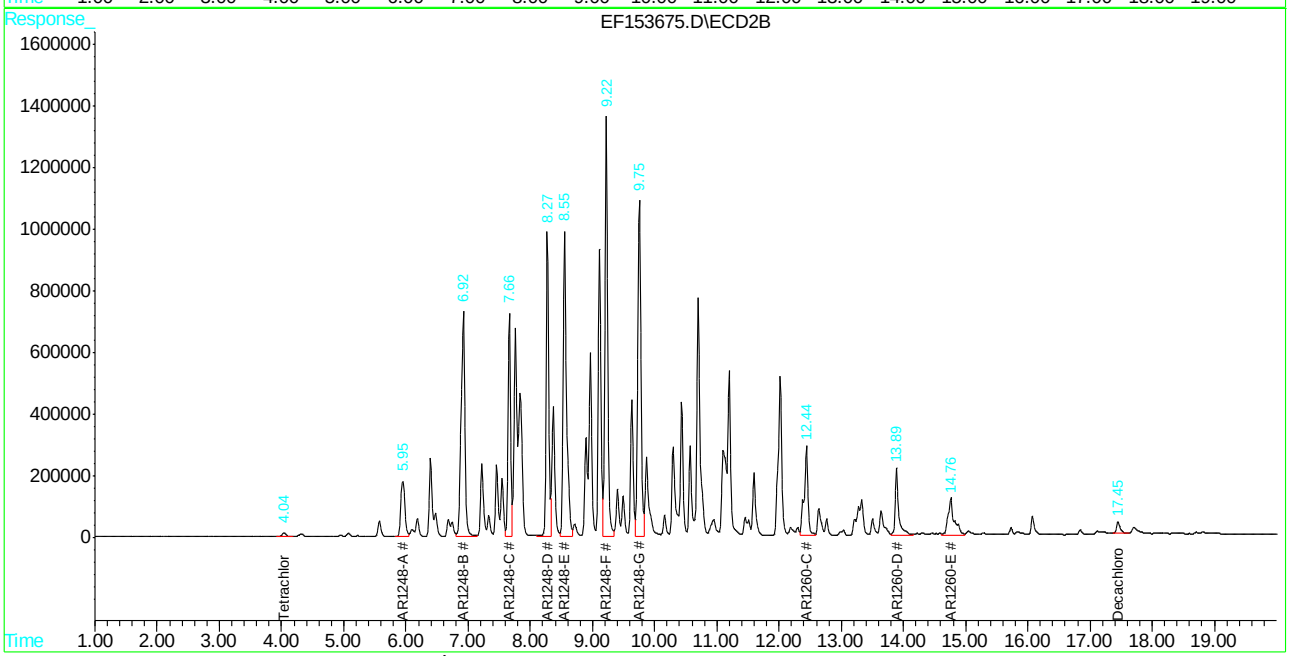
Quantitation Report

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.
EF153688.D PCB5560.M Tue Feb 16 17:35:25 2016 GCEF Page 1

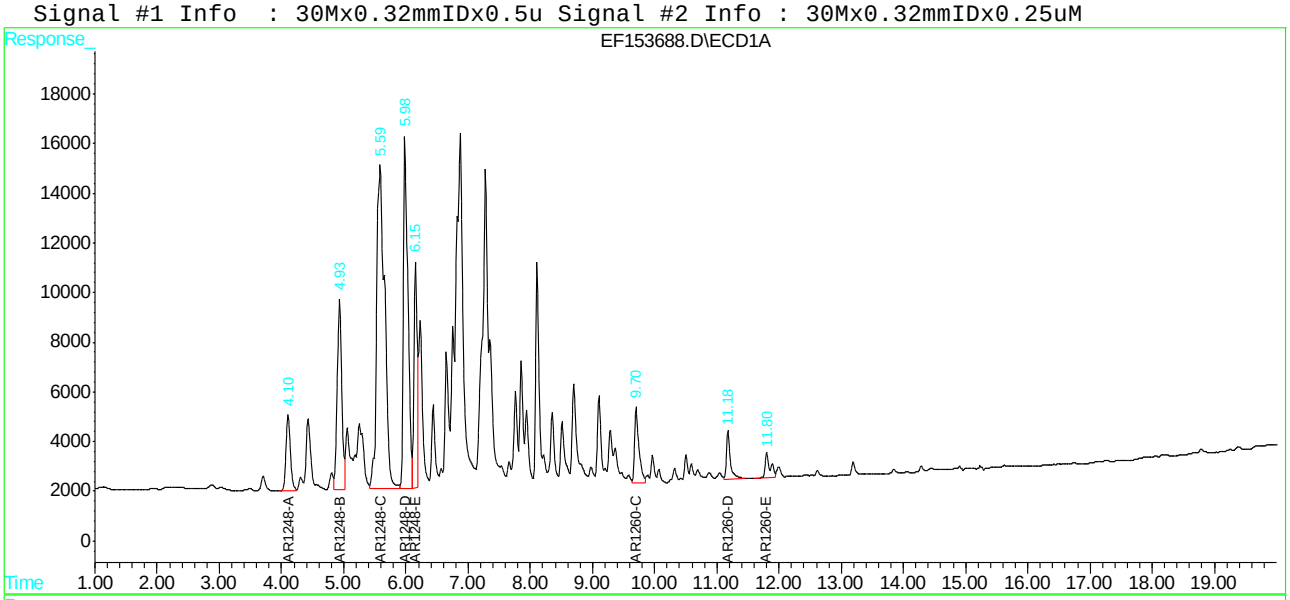
Quantitation Report

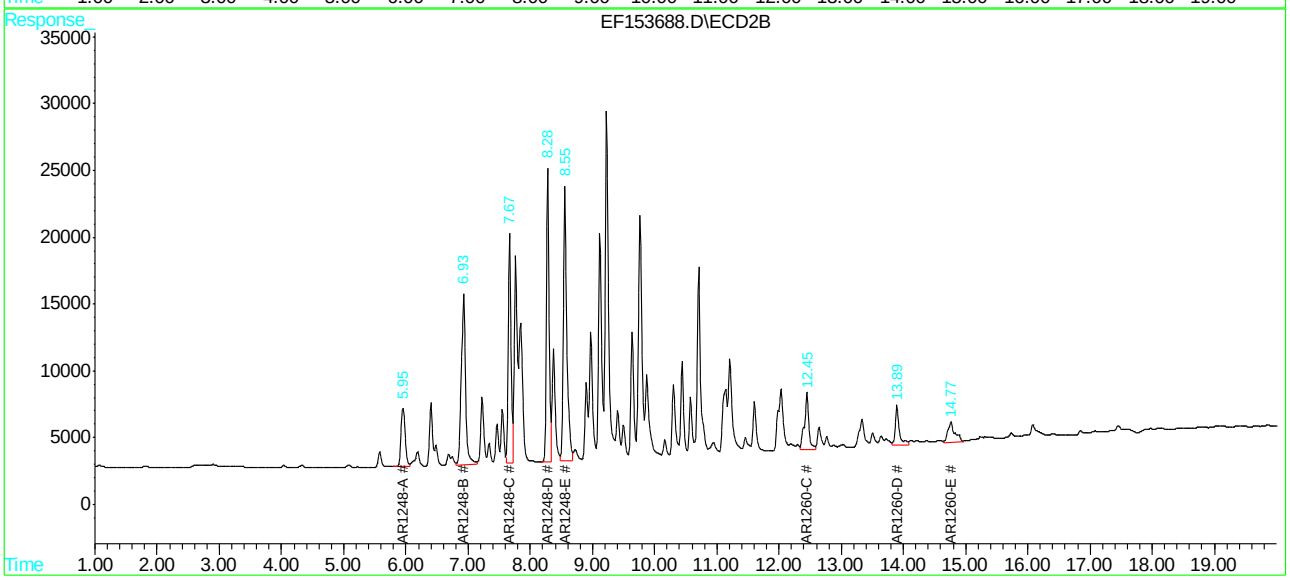
Data File : C:\HPCHEM\1\DATA\GEF5565\EF153688.D\ECD1A.CH Vial: 5
Acq On : 5 Feb 2016 3:42 pm Operator: curtisc
Sample : jc13575-1 Inst : gcef
Misc : op90954,gef5565,15.5,,,10,100 Multiplr: 1.00
IntFile : EVENTS.E

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










SGS ACCUTEST JC13575

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 |

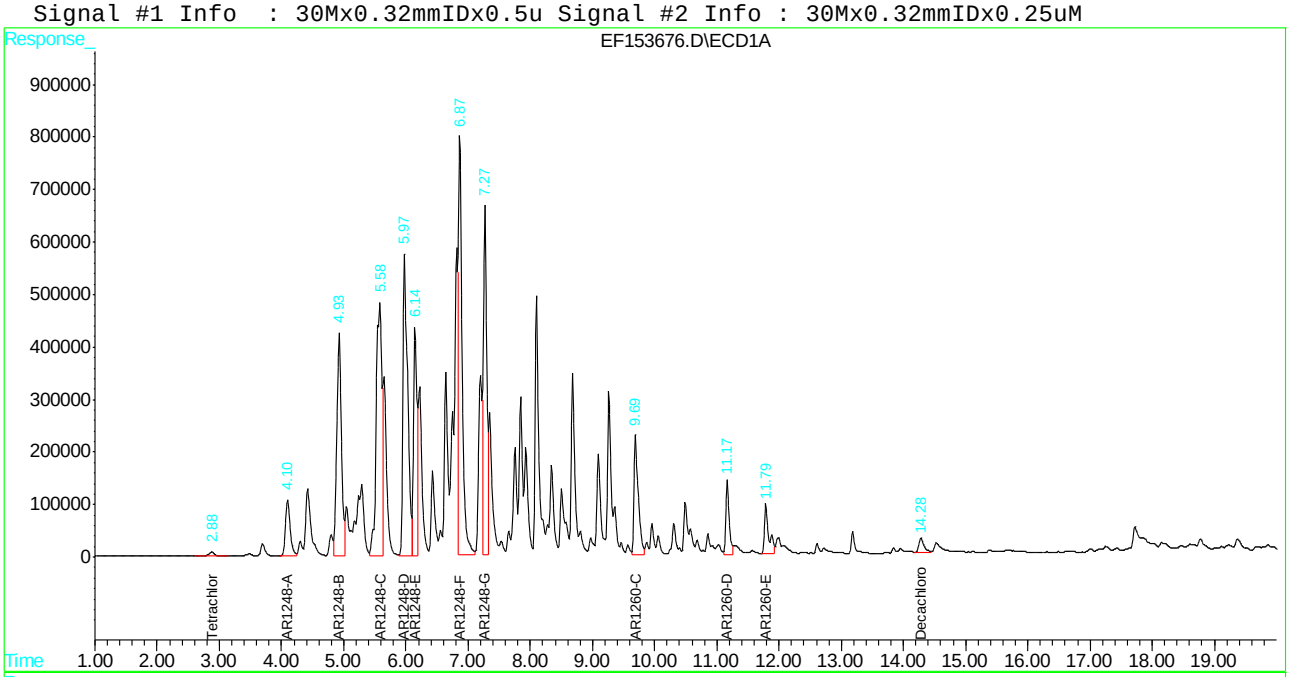
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
EF153676.D PCB5560.M Tue Feb 16 17:33:22 2016 GCEF

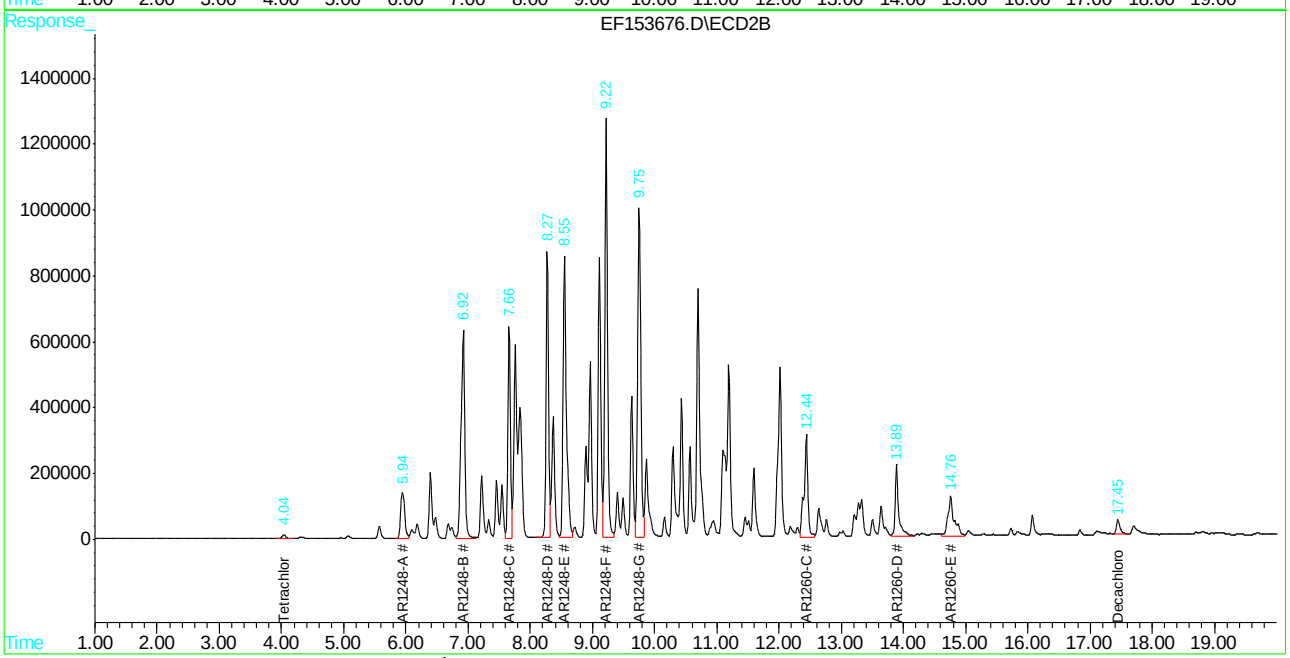
Quantitation Report

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










SGS ACCUTEST JC13575

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 |

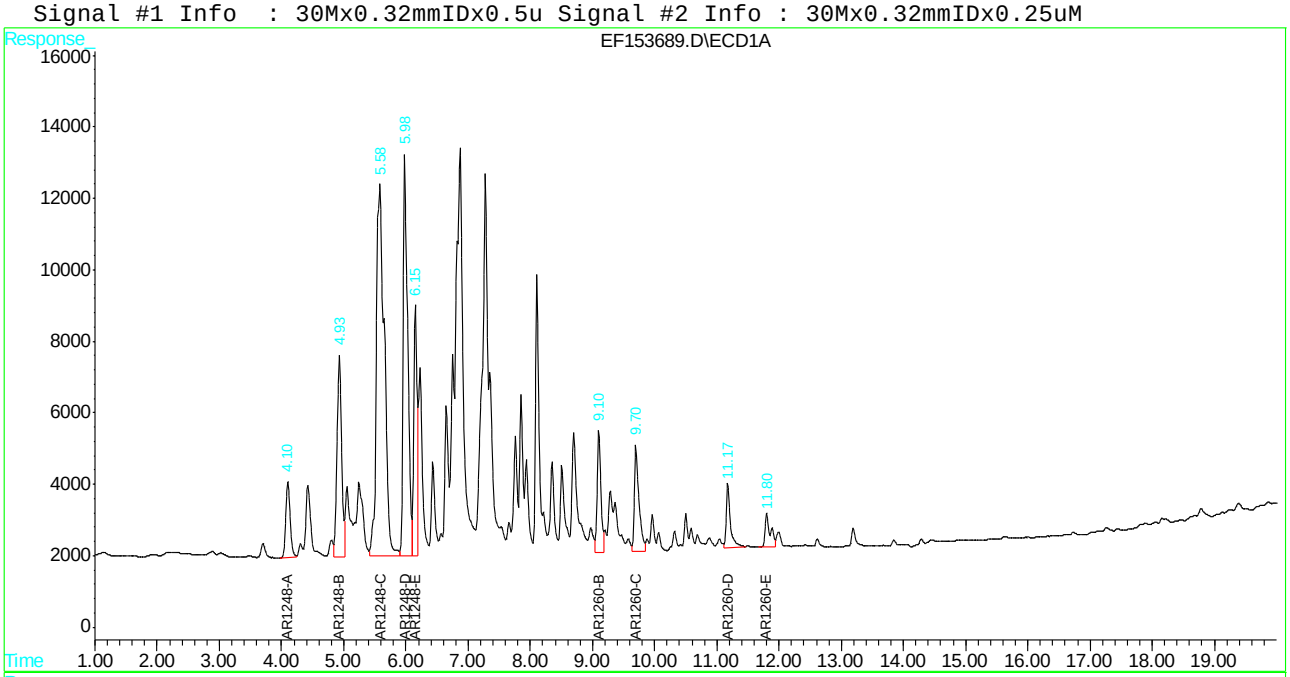
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
EF153689.D PCB5560.M Tue Feb 16 17:36:10 2016 GCEF Page 1

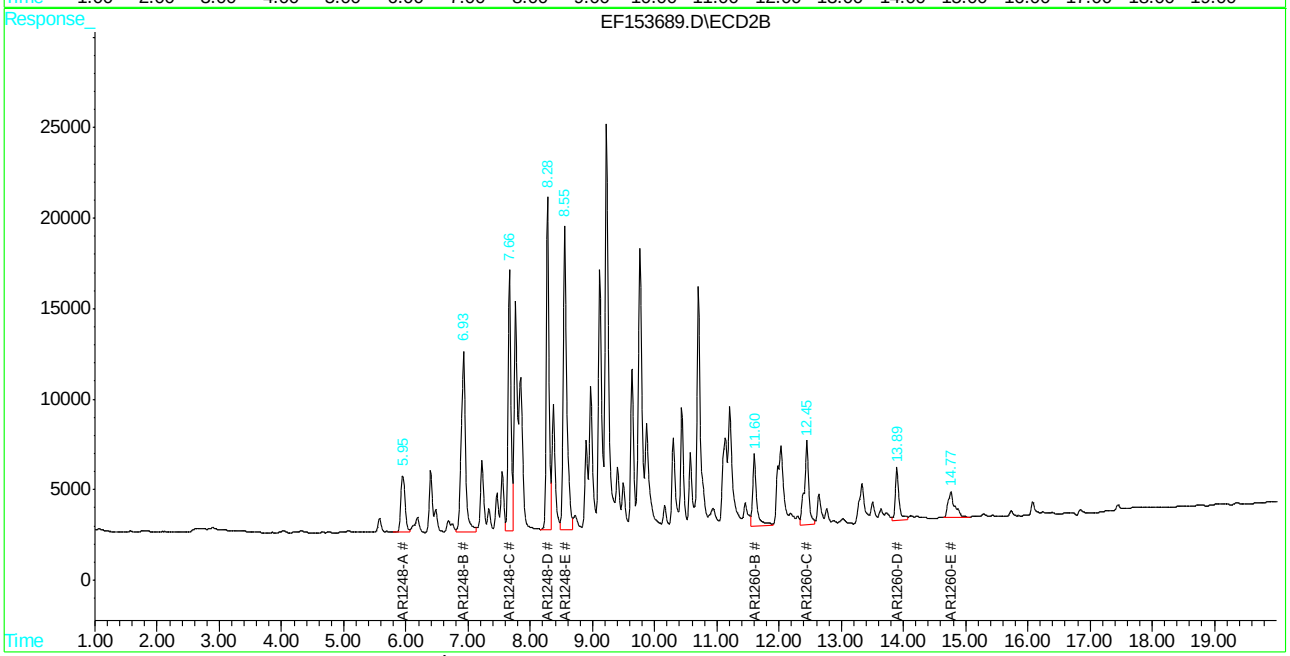
Quantitation Report

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










SGS ACCUTEST JC13575

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 |

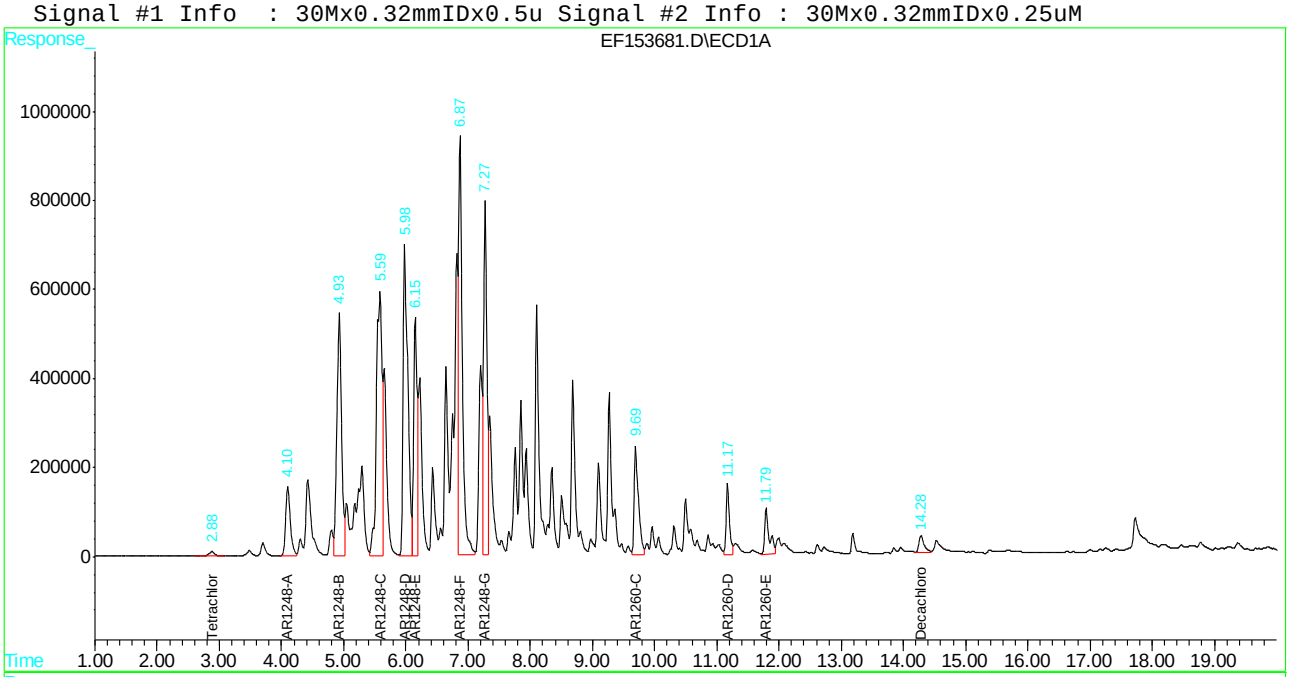
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
EF153681.D PCB5560.M Tue Feb 16 17:33:38 2016 GCEF

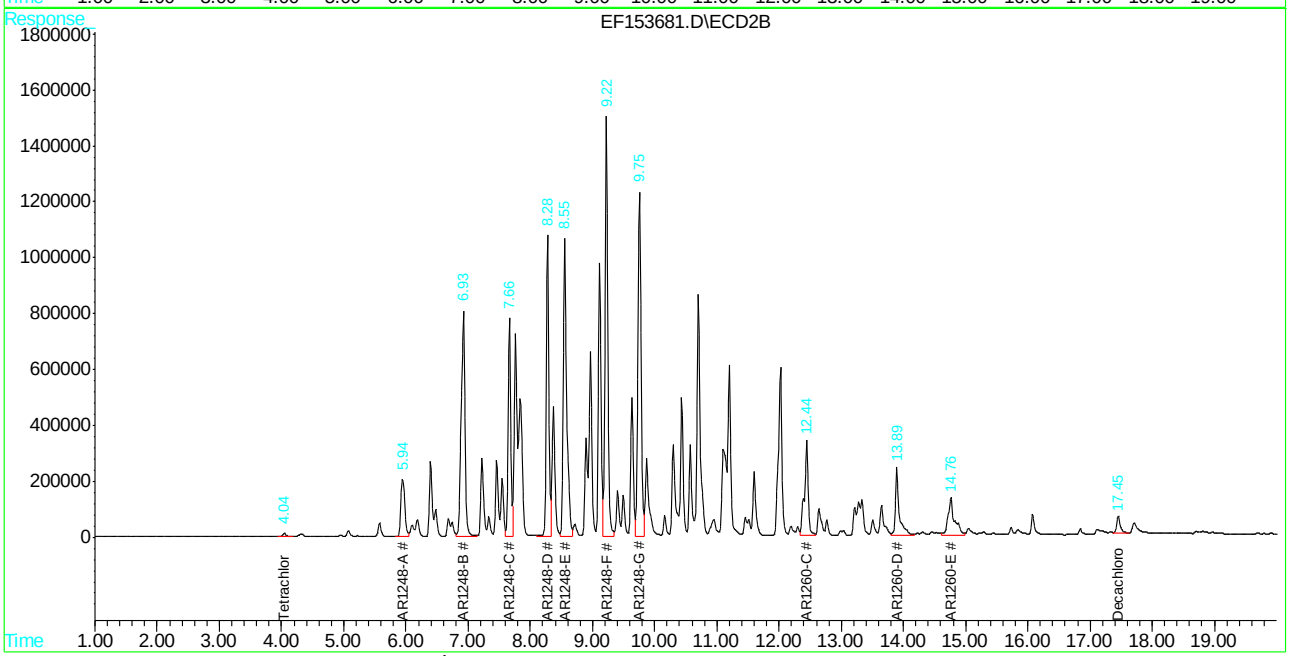
Quantitation Report

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










SGS ACCUTEST JC13575

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 |

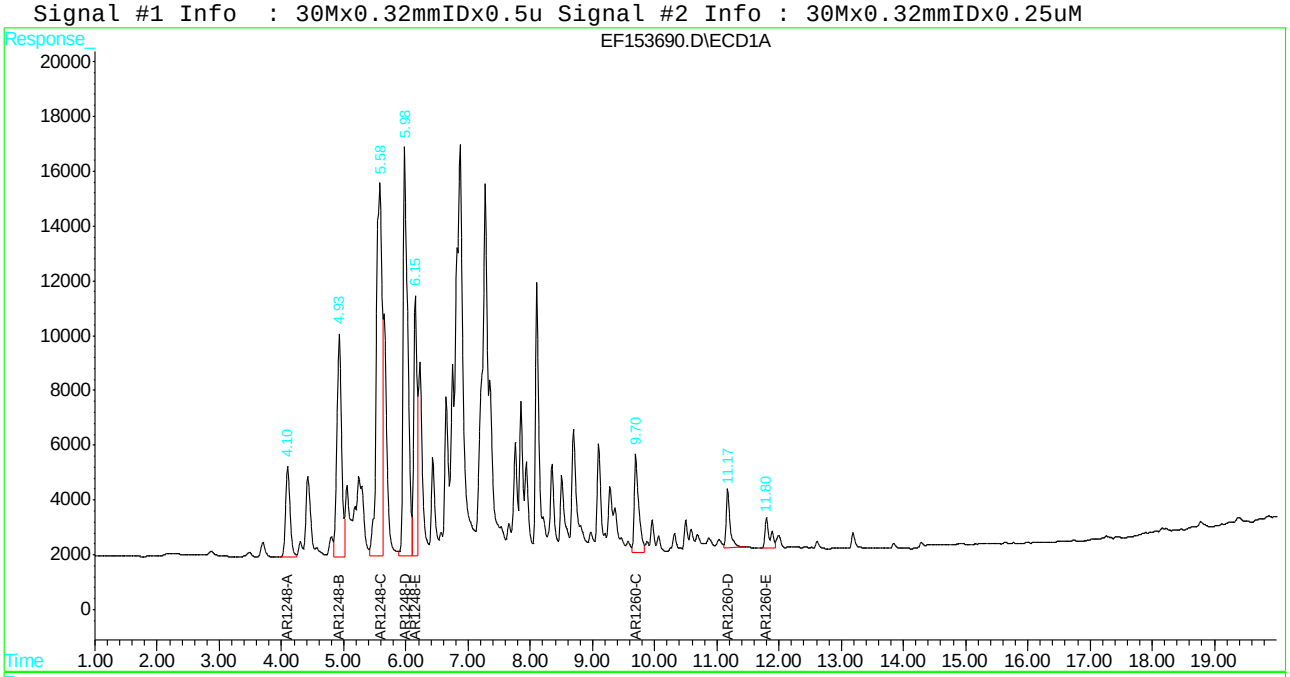
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
EF153690.D PCB5560.M Tue Feb 16 17:36:58 2016 GCEF

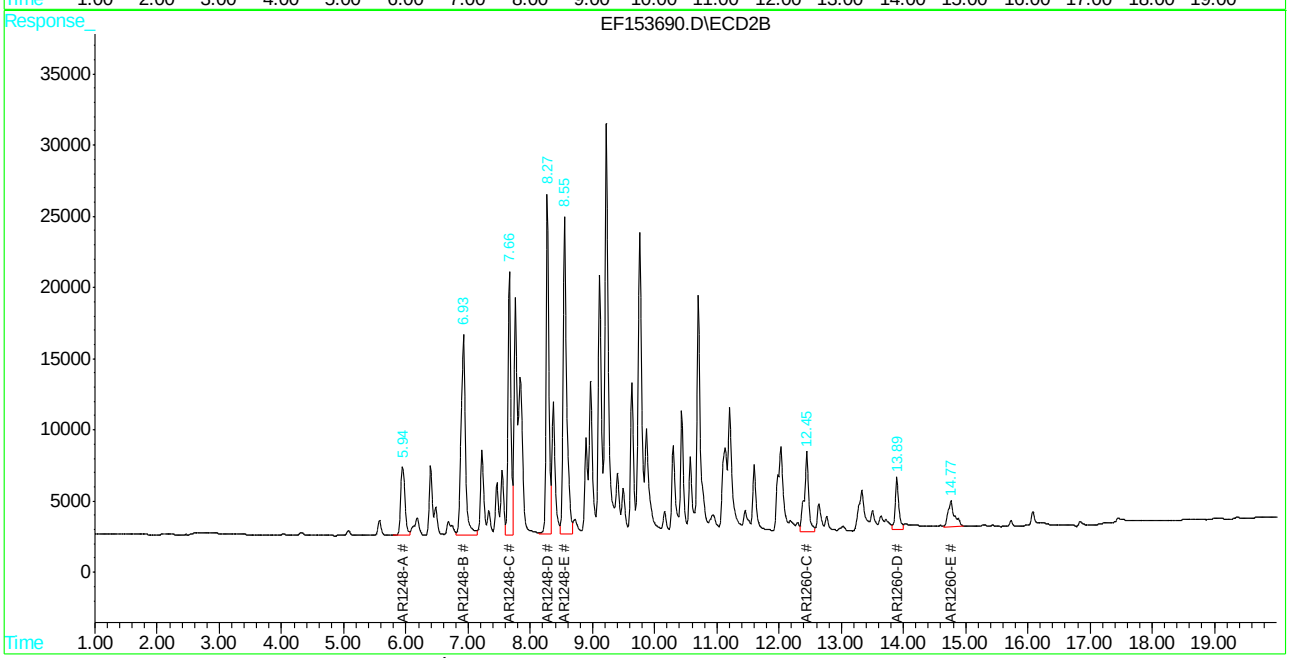
Quantitation Report

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










SGS ACCUTEST JC13575

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.
EF153682.D PCB5560.M Tue Feb 16 17:33:51 2016 GCEF Page 1

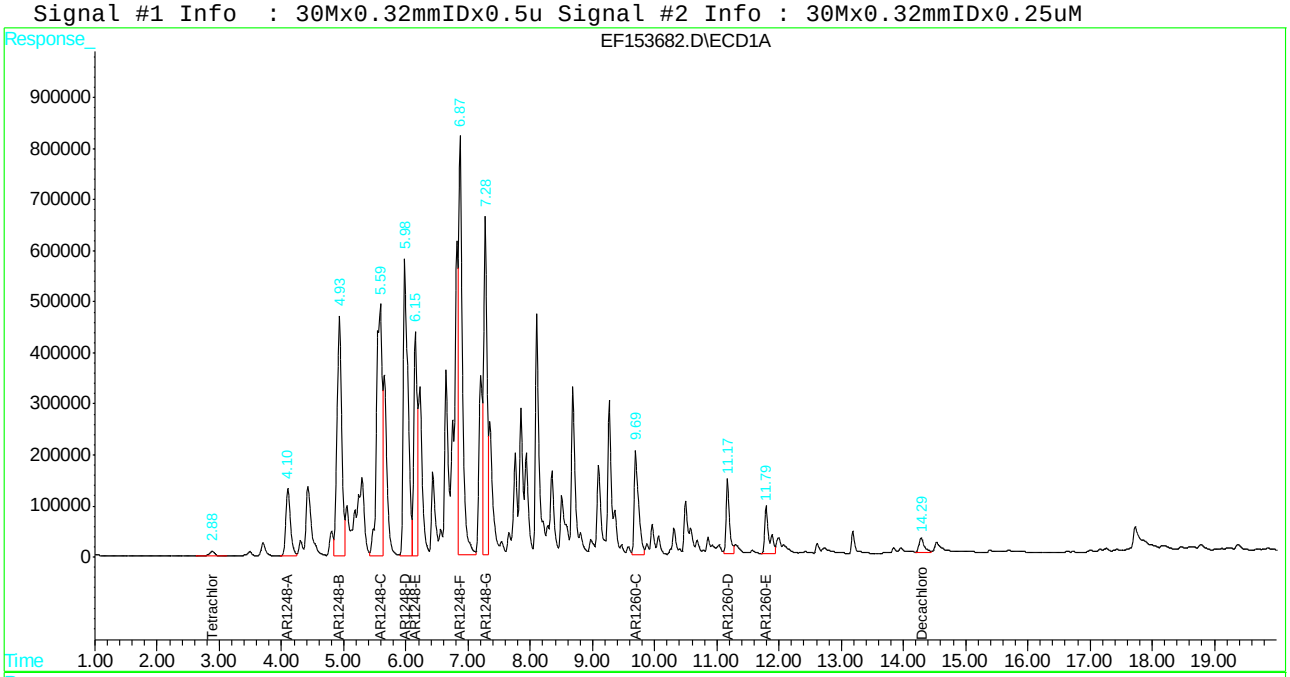

SGS ACCUTEST JC13575

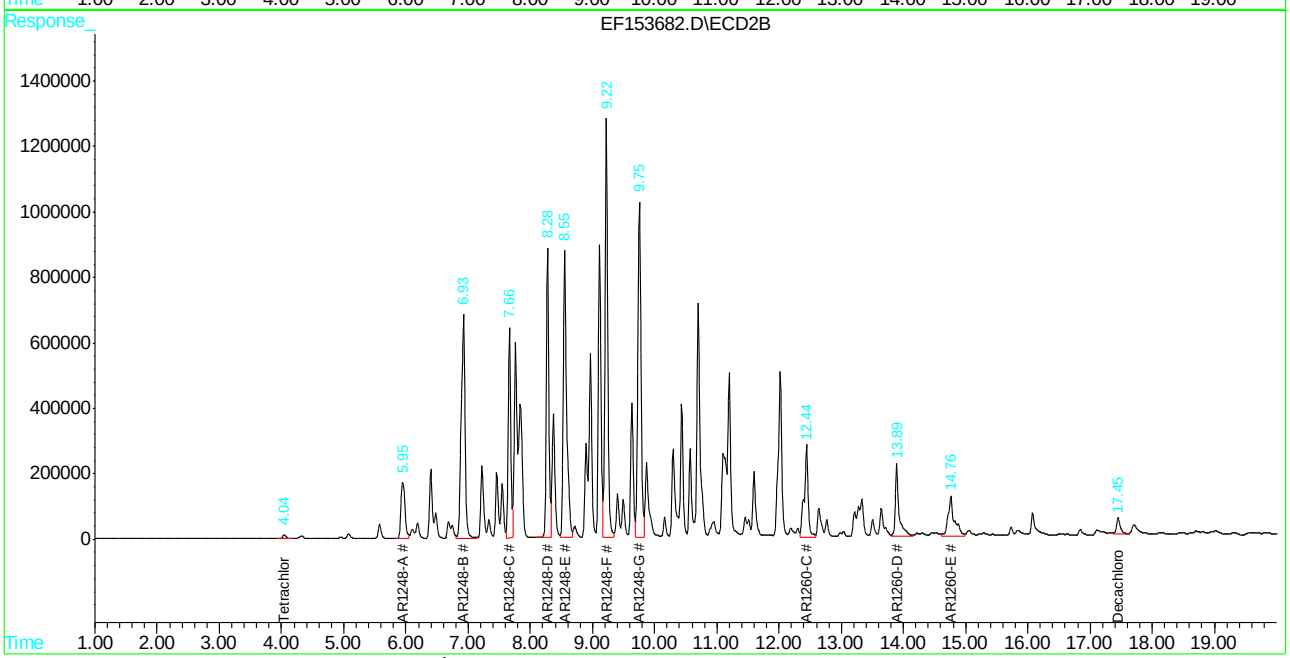
Quantitation Report

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










SGS ACCUTEST JC13575

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 |

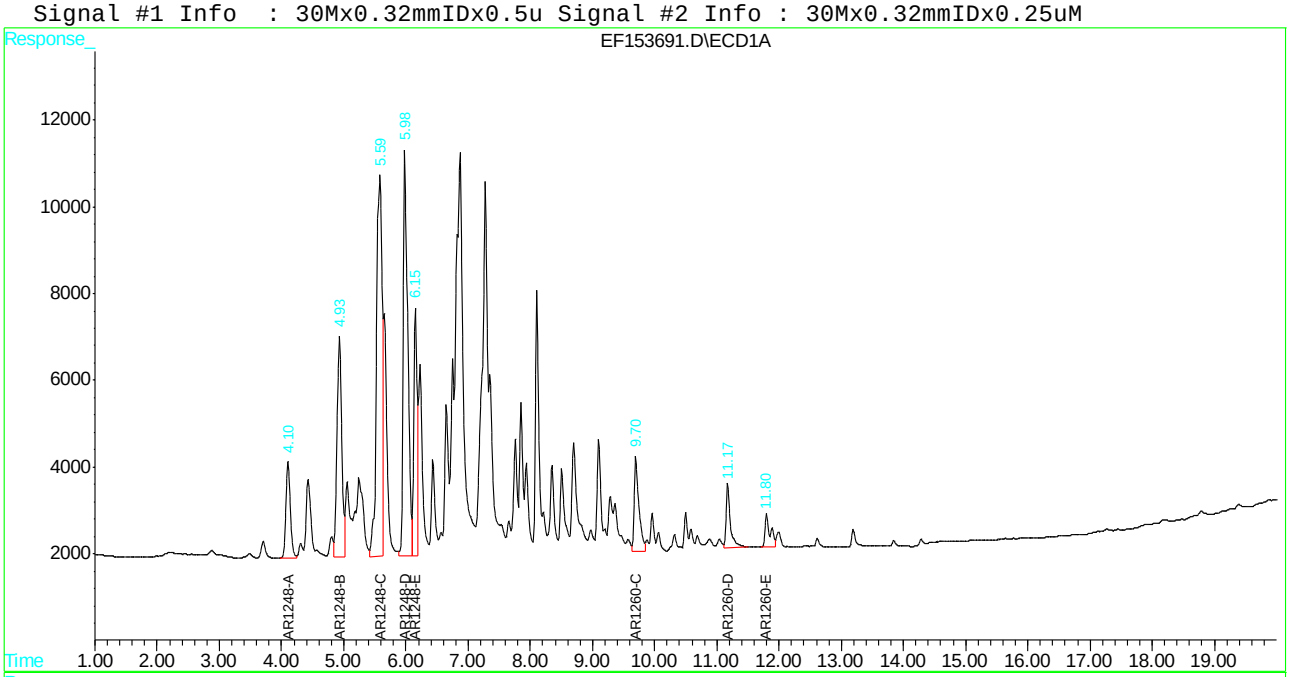
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
EF153691.D PCB5560.M Tue Feb 16 17:37:35 2016 GCEF

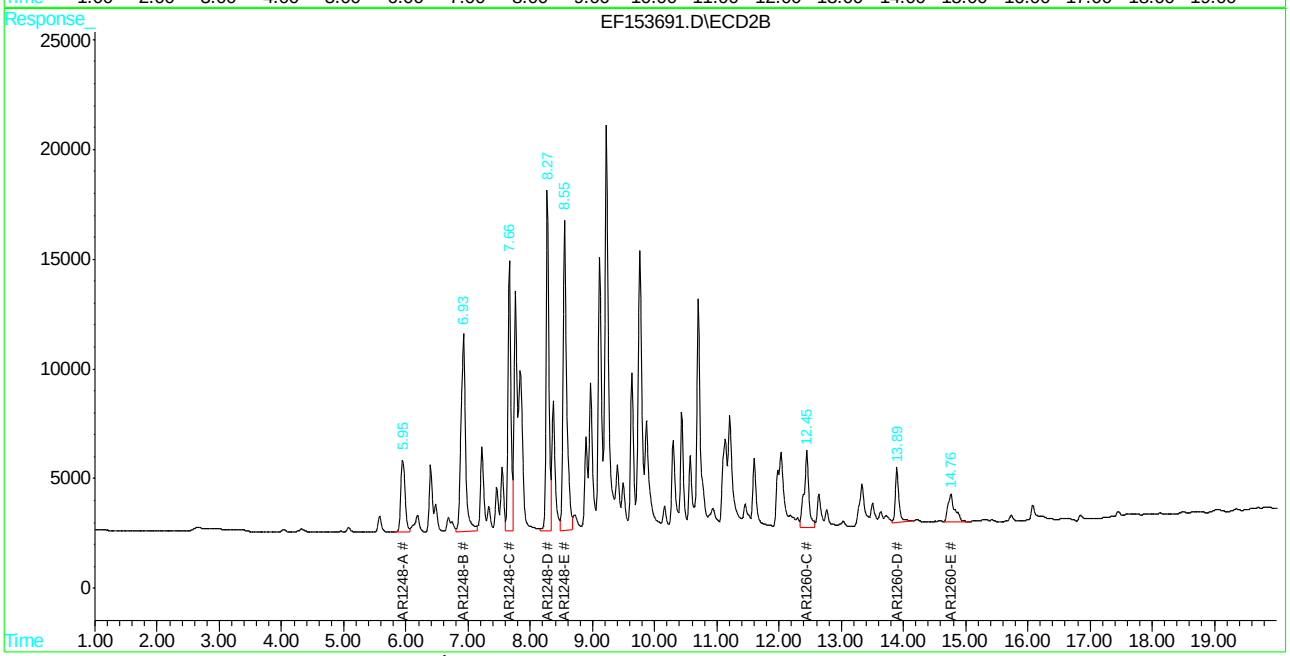
Quantitation Report

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










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 : 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.

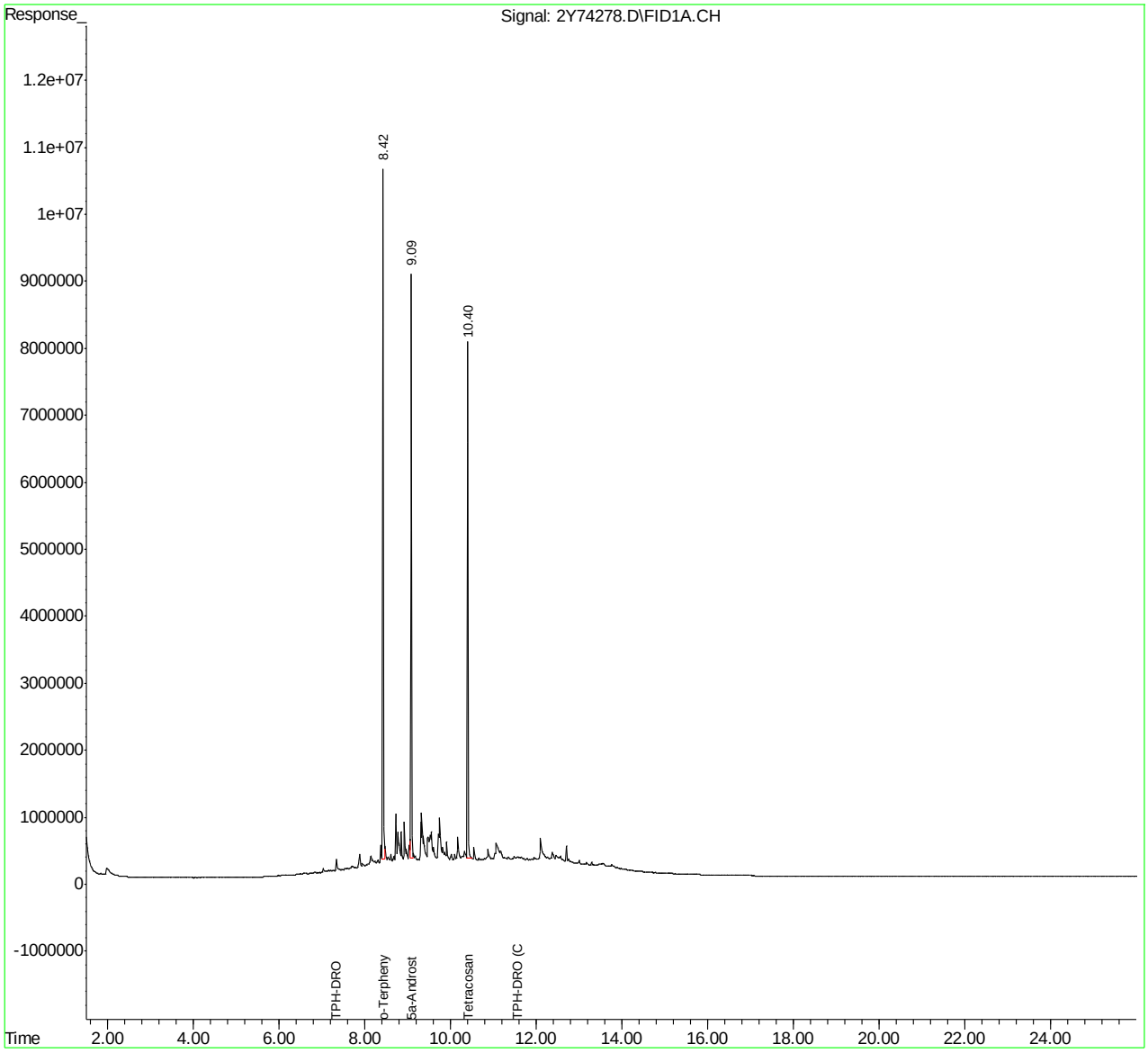
13.1.9
13

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

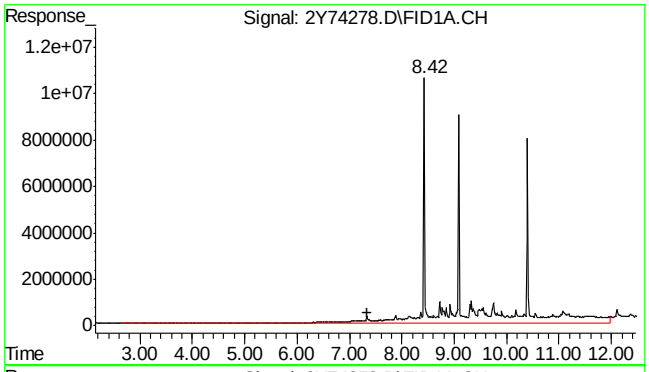






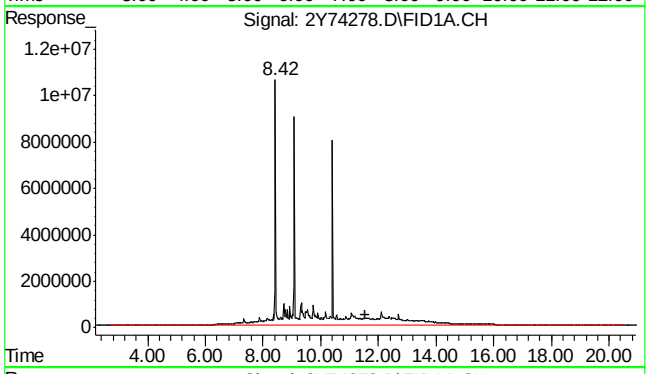



SGS ACCUTEST JC13575



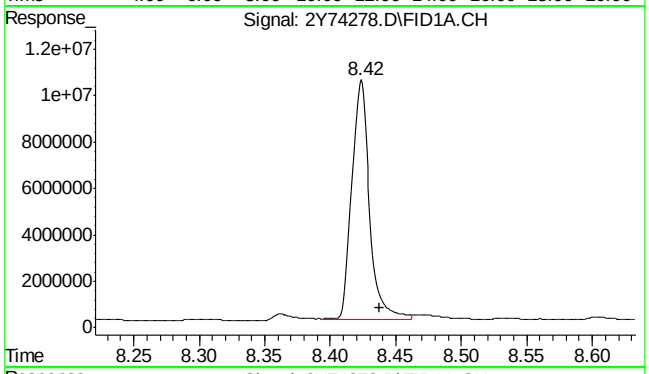

#1 TPH-DRO

R.T.: 7.340 min
Delta R.T.: 0.000 min
Response: 891195420
Conc: 563.68 PPM m



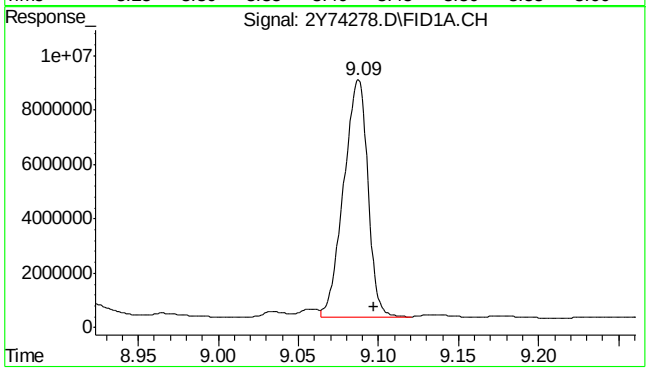

#2 TPH-DRO (C10-C44)

R.T.: 11.560 min
Delta R.T.: 0.000 min
Response: 1294904783
Conc: 819.03 PPM m



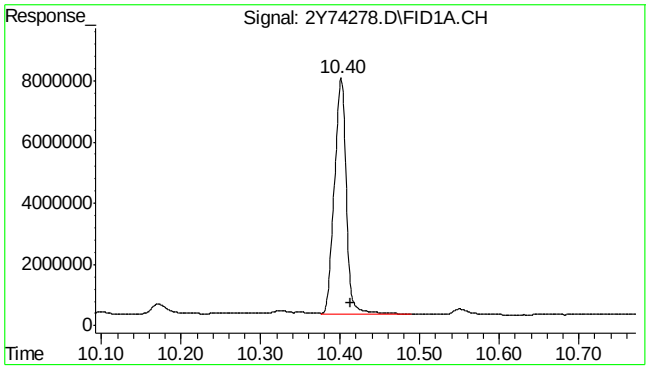

#9 o-Terphenyl

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.

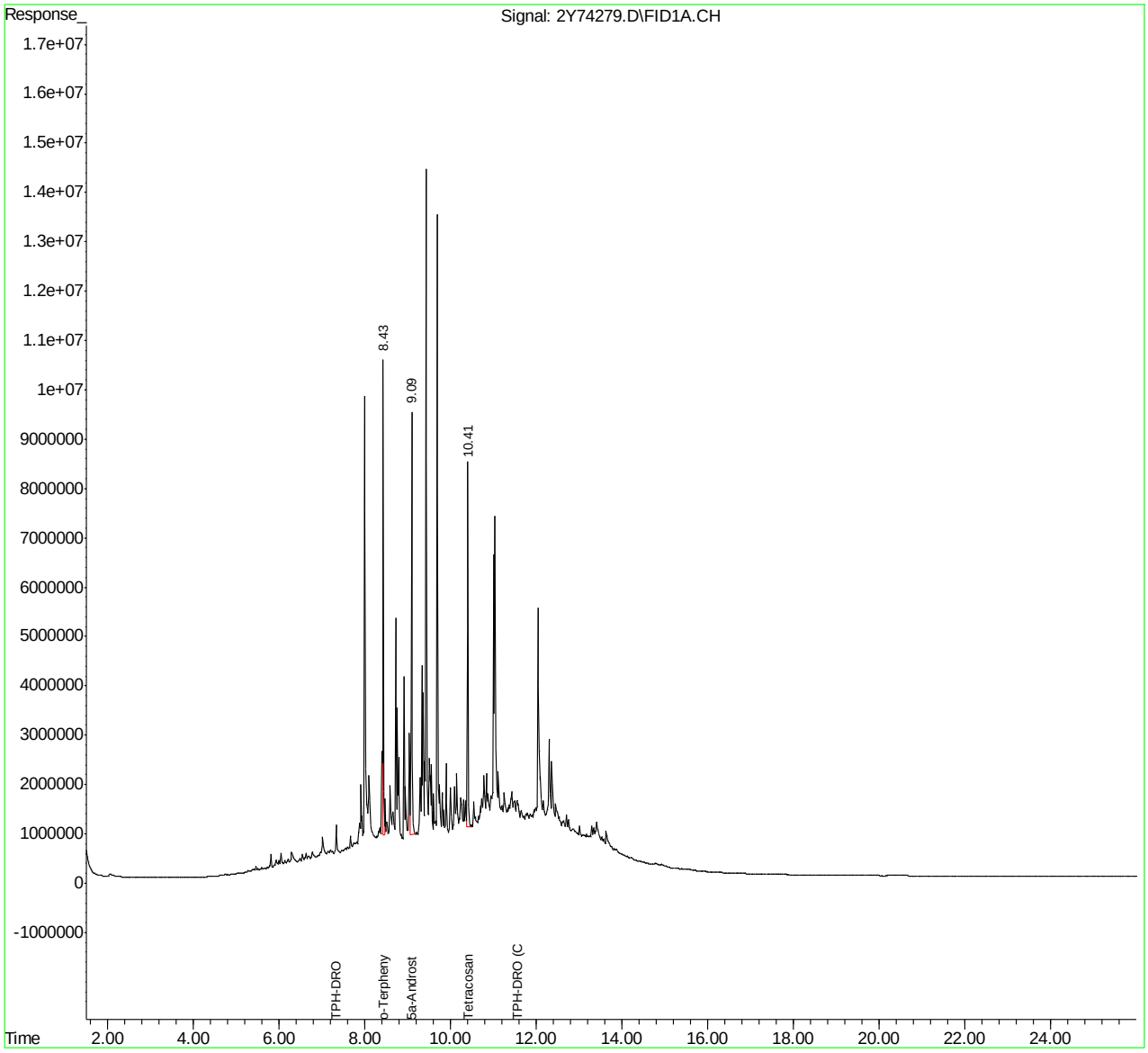
13.1.10
13

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

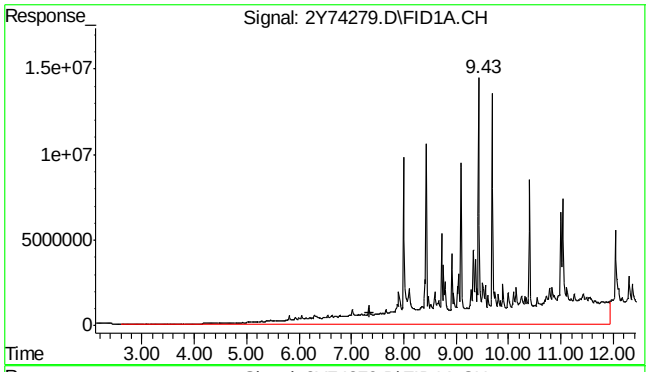






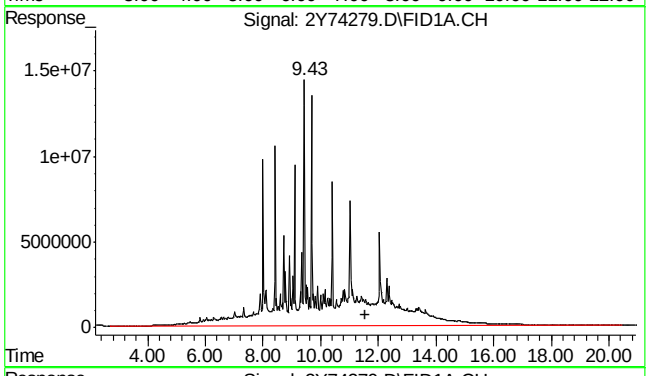



SGS ACCUTEST JC13575



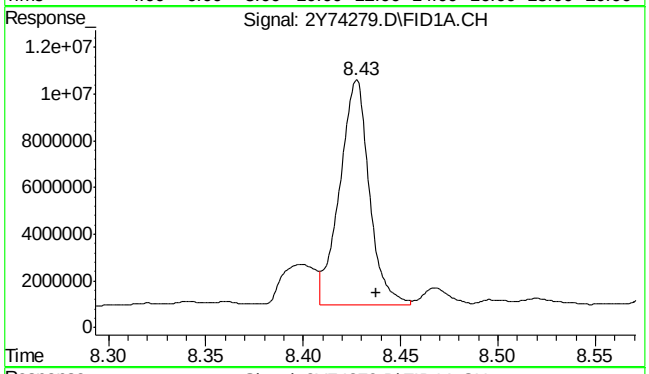

#1 TPH-DRO

R.T.: 7.340 min
Delta R.T.: 0.000 min
Response: 4343618505
Conc: 2747.34 PPM m



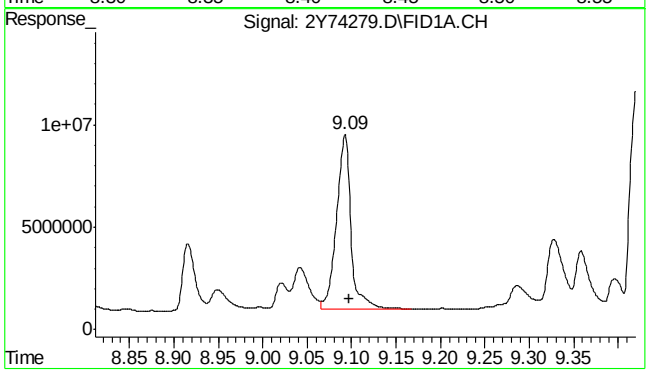

#2 TPH-DRO (C10-C44)

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

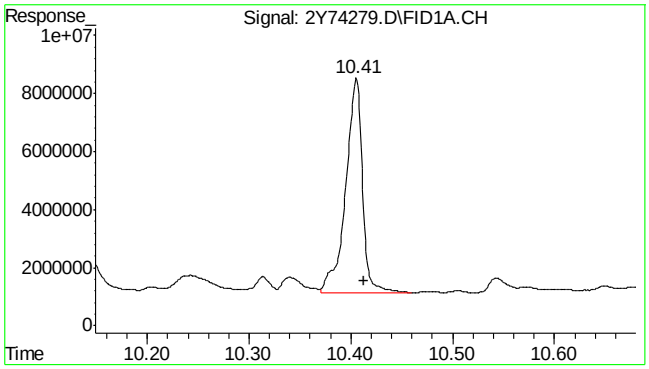
R.T.: 9.092 min
Delta R.T.: -0.005 min
Response: 98066012
Conc: 56.53 PPM m







SGS ACCUTEST JC13575




#11 Tetracosane-d50

| | |
|---|---|
| R.T.: | 10.405 min |
| Delta R.T.: | -0.008 min |
| Response: | 84586872 |
| Conc: | 56.22 PPM m |

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.

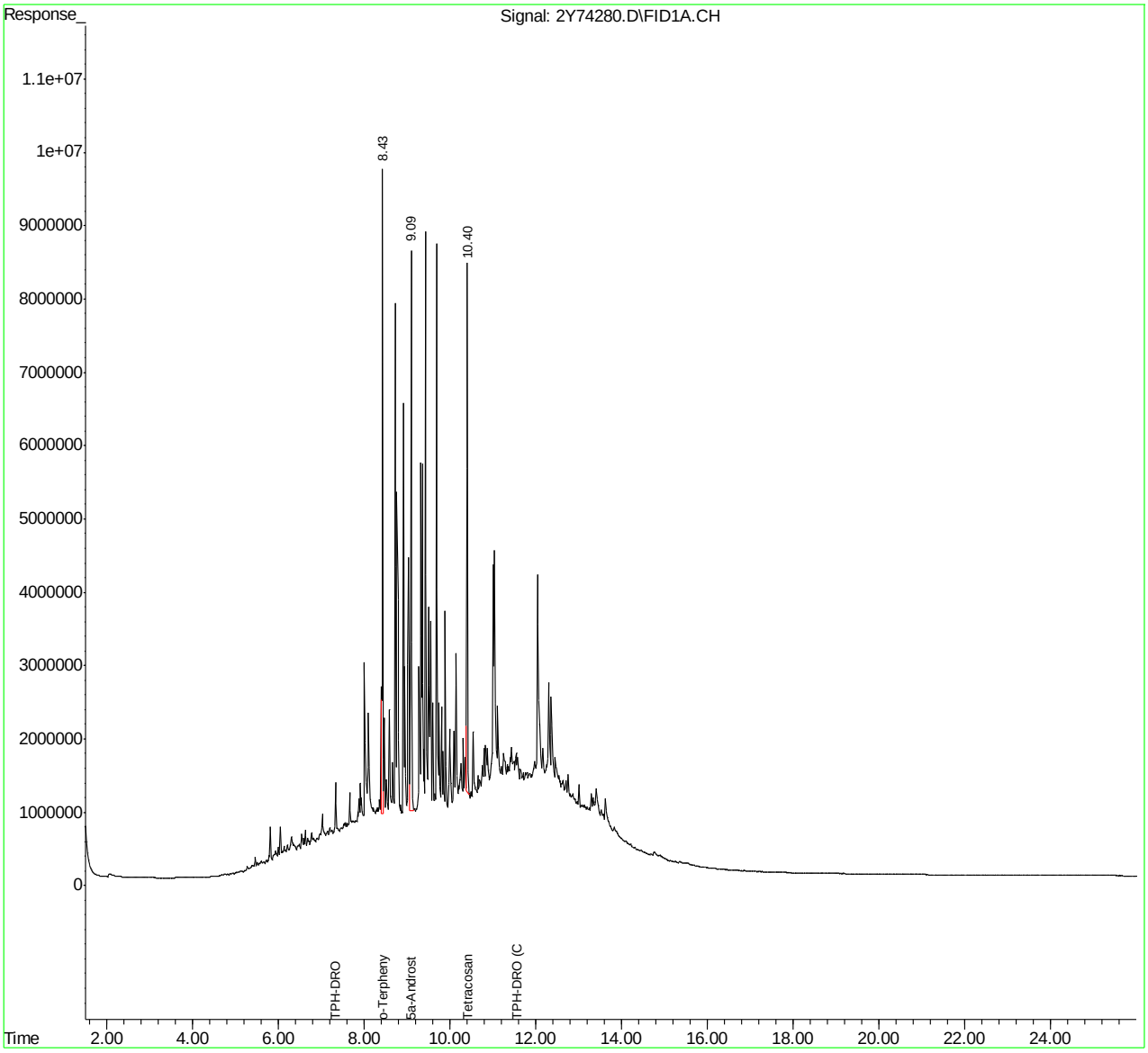
13.1.1.11
13

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

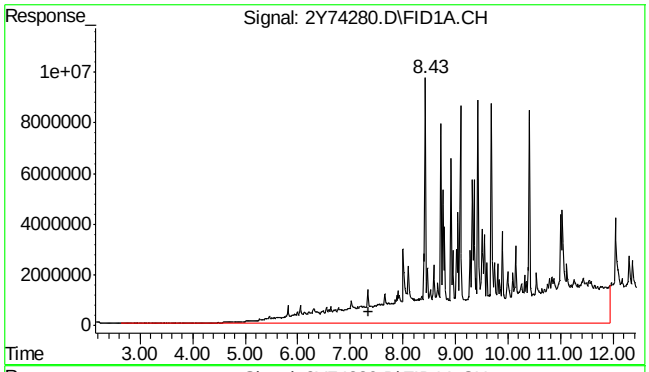






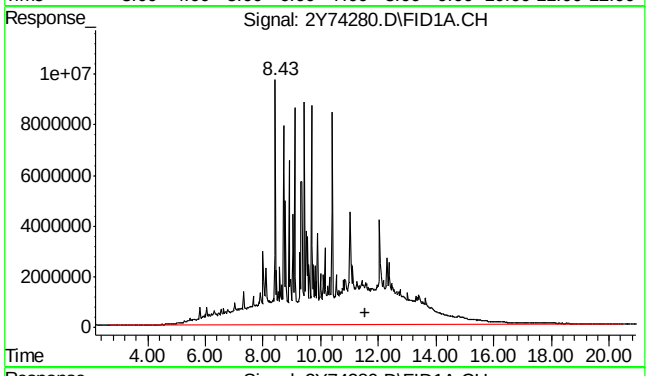



SGS ACCUTEST JC13575



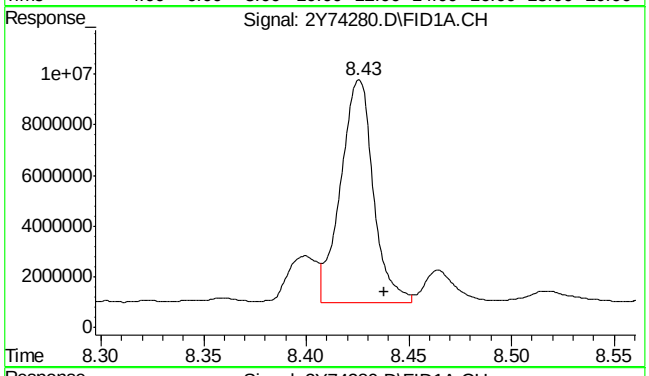

#1 TPH-DRO

R.T.: 7.340 min
Delta R.T.: 0.000 min
Response: 4536759813
Conc: 2869.51 PPM m



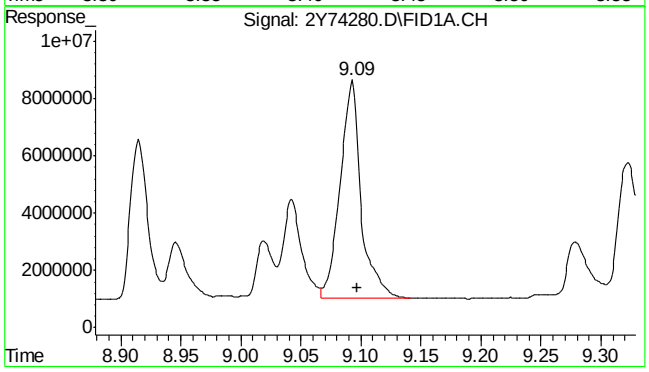

#2 TPH-DRO (C10-C44)

R.T.: 11.560 min
Delta R.T.: 0.000 min
Response: 6474312896
Conc: 4095.01 PPM m



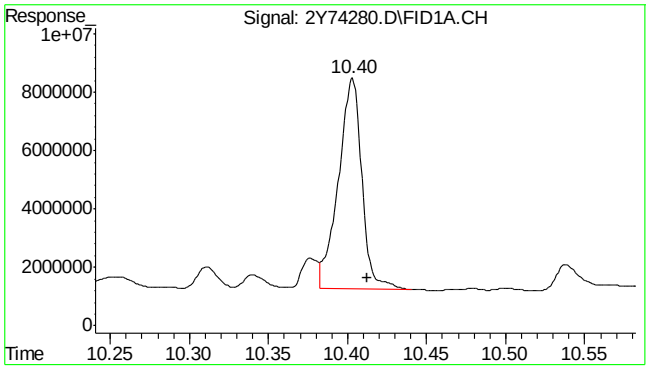

#9 o-Terphenyl

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




#11 Tetracosane-d50

| | |
|---|---|
| R.T.: | 10.403 min |
| Delta R.T.: | -0.010 min |
| Response: | 74202864 |
| Conc: | 49.32 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 : 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.

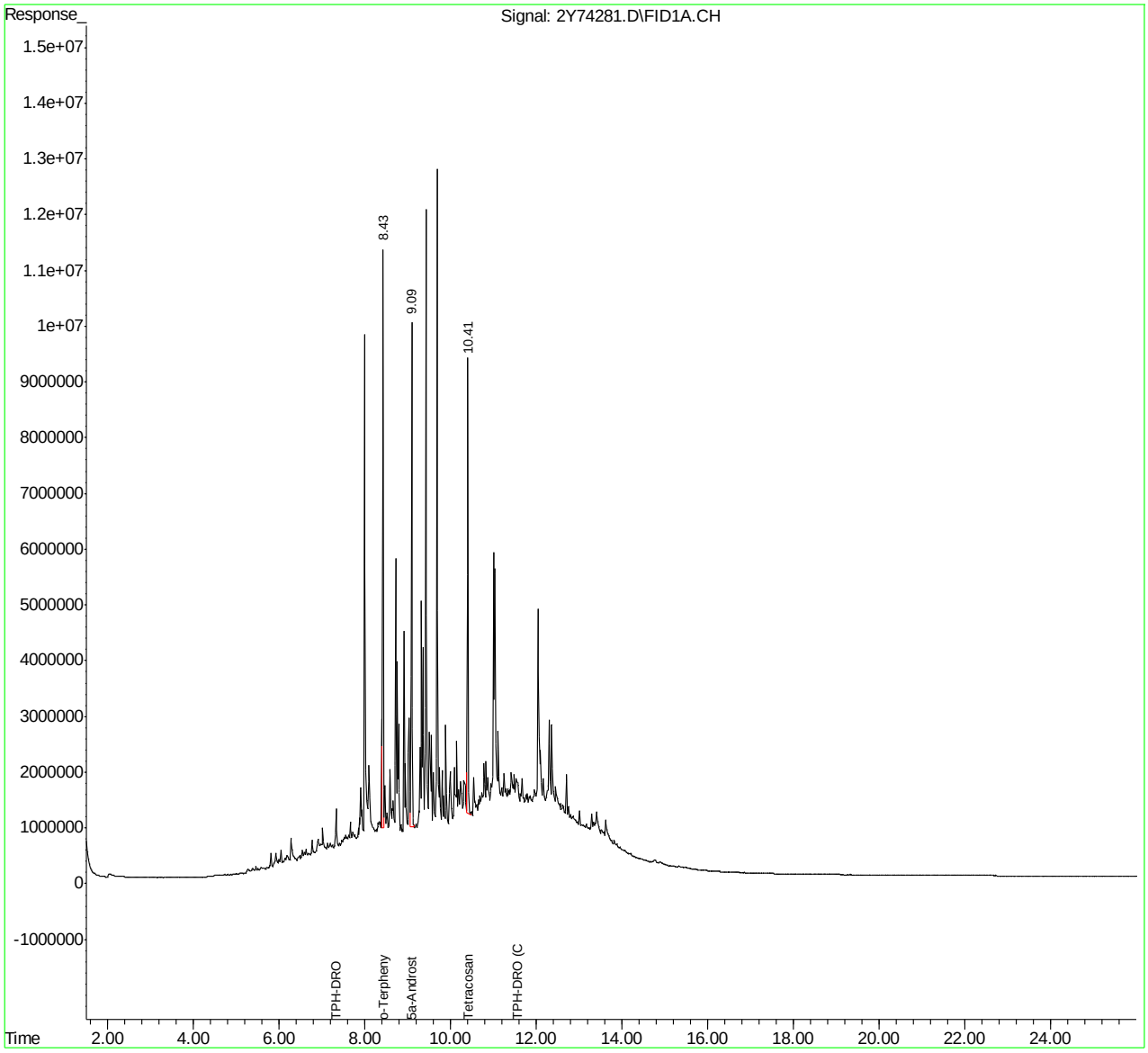
13.1.12
13

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

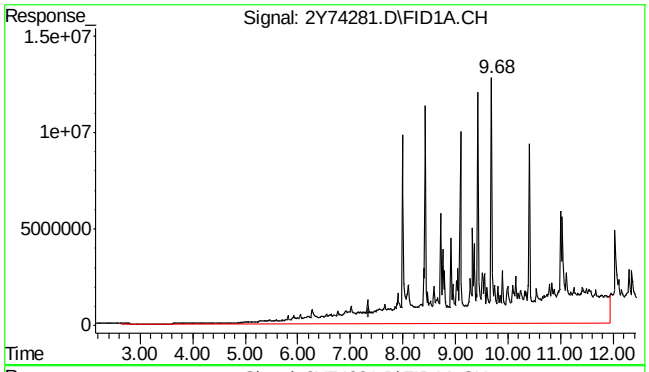






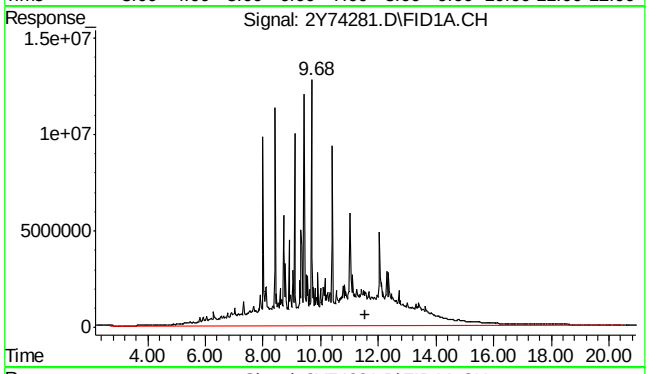



SGS ACCUTEST JC13575



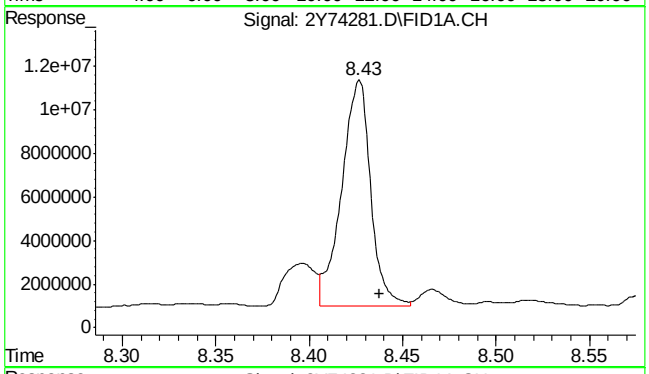

#1 TPH-DRO

R.T.: 7.340 min
Delta R.T.: 0.000 min
Response: 4538106907
Conc: 2870.36 PPM m



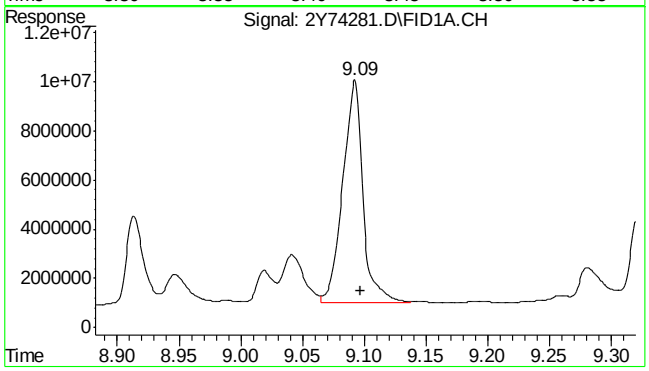

#2 TPH-DRO (C10-C44)

R.T.: 11.560 min
Delta R.T.: 0.000 min
Response: 6434067681
Conc: 4069.55 PPM m



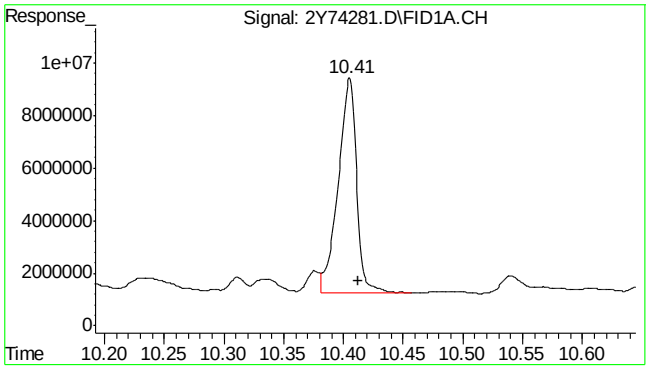

#9 o-Terphenyl

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.



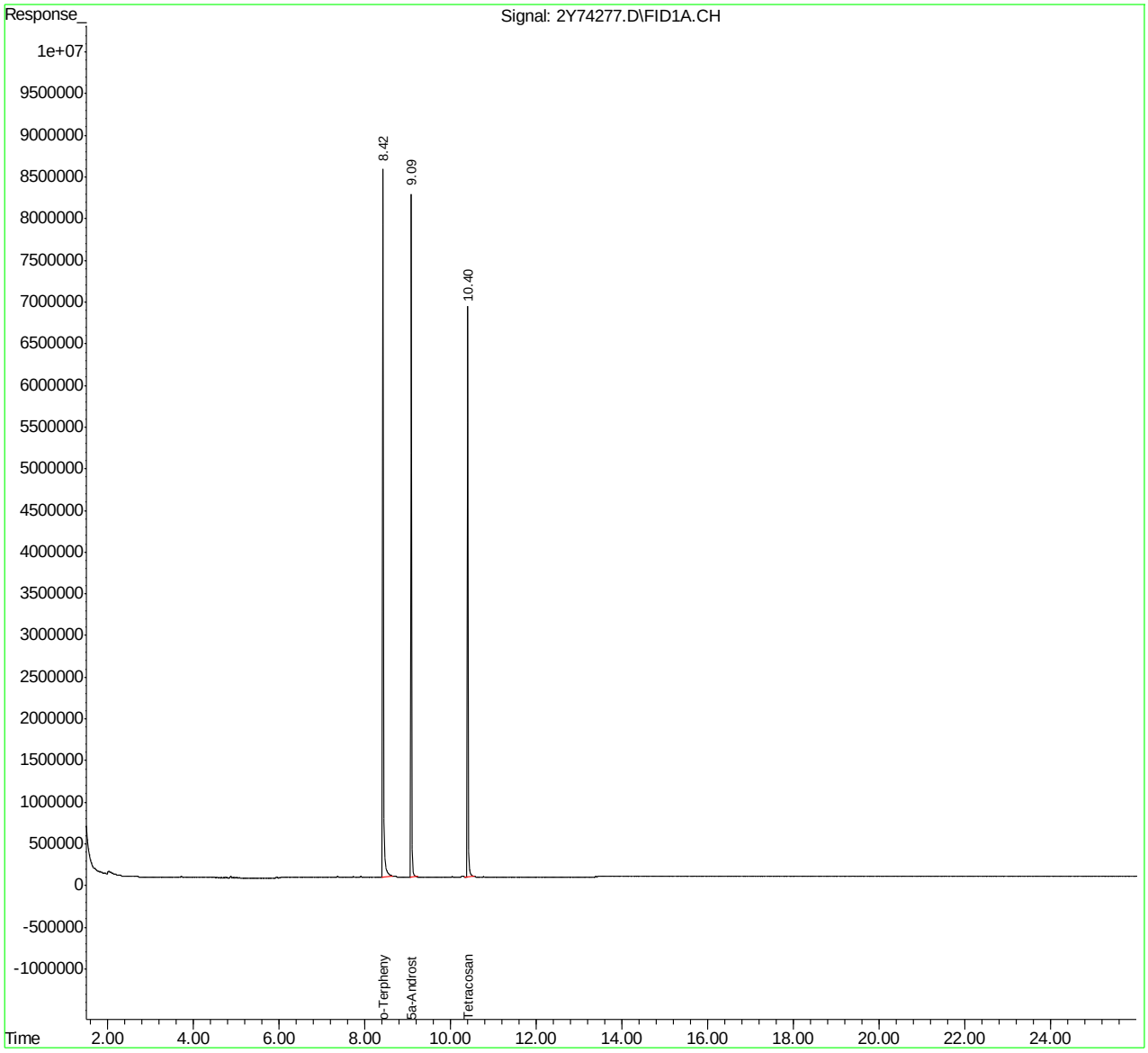
SGS ACCUTEST JC13575

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







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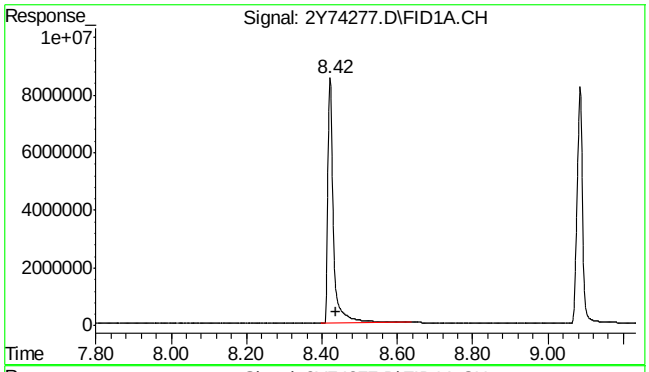
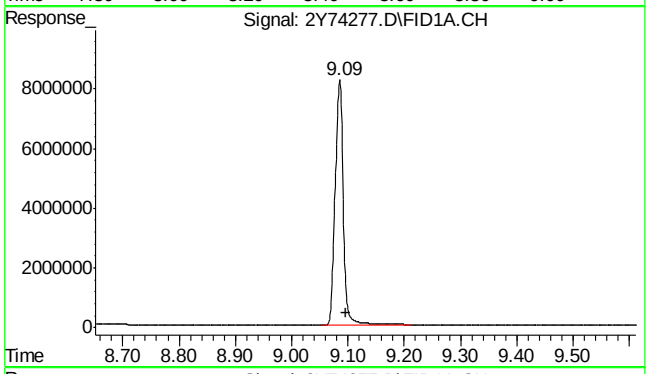


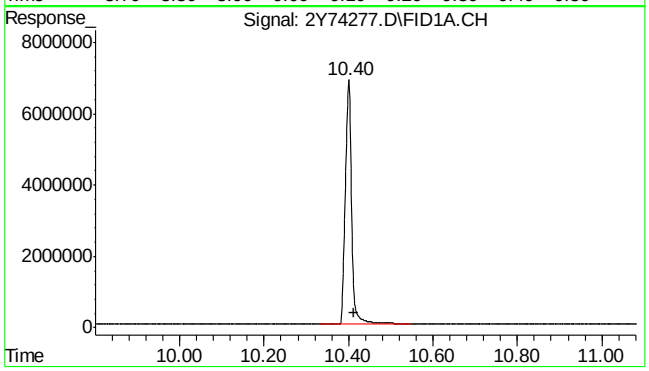

#9 o-Terphenyl

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.







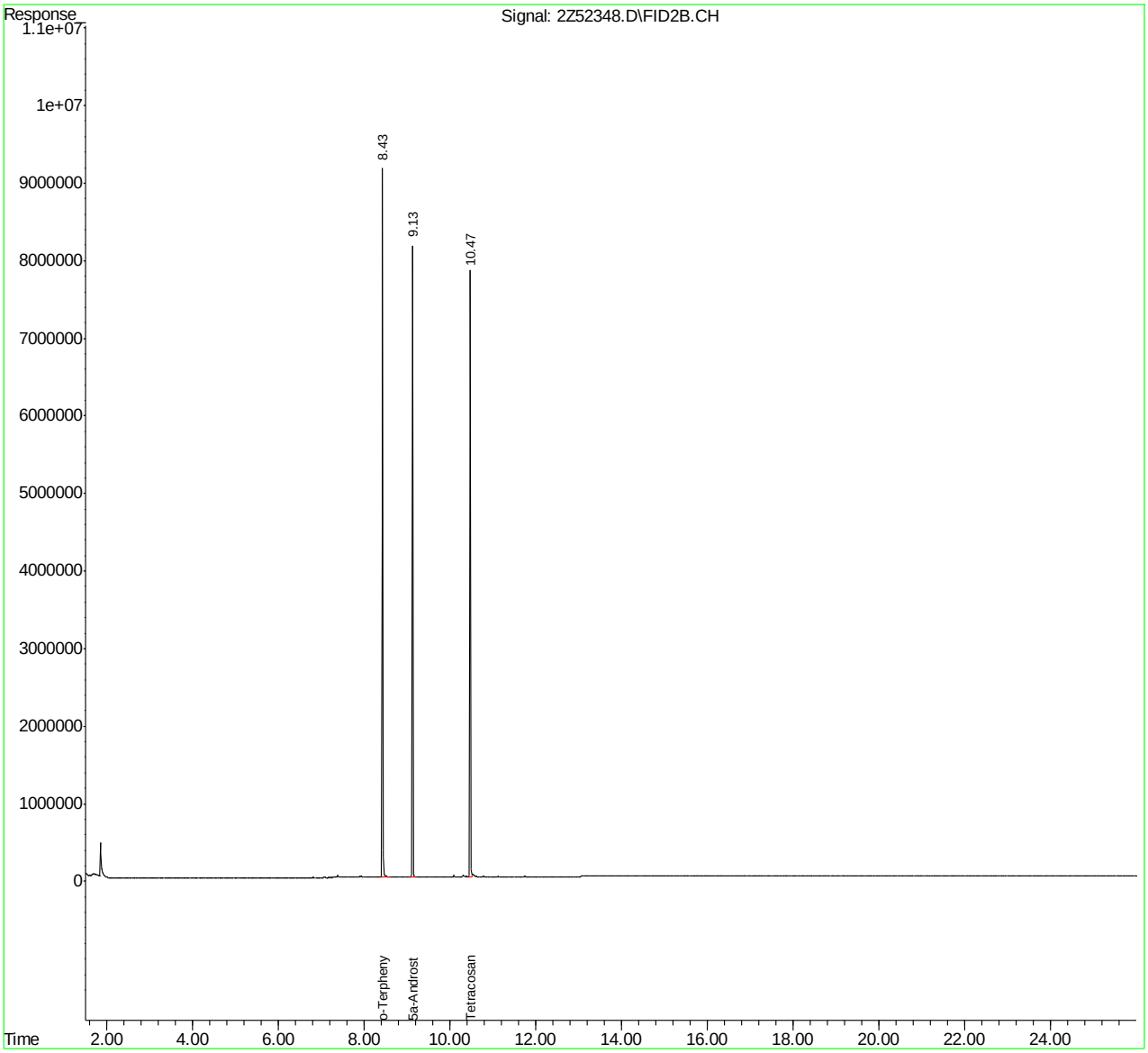
SGS ACCUTEST JC13575

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

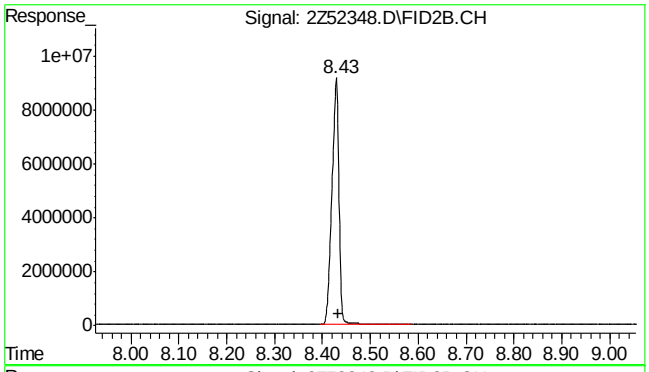






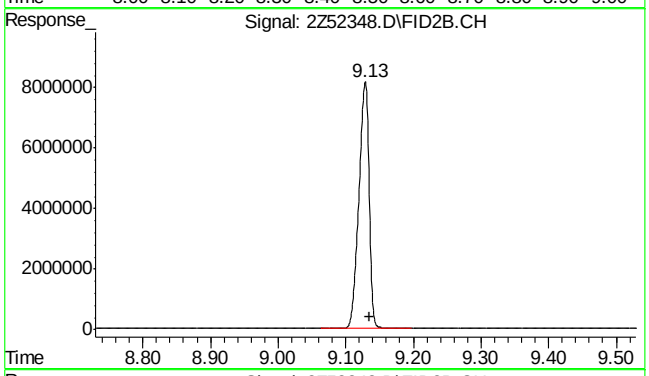



SGS ACCUTEST JC13575



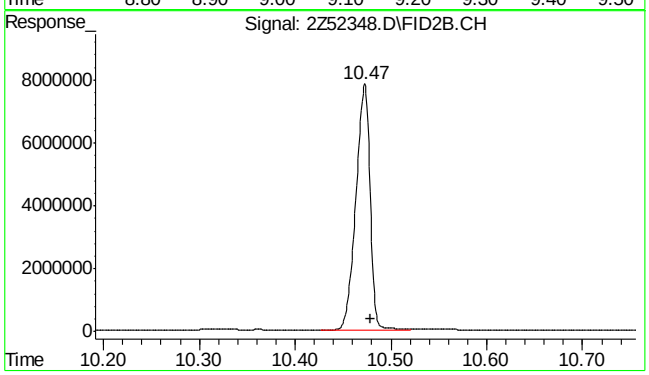

#9 o-Terphenyl

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.
EF153618.D PCB5560.M Fri Feb 05 08:52:03 2016 GCEF Page 1

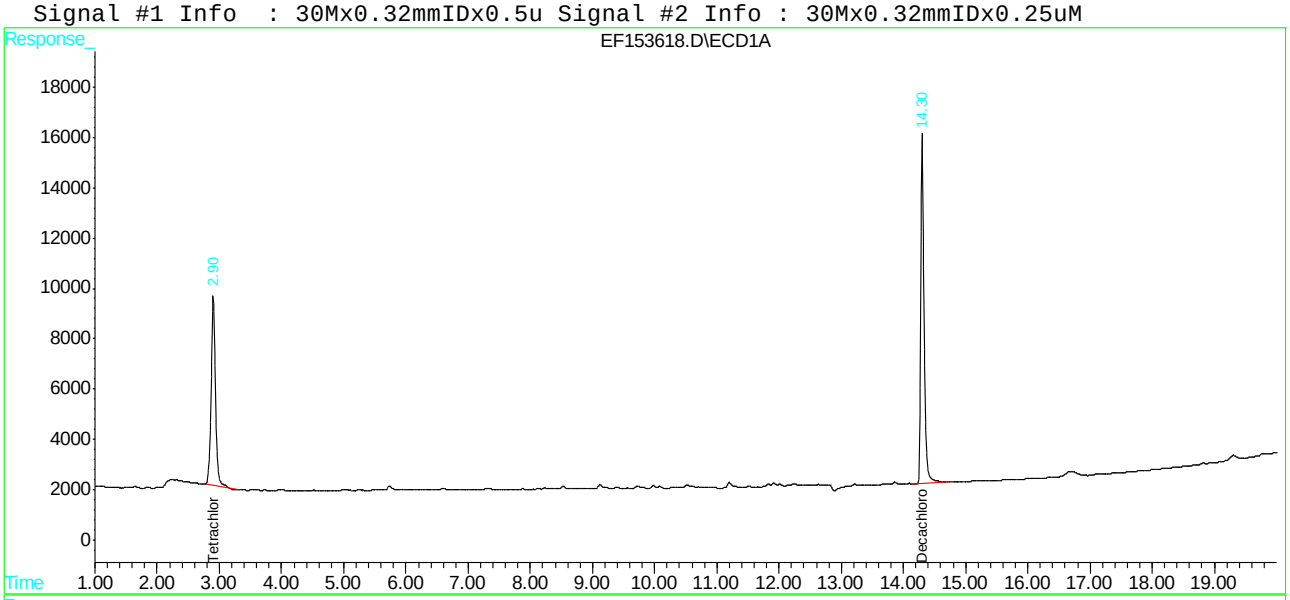
Quantitation Report

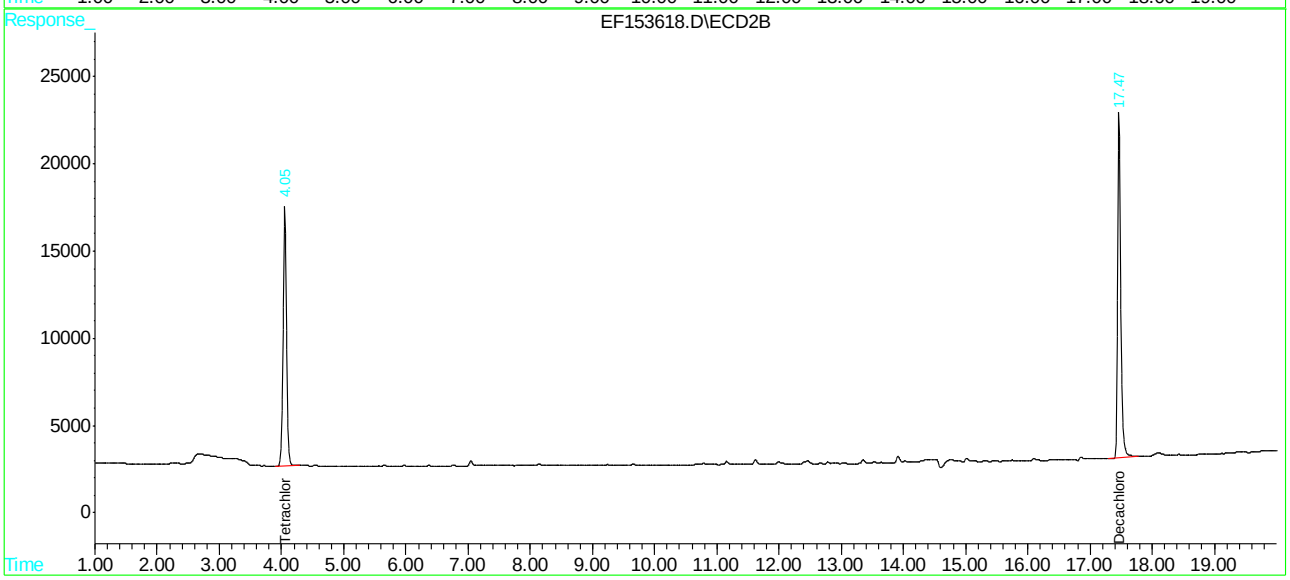
Data File : C:\HPCHEM\1\DATA\GEF5564\EF153618.D\ECD1A.CH Vial: 3
Acq On : 4 Feb 2016 10:08 am Operator: curtisc
Sample : op90954-mb1 Inst : gcef
Misc : op90954,gef5564,15.0,,,10,1 Multiplr: 1.00
IntFile : EVENTS.E

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












SGS ACCUTEST JC13575

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 |

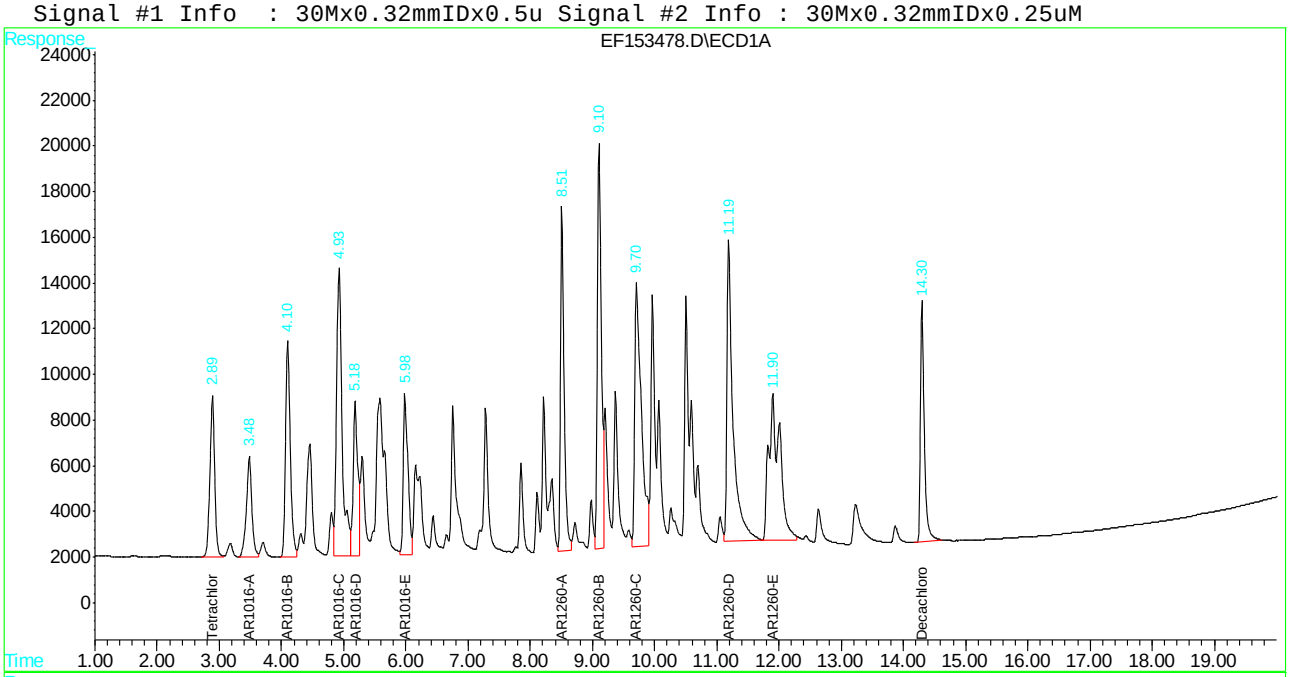
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
EF153478.D PCB5560.M Tue Feb 02 13:35:55 2016 GCEF Page 1

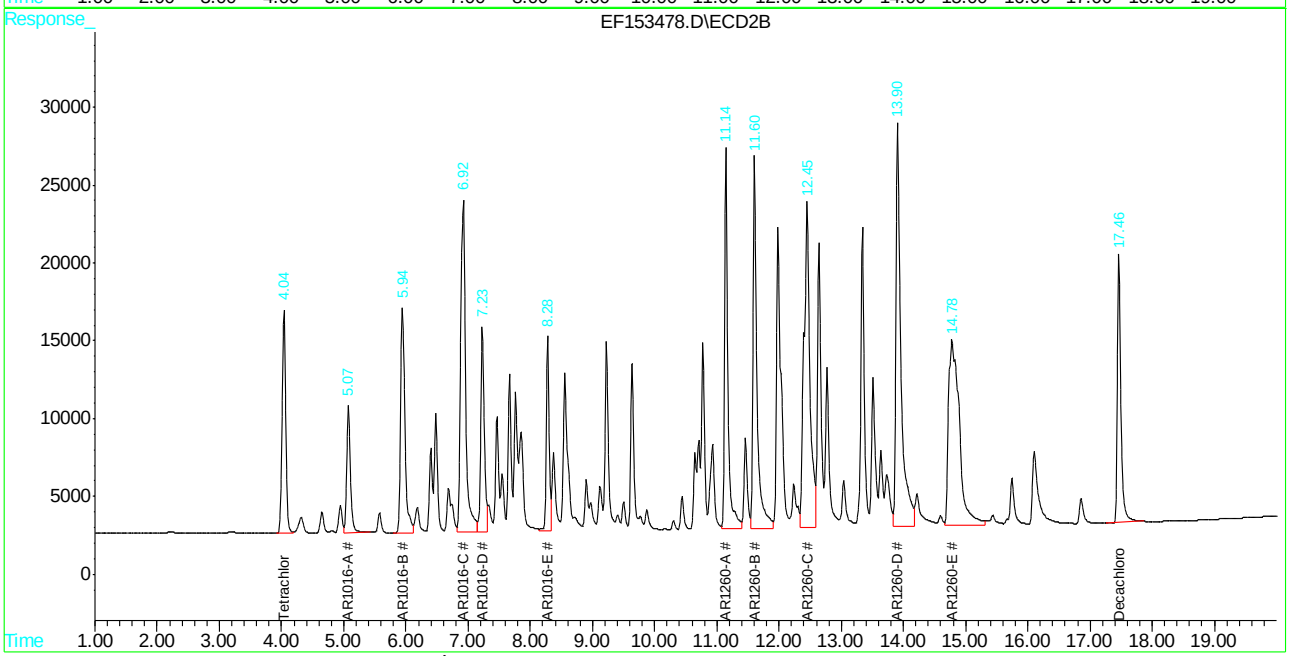
Quantitation Report

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 | |

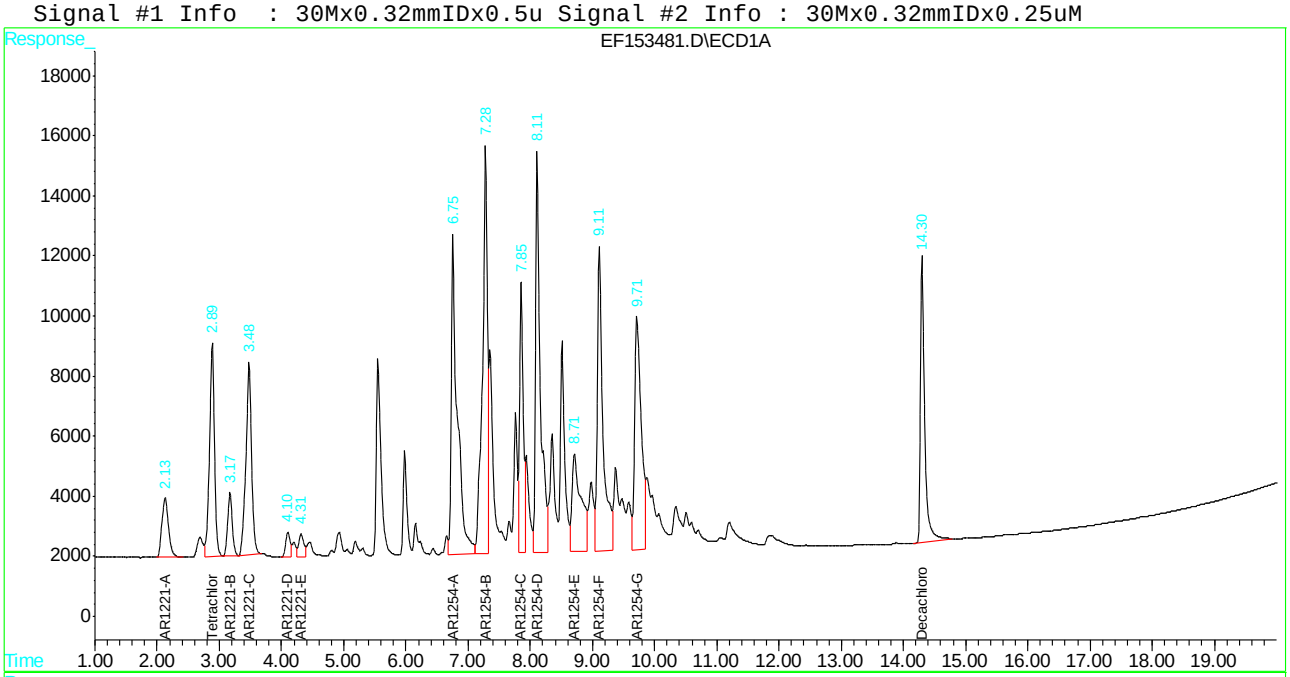
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
EF153481.D PCB5560.M Tue Feb 02 12:04:09 2016 GCEF

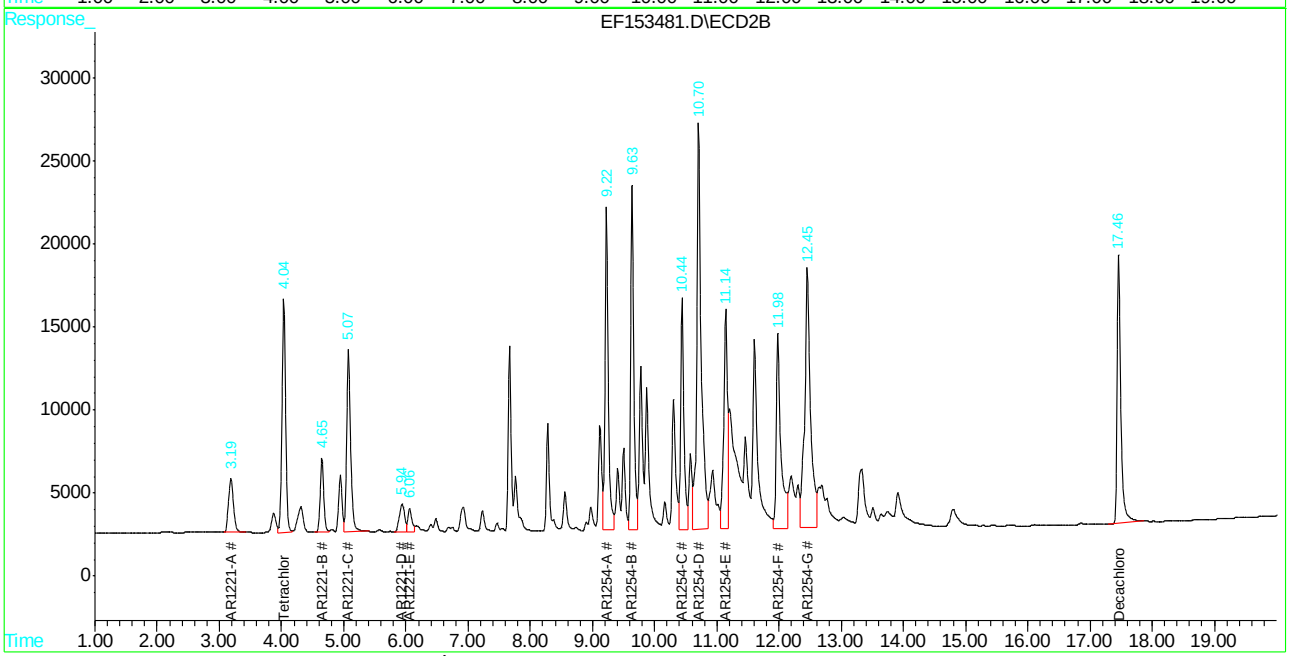
Quantitation Report

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







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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 Page 1


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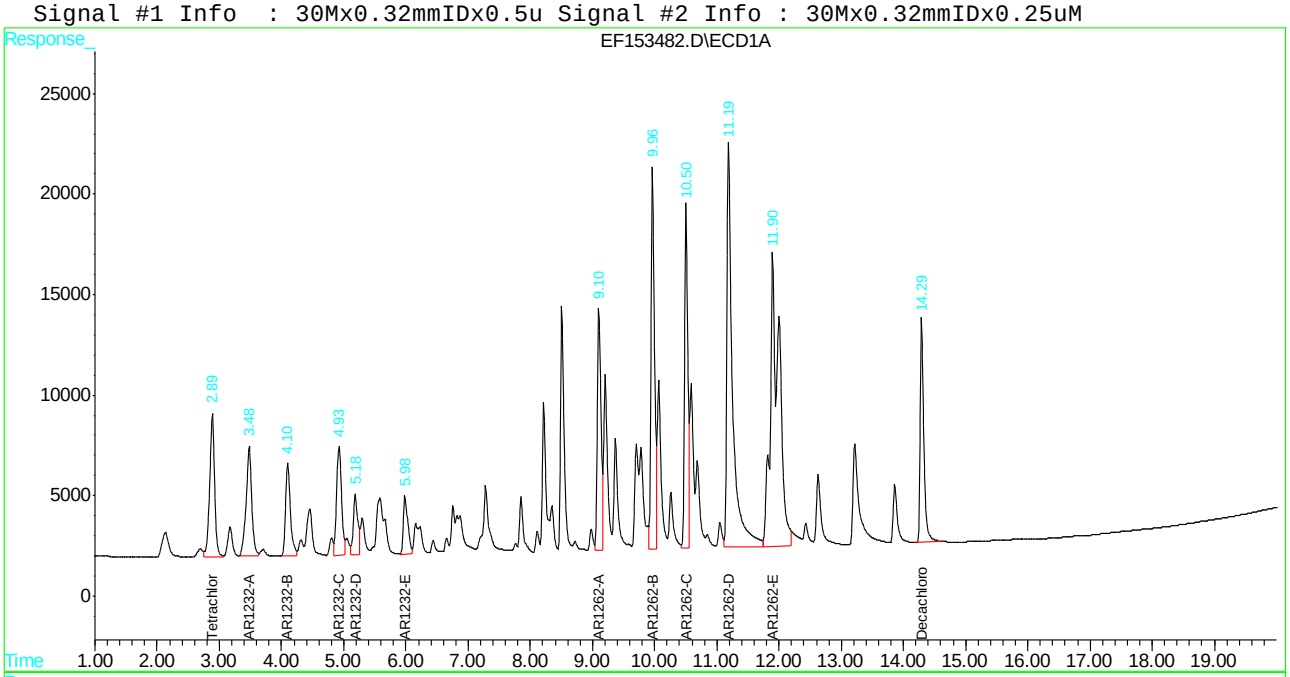
JC13575

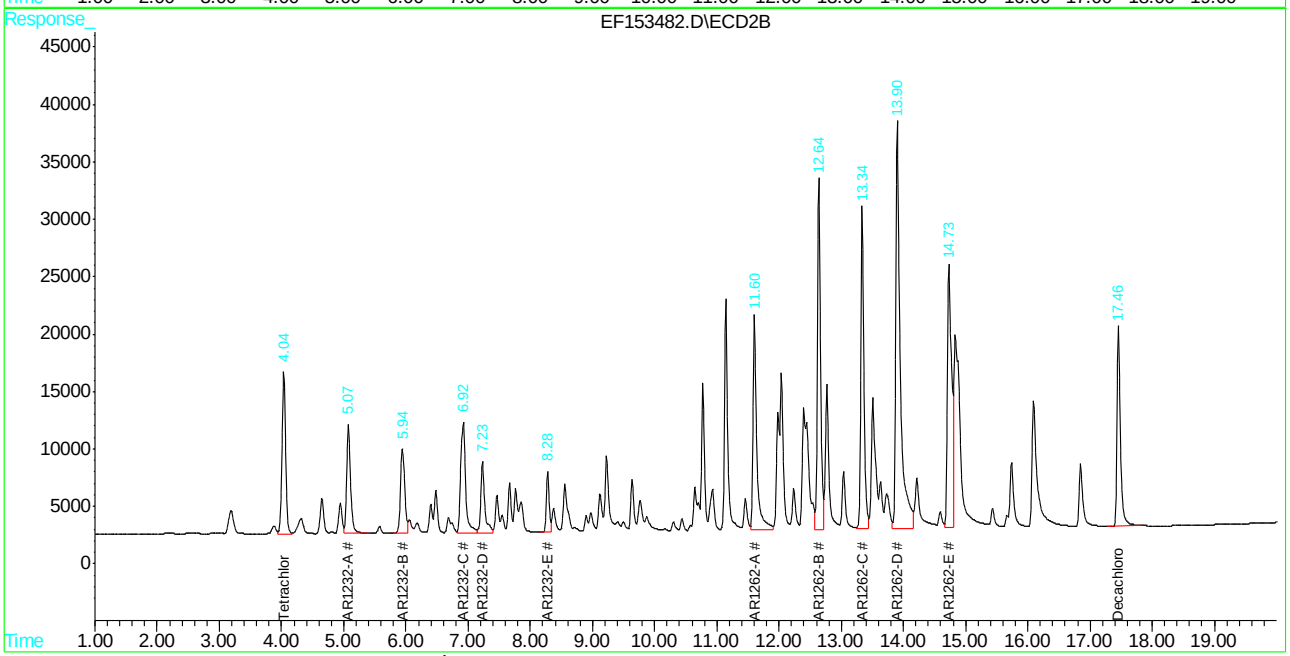
Quantitation Report

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 Page 1

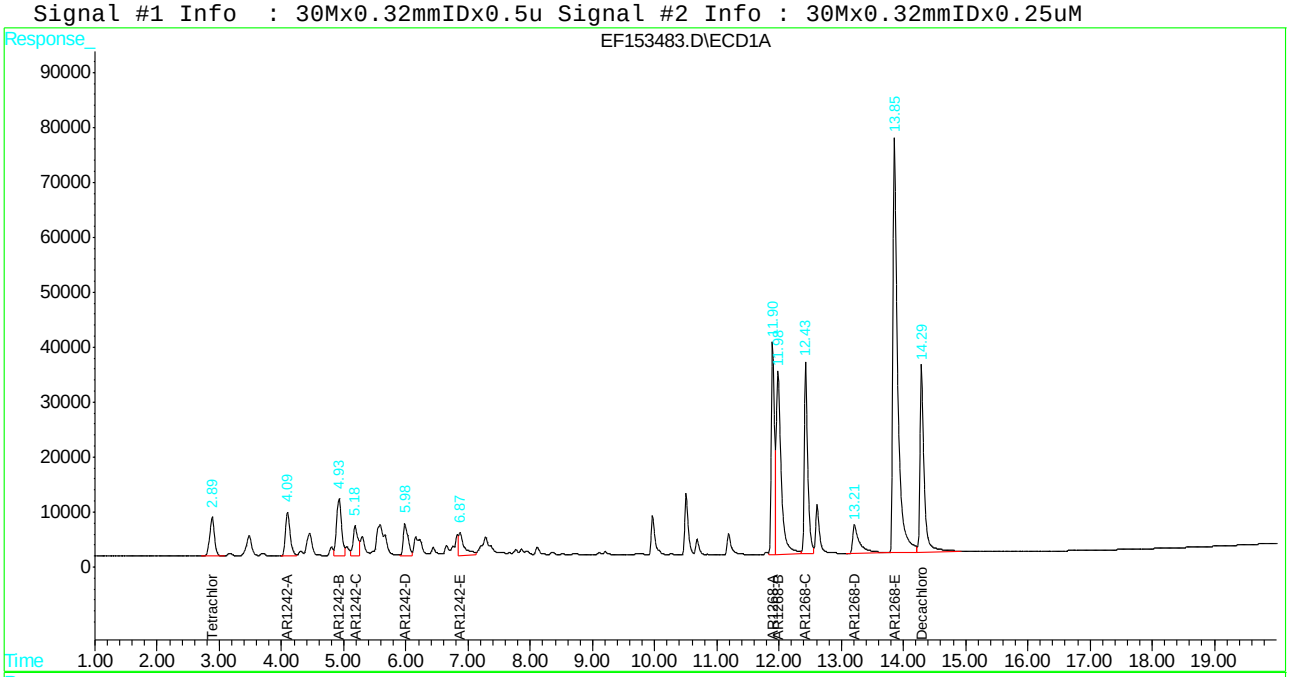

SGS ACCUTEST JC13575

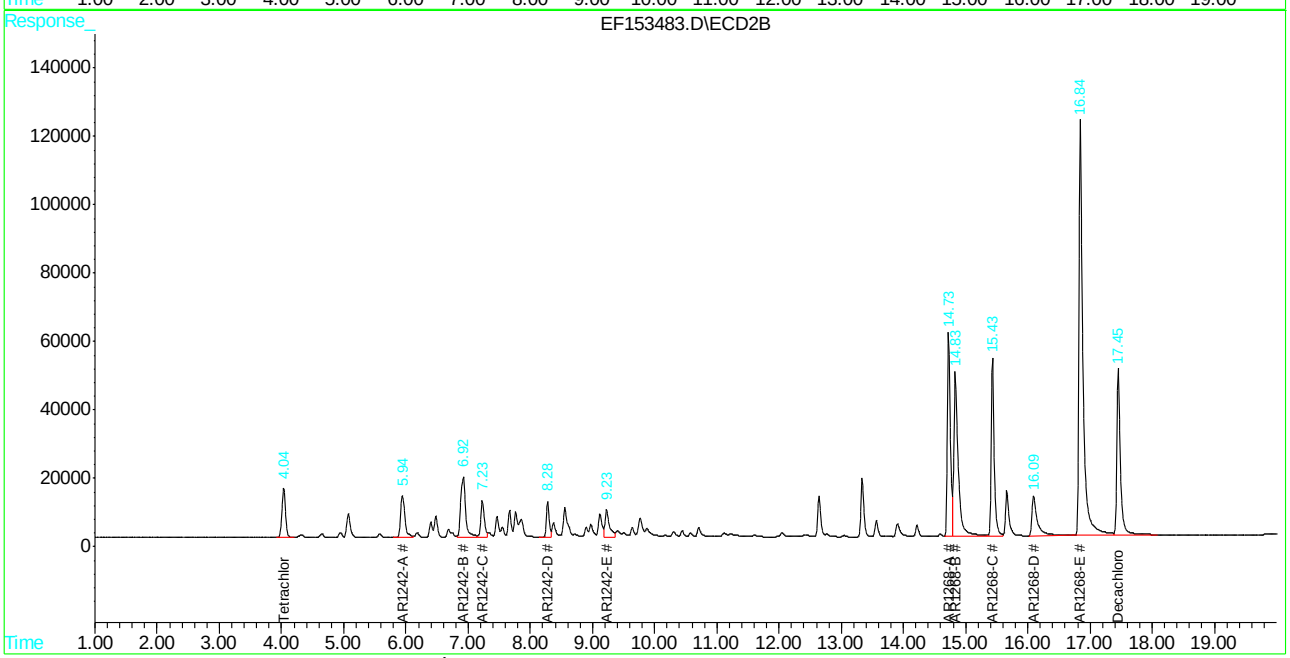
Quantitation Report

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










SGS ACCUTEST JC13575

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 |

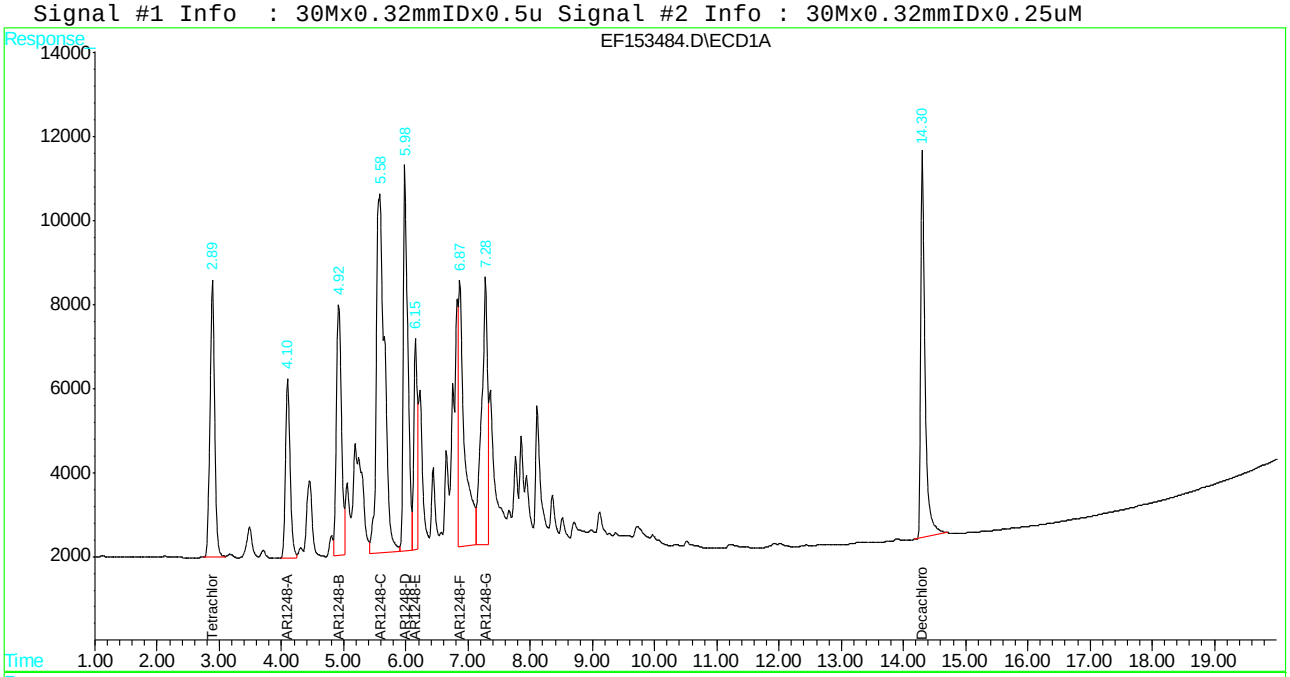
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
EF153484.D PCB5560.M Tue Feb 02 12:04:31 2016 GCEF

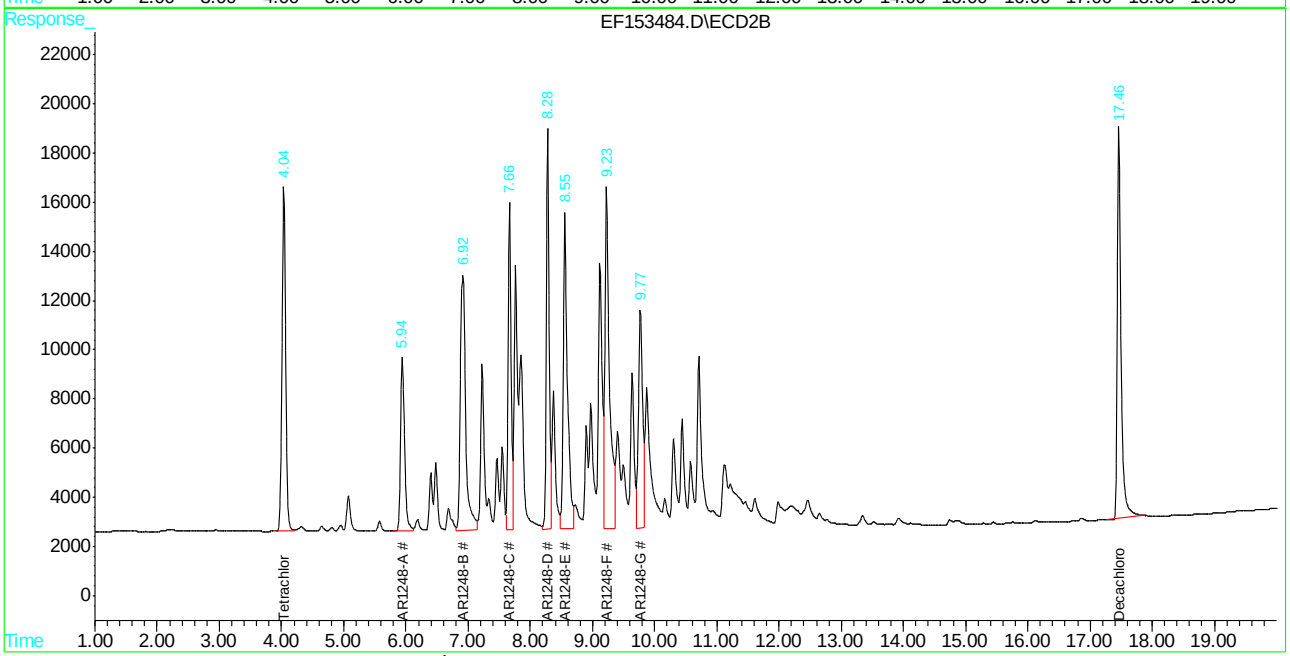
Quantitation Report

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










SGS ACCUTEST JC13575

## 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

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: / Sample ID: | | | 12:38 CCB4 | | 14:30 CCB5 | | 14:56 CCB6 | | 15:16 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

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

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

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

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: / Sample ID: | | | 21:57 ICB1 | | 22:03 CCB1 | | 22:39 CCB2 | | 23:10 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

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: / Sample ID: | | | 23:42 CCB4 | | 00:18 CCB5 | | 00:53 CCB6 | | 01:29 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: / Sample ID: | | | 23:42 CCB4 | | 00:18 CCB5 | | 00:53 CCB6 | | 01:29 CCB7 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Metal | RL | IDL | raw | final | raw | final | raw | final | raw | final |
| Zirconium | 20 | .3 | | | | | | | | |

(*) 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: 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

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

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

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

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

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

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

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

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

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

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

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 % |

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: / Sample ID: | | | 10:12 ICB1 | | 10:29 CCB1 | | 11:55 CCB2 | | 13:01 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

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: / Sample ID: | | | 14:08 CCB4 | | 15:14 CCB5 | | 16:21 CCB6 | | 17:28 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: / Sample ID: | | | 14:08 CCB4 | | 15:14 CCB5 | | 16:21 CCB6 | | 17:28 CCB7 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Metal | RL | IDL | raw | final | raw | final | raw | final | raw | final |
| Zirconium | 10 | .5 | | | | | | | | |

(*) 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: SD020416M1.ICP  Date Analyzed: 02/04/16  Methods: EPA 200.7, SW846 6010C
QC Limits: result < RL  Run ID: MA38672  Units: ug/l

| Time: / Sample ID: | | | 18:34 CCB8 | | 19:17 CCB9 | | 20:23 CCB10 | | 21:30 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

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: / Sample ID: | | | 22:37 CCB12 | | 23:44 CCB13 | | 00:50 CCB14 | | 01:46 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

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

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

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

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

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

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

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

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

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

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

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

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

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
Matrix Type: LEACHATE

Methods: SW846 6010C
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

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 Methods: SW846 6010C
Matrix Type: LEACHATE Units: mg/l

Prep Date: 02/03/16

| | JC13480-1A | Spikelot | | MSD | QC |
|---|---|---|---|---|---|
| Metal | Original MSD | MPSPK1 | % Rec | RPD | 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

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

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 | % |