CLEARWATER ENVIRONMENTAL RESOURCES, LLC

SEMI-ANNUAL
PROGRESS REPORT NO. 5
VOLUNTARY REMEDIATION PROGRAM

RAYLOC FACILITY
600 RAYLOC DRIVE
FULTON COUNTY
ATLANTA, GEORGIA
HSI SITE # 10547

CLEARWATER PROJECT NO. 1502-1-3

Prepared For:

Genuine Parts Company
2999 Circle 75 Parkway
Atlanta, Georgia 30339

Prepared By:

Clearwater Environmental Resources, LLC
3870 Peachtree Industrial Boulevard
Suite 340139
Duluth, Georgia 30096

APRIL 7, 2016

CLEARWATER ENVIRONMENTAL RESOURCES, LLC

April 7, 2016

Mr. Allan C. Nix, P.G.
Georgia Department of Natural Resources
Georgia EPD Response and Remediation Program (GAEPD)
2 Martin Luther King Jr. Dr., SE, STE 1462 East
Atlanta, GA 30334

Subject: **Semi-Annual Progress Report No. 5**
Voluntary Remediation Program
Rayloc Facility
600 Rayloc Drive, SW
Atlanta, Fulton County, Georgia 30336
HSI #10547
Clearwater Project No. 1502-1-3

Dear Mr. Nix:

Clearwater Environmental Resources, LLC (Clearwater), under contract to Genuine Parts Company (GPC), respectfully submits this 5th Semi-Annual Progress Report for the Rayloc facility. This report describes the actions taken at the site since the 4th Semi-Annual Progress Report submitted on November 12, 2015.

Clearwater appreciates the opportunity to provide this Progress Report. Please feel free to contact me at (678) 491-4601 or jack.wintle@clearwaterenv.net or Mr. Bob Lewis with Genuine Parts Company at (404) 858-2564 if you have any questions regarding our report.

Sincerely,
Clearwater Environmental Resources, LLC

Jack A. Wintle, P.G.
Senior Environmental Geologist

cc: Mr. Bob Lewis, Genuine Parts Company
Mr. Douglas E. Cloud, Kazmarek Mowrey Cloud Laseter LLP

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1.0 INTRODUCTION

A Voluntary Remediation Plan (VRP) for the Rayloc facility located at 600 Rayloc Drive in Atlanta, Fulton County, Georgia, was received by the Georgia Environmental Protection Division Response and Remediation Program (GAEPD) on January 15, 2013 and conditionally approved by the GAEPD on October 11, 2013. In order to evaluate the progress of the voluntary clean-up efforts, semi-annual progress reports are required. Please refer to Figure 1 for a Site Aerial Map for the location of the site.

The remedial activities include the continued treatment of contaminated groundwater in and downgradient of the former waste pit area using gas-infusion technology with the objective of achieving Type 3 Risk Reduction Standards (RRS). Clearwater has also operated an Air Sparge/Soil Vapor Extraction system using the gas-infusion technology to the only area of impact identified within the former Rayloc building to effect the same result. Further, Clearwater has recently completed excavation of impacted soils identified outside of the Rayloc building during the PPCAP investigation.

1.1 Groundwater Sampling Protocol

Groundwater sampling activities at the Rayloc Facility are completed in a manner consistent with the current EPA Region 4 SESD Operating Procedure SESDPROC-301-R3, dated March 4, 2013. Unless otherwise noted, each monitoring well is sampled via bailers or the "Low Flow" method using a bladder pump. These methodologies were selected based on the target depth of the samples and the objective of minimizing investigation-derived waste (IDW). Sampling commences when parameters in the purged groundwater reach a pH variance of no more than 0.1 SU, a specific conductance variance of no more than 5% of the observed value, and a turbidity variance of less than 5 NTU or a total reading of less than 10 NTU, when possible. Sampling commences after the removal of three measured well volumes if stabilization has not been noted in the purging parameters.

Purging of each shallow monitoring well (less than 33 feet) is completed in a controlled, quiescent manner with single-use, disposable polyethylene bailers. Stabilization criteria of the purged groundwater are evaluated with an YSI 556 multi-parameter instrument and a nephelometric turbidimeter. The YSI 556 and turbidimeter are calibrated by a third-party equipment supplier and verified on-site per Operating Procedures SESDPROC-100, SESDPROC-101, and SESDPROC-103.

Sampling of the deeper (greater than 33 feet) monitoring wells is completed via a bladder pump constructed with stainless steel housing and Teflon bladders in conjunction with a QED MicroPurge controller. The bladder pump intake is placed at the target screen interval of the monitoring well, and the samples are collected through single-use, down-well polyethylene tubing and bladder. At the start and end of the sampling event, and after each monitoring well sampled, the stainless steel housing of the bladder pump is decontaminated in a pre-rinse, a Liquinox bath, and subsequently rinsed with deionized water. IDW including purged groundwater, polyethylene bailers, bailer twine,

polyethylene tubing, and Teflon bladders are stockpiled in one or more sealed 55-gallon drums during each sampling event, and transported off-site at periodic intervals. Following collection in laboratory-supplied containers, groundwater samples are stored on site with wet ice as a preservative and delivered to the designated lab under chain-of-custody protocols.

2.0 MILESTONES COMPLETED SINCE NOVEMBER 12, 2015

Since November 12, 2015, Clearwater has completed the excavation of impacted soil identified outside of the Rayloc building during the PPCAP investigation. The following paragraph discusses the excavation work. Due to the recent completion of this work, tables and figures will be provided in the 6th Semi-Annual Progress Report.

2.1 Excavation of Impacted Areas Identified During the PPCAP Investigation

Between October 2015 and March 2016 Clearwater excavated a total of 193.11 tons of impacted soil from the areas of minor impacts (AST-2, OT-3 and OT-5) identified outside of the Rayloc building during the PPCAP investigation. These soil impacts have recently been remediated to below the RRS Type 3. The excavations were then backfilled and resurfaced. Please refer to Figure 2 for a map showing the soil excavation locations. Tables and figures are being prepared and will be provided in the 6th Semi-Annual VRP Report.

3.0 MILESTONES IN-PROGRESS OR TO BE COMPLETED

The milestones that are either in-progress or to be completed at the Rayloc property are outlined in the following sections.

3.1 Source Area Remediation

GPC and Clearwater are in the process of proposing an alternative remedial option for this area.

3.2 Former Parts Disassembly and Cleaning Area AS/SVE Remedial System

Clearwater has operated an Air Sparge/Soil Vapor Extraction (AS/SVE) system in the former PDA area since April 2015 which utilizes gas-infusion technology.

Environmental X_2 Contracting, Inc. (X2) is a remedial contractor at Rayloc and has active remedial systems in both the site groundwater and the PDA area.

Due to analytical results indicating that the PCE impact extended west beyond our initial system, Clearwater subsequently installed three (3) additional extraction wells and one (1) additional injection well on the west side of the known impact area.

In March 2016, a pilot study was initiated using a gravity fed in-situ chemical oxidation (ISCO) using persulfate to attempt to accelerate the remedial process. Early results, although minor, appear positive. Based on Clearwater's remedial contractor (X_2), the conclusion is that the persulfate pilot study is showing positive results in air monitoring of the study monitoring wells in the form of spikes in sulfides and carbon monoxide. Effluent from the activated carbon exhaust has been non-detect for VOCs since October 2015.

Clearwater will continue to collect verification soil samples from the same locations within the PDA area every two months to compare results. This will allow X_2 to adjust injection or extraction flows and/or gas concentrations to provide more effective remediation of the impact. Please refer to Table 1 for a summary of historical PDA sampling results and Figure 3 for a figure showing the PDA sampling locations and results. December 2015 and March 2016 PDA laboratory data are located in Appendix A. The X_2 Soil Remediation Status Report is located in Appendix D.

3.3 Groundwater Remedial System

In early October 2015, Clearwater collected groundwater samples from the twenty (20) compliance wells at the Rayloc facility.

As stated in the November 2015 5th Semi-Annual Progress Report, some wells have maintained their concentrations of VOCs while others have shown excellent reduction in tetrachloroethene (PCE). MW-15 saw a reduction from 156 ppb in November 2012 to

5.23 ppb in October 2015 and MW-19 from 97 ppb in November 2012 to 8.12 ppb in October 2015. These wells are located near the drainage feature east of Wendell Drive and are located near injection wells.

Results of PCE levels in RAD-4, a deep source area well, have gone down from 20,000 ppb in January 2010 to less than 5 ppb in October 2015 and results of PCE levels from RAD-5, a deep well adjacent to the source area, have gone down from 13,500 ppb in November 2012 to 841 in October 2015. These reductions in contaminant concentrations may be due to the typical rebounding of dechlorinating microbes when the temperature drops after an Electro-Thermal Dynamic Stripping Process or ET-DSP™ system is deactivated. The ET-DSP™ system was shut down in 2008.

Please refer to Table 2 for a summary of monitoring well and groundwater elevations, Table 3 for a summary of historical Compliance Well sampling results, Figure 4 for a figure showing the groundwater sampling locations and October 2015 results, Figure 6 for a figure showing the October 2015 Potentiometric-Surface Map and Figure 7 for a figure showing the October 2015 PCE Isoconcentration Map.

X2 has provided a technical summary of the groundwater remedial operations as follows:

There was a significant reduction in PCE concentrations throughout the source area, an increase in the downgradient zone Area 2 (Railroad Area), and modest change in the offsite Area 3 (Creek Area). However, there was substantial generation of CIS-1,2 - Dichloroethene daughter product in Area 2, indicating that a high level of reduction is occurring as greater mass of PCE migrates into the area. The 27 percent improvement in ORP during this period supports the conclusion that reductive dechlorination is increasing in most of the treatment zone. The areas that are deficient in organic acids and buffering capacity continue to experience excess methane generation due to methanogenic competition for hydrogen, thus inhibiting reductive dechlorination.

Please refer to Table 4 for a summary of the Historical X2 Remedial System Sampling Results, Figure 5 for a figure showing the February 2016 X2 Remedial System Sampling Results, February 2016 laboratory data is located in Appendix B, Sampling Logs are located in Appendix C and the X2 Groundwater Remediation Status Report is located in Appendix D

3.4 Installation of Additional POD Wells

Clearwater is in the process of negotiating with the offsite owners for access to install two new monitoring wells to be used as Point of Demonstration (POD) wells: one between the abandoned MW-14 and MW-10; and one along the drainage feature between MW-10 and MW-15. Based on the negotiation, Clearwater anticipates these wells will be installed this summer and will be included in the 6th Semi-Annual VRP Report.

3.5 Complete Horizontal and Vertical Delineation

Although much of the impacted groundwater has been delineated, Clearwater is in the process of further delineating the groundwater impact at the Rayloc property. The soil impact within the Rayloc building (PDA Area) is being addressed as previously discussed.

3.6 Vapor-Intrusion Investigation (Rayloc Building)

Soil-vapor samples will be collected from locations within the Rayloc building to determine whether chlorinated solvents in the site groundwater may have migrated to the building area. These samples will be collected upon completion of the remediation of the impact in the Parts Disassembly & Cleaning Area. This Area is located in an unused area of the Rayloc building, away from any currently used areas. The only area currently being consistently used is the high-ceilinged warehouse where the trucks are loaded and unloaded through bay doors using forklifts.

4.0 CERTIFICATIONS

4.1 Professional Geologist Certification

"I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et seq.). I am a professional geologist who is registered with the Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances.

Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division.

The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

Please refer to Table 5 for a Summary of Professional Oversight Hours.

_____

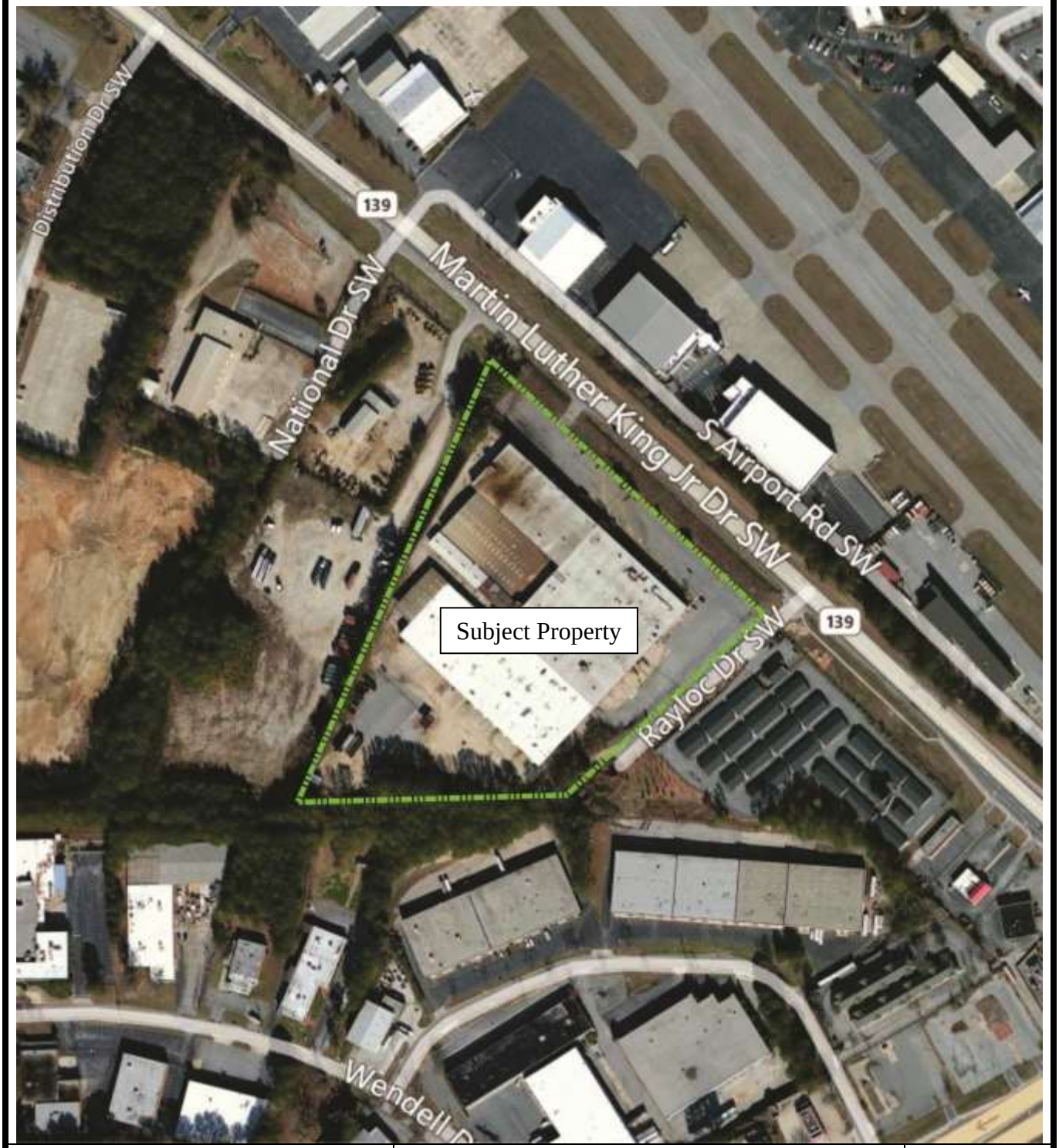
Jack A. Wintle P.G.
Senior Environmental Geologist

Date: April 7, 2016

_____

Geologist Seal

FIGURES



Legend		Figure 1 – Site Aerial Map	Scale
Map Source: Google Earth	N	**Rayloc Facility** **600 Rayloc Drive** **Atlanta, Fulton County, Georgia**	NTS
Map Date: 10-31-2012		**CLEARWATER ENVIRONMENTAL RESOURCES, LLC** **3870 Peachtree Industrial Boulevard** **Suite 340139** **Duluth, Georgia 30096**	
Project No.: **1502-1-3**	JAW		

LUTHER KING DRIVE (200' R

Former Location of 20,000 Gallon UST

Parking Lot

RENT RITE

Location of Former Cleaning Ovens

CO-1

CO-2

Location of Former Parts Assembly and Cleaning Area

PD-1

PD-2

PD-3

Parking Lot

OT-7

OT-6

CD-2

CD-1

Caustic Deterioration

Dryer / Furnace

MS-1

MS-2

MS-3

Chain Link Fence

Blue Hand Rail

Maintenance Shop

Stairs Entrance

LOADING DOCK

METAL SHED

OT-1

OT-2

Open Trenches Area

OT-3

OT-4

OT-5

RAYLOC BUILDING

1 STORY BRICK WAREHOUSE

Vent Pipe

UST-1

UST-2

Potential Location of 1,500 Gallon UST

SIP INDUSTRIES

AST-1

AST-2

AST-3

Former Chemical AST Area

CONCRETE BUILDING

30' 15' 0 30'

Feet

1"=15'

LEGEND

Excavations

Well Location

Building With Roof

OT Open Trenches

CD Caustic Deterioration

MS Maintenance Shop

PD Parts Disassembly

CO Cleaning Oven

Property Line

Chain Link Fence

LEGEND

Soil Sample Boring

Injection/Extraction Well

CLEARWATER ENVIRONMENTAL RESOURCES, LLC	Drawing: Rayloc 4-6-2016.dwg	FIGURE 2
	Revision #: 0	LOCATION OF EXCAVATIONS
	Date: 04/2016	RAYLOC FACILITY
	Project #: 1502-1-3	APRIL 2016

Rayloc 4-6-2016.dwg

Clearwater Environmental Resources, LLC
April 2016

Genuine Parts Company
Atlanta, GA

ADD-2	@ 5'	@ 10'
Cis -	<5.0	6.01
PCE -	3100	198
TCE -	48.7	6.26
VC -	<0.02	<0.02

ADD-1	@ 6'	@ 10'
Cis -	9.05	6.01
PCE -	30.4	198
TCE -	2.19	6.26
VC -	<0.02	<0.02

WD-11 @ 10'	
Cis -	<5.0
PCE -	381
TCE -	<5.0
VC -	<0.02

WD-8 @ 2 5'	
Cis -	8.74
PCE -	43
TCE -	1.87
VC -	<0.02

WD-4 @ 10'	
Cis -	7.08
PCE -	317
TCE -	6.12
VC -	<0.02

WD-2 @ 10'	
Cis -	<5.0
PCE -	3.46
TCE -	<5.0
VC -	<0.02

PD-2 @ 10'	
Cis -	2.35
PCE -	13.3
TCE -	2.33
VC -	<0.02

PDA-E-7
ADD-2
WD-9
PDA-I-6
PDA-E-6
ADD-1
PDA-E-10
PDA-I-8
PDA-E-11
WD-1
WD-4
PDA-I-5
WD-11
WD-8
PDA-E-5
PD-1
PDA-E-9
PDA-I-7
PDA-I-4
WD-10
WD-2
PDA-E-4
WD-5
WD-12
PDA-I-3
PDA-E-8
PD-2
PDA-E-3
WD-3
PDA-I-2
WD-6
PD-3
PDA-E-2
PDA-I-1
WD-7
PDA-E-1

LOCATION OF FORMER
PARTS DISASSEMBLY
AND CLEANING AREA

LEGEND

- Soil Sample Boring
- Injection/Extraction Well

MW-##	
Cis -	##
PCE -	##
TCE -	##
VC -	##

Monitoring Well Identification Tag
Cis - Cis-1-2-Dichloroethene
PCE - Tetrachloroethene
TCE - Trichloroethene
VC - Vinyl chloride

Results in ppm

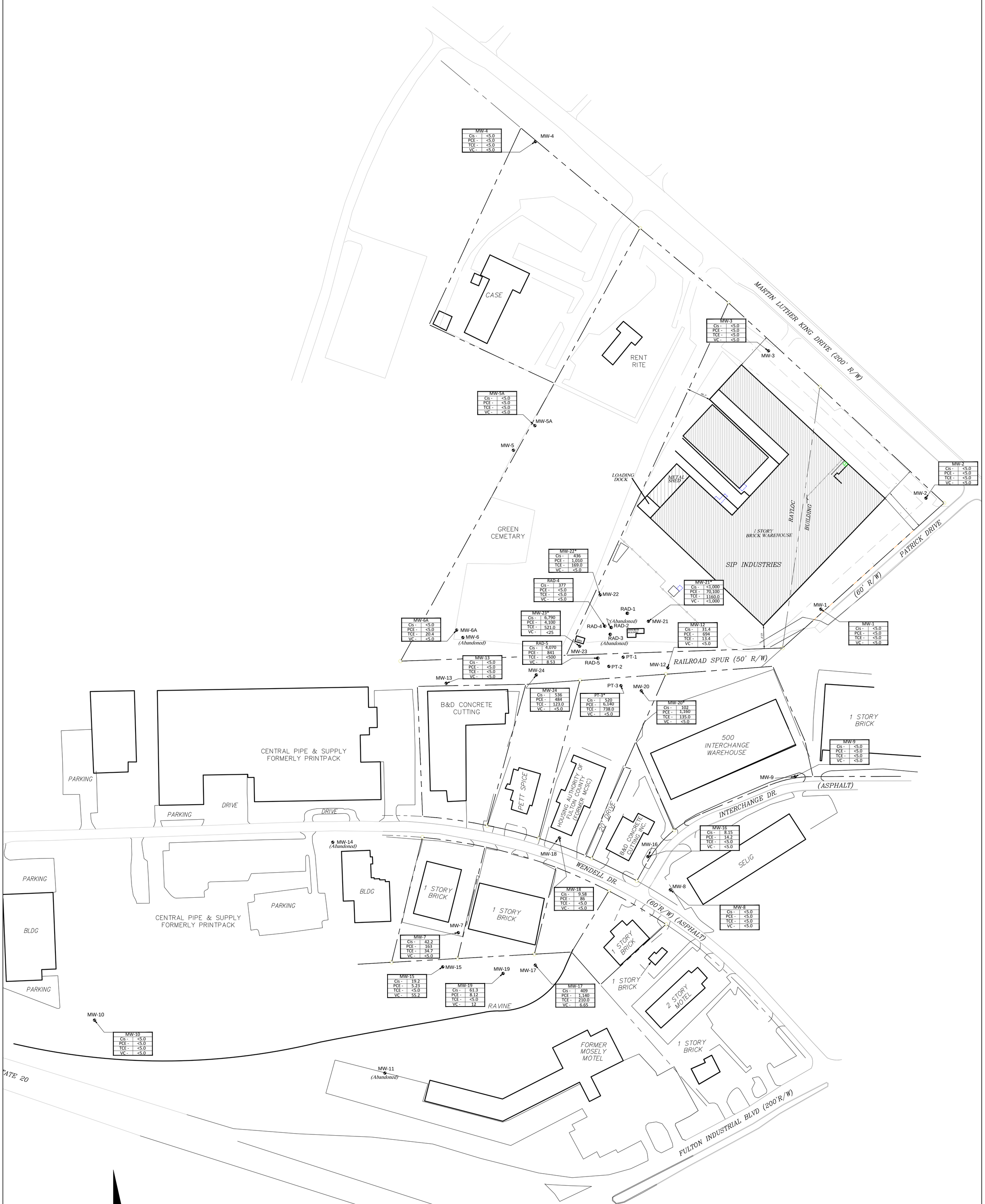
0 5' 10'
Approximate Scale In Feet

N

CLEARWATER ENVIRONMENTAL RESOURCES, LLC

Drawing:	Rayloc_Fig3 PDA 11-12-2015.dwg	FIGURE 3
Revision #:	0	PDA SAMPLING RESULTS
Date:	11/2015	RAYLOC FACILITY
Project #:	1502-1-3	MARCH 2016

Rayloc_Fig3 PDA 11-12-2015.dwg

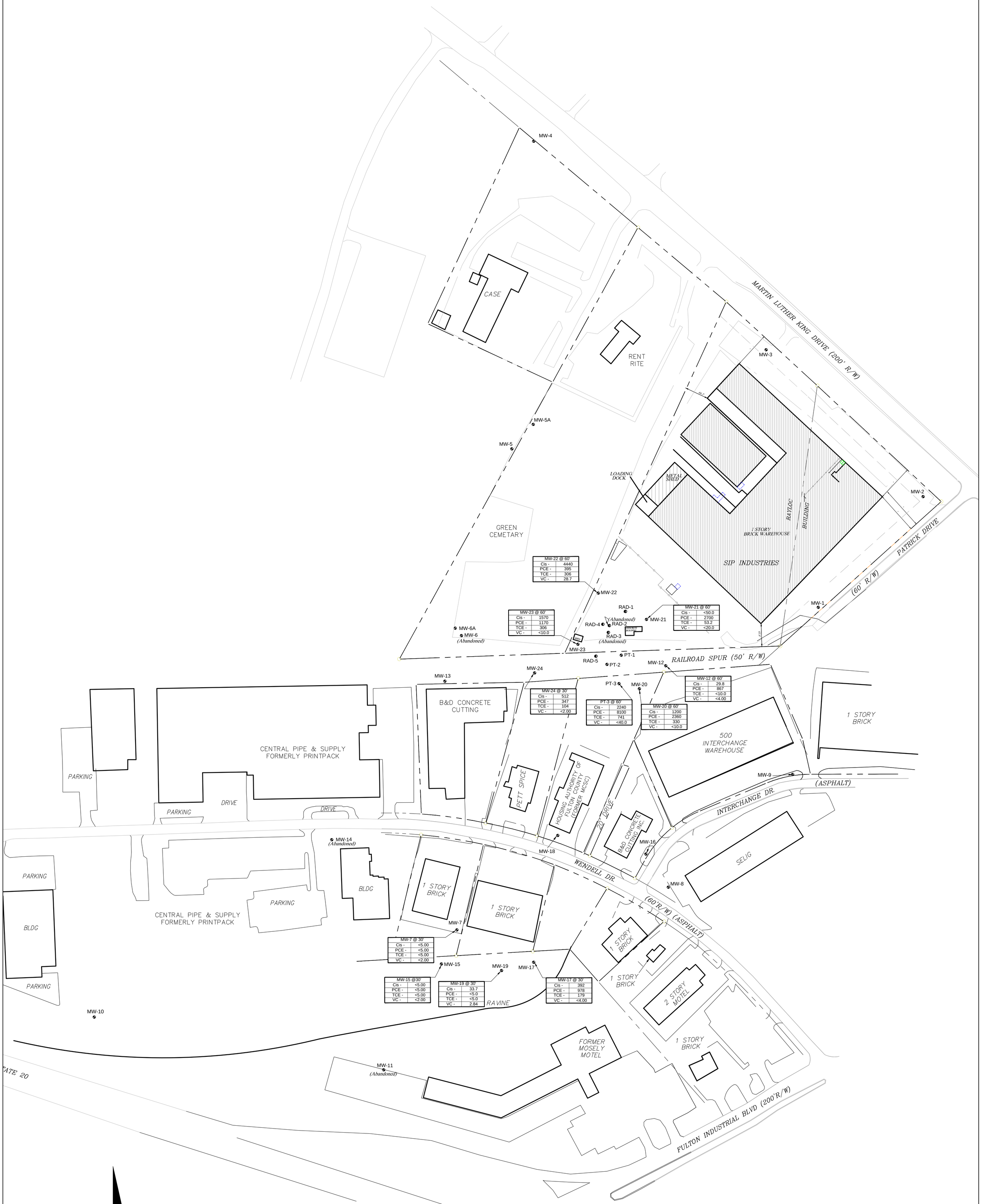


CLEARWATER ENVIRONMENTAL RESOURCES, LLC	*Drawing:* Rayloc 4-6-2016.dwg	FIGURE 4
	Revision #: 0	OCTOBER 2015 COMPLIANCE WELL SAMPLING RESULTS
	Date: 11/2015	RAYLOC FACILITY
	Project #: 1502-1-3	OCTOBER 2015

Rayloc 4-6-2016.dwg

Clearwater Environmental Resources, LLC
OCTOBER 2015

Genuine Parts Company
Atlanta, GA



LEGEND

- Monitoring Well Location
- Indicates Readings from September 2015 Sampling Event
- Property Line

MW-##	
Cis -	##
PCE -	##
TCE -	##
VC -	##

Monitoring Well Identification Tag
Cis - Cis-1-2-Dichloroethene
PCE - Tetrachloroethene
TCE - Trichloroethene
VC - Vinyl chloride
Results in ppb

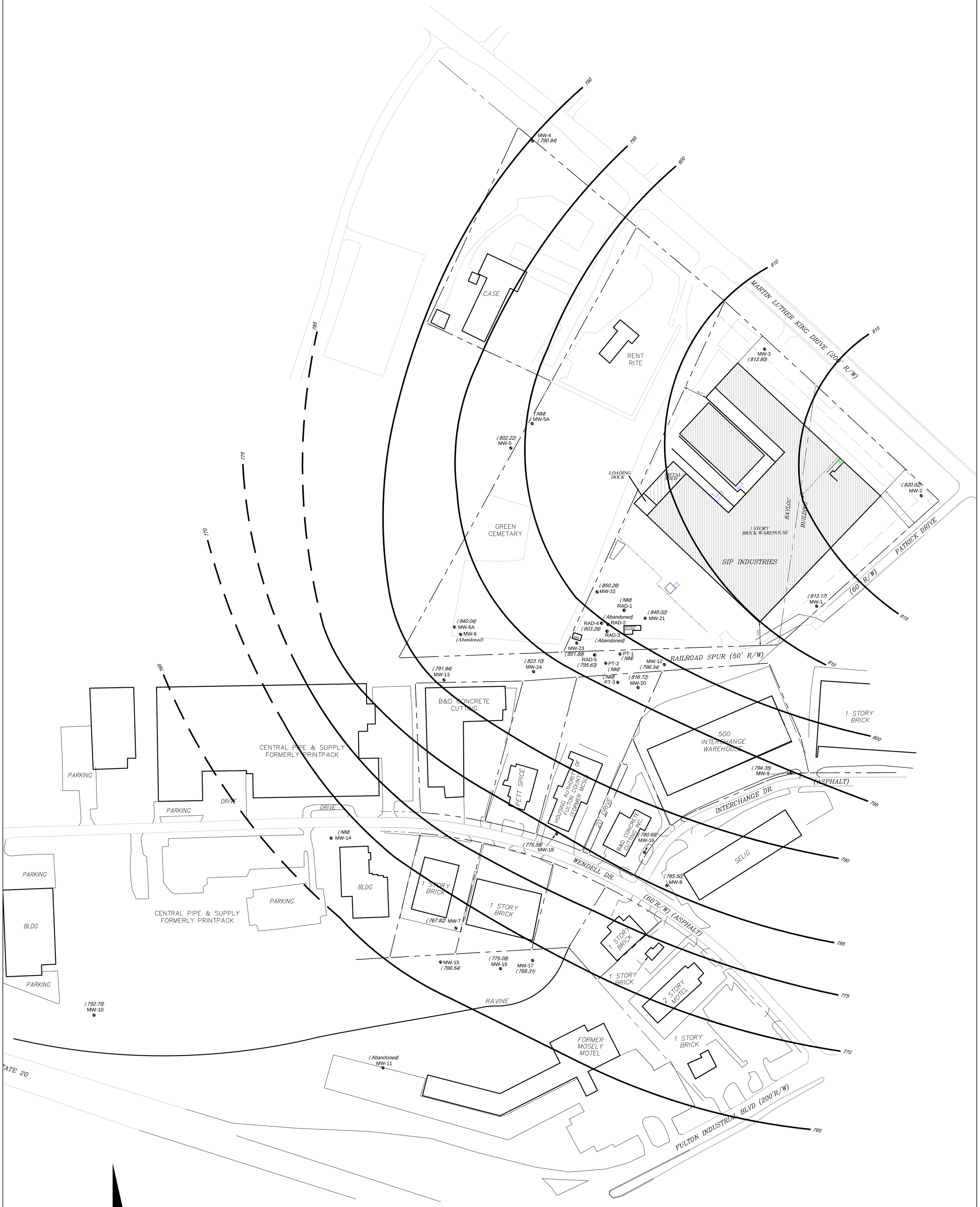
CLEARWATER ENVIRONMENTAL RESOURCES, LLC

Drawing:	Rayloc 4-6-2016.dwg	FIGURE 5
Revision #:	0	FEBRUARY 2016 X_2 REMEDIAL SYSTEM SAMPLING RESULTS
Date:	02/2016	RAYLOC FACILITY
Project #:	1502-1-3	FEBRUARY 2016

Rayloc 4-6-2016.dwg

Clearwater Environmental Resources, LLC
FEBRUARY 2016

Genuine Parts Company
Atlanta, GA



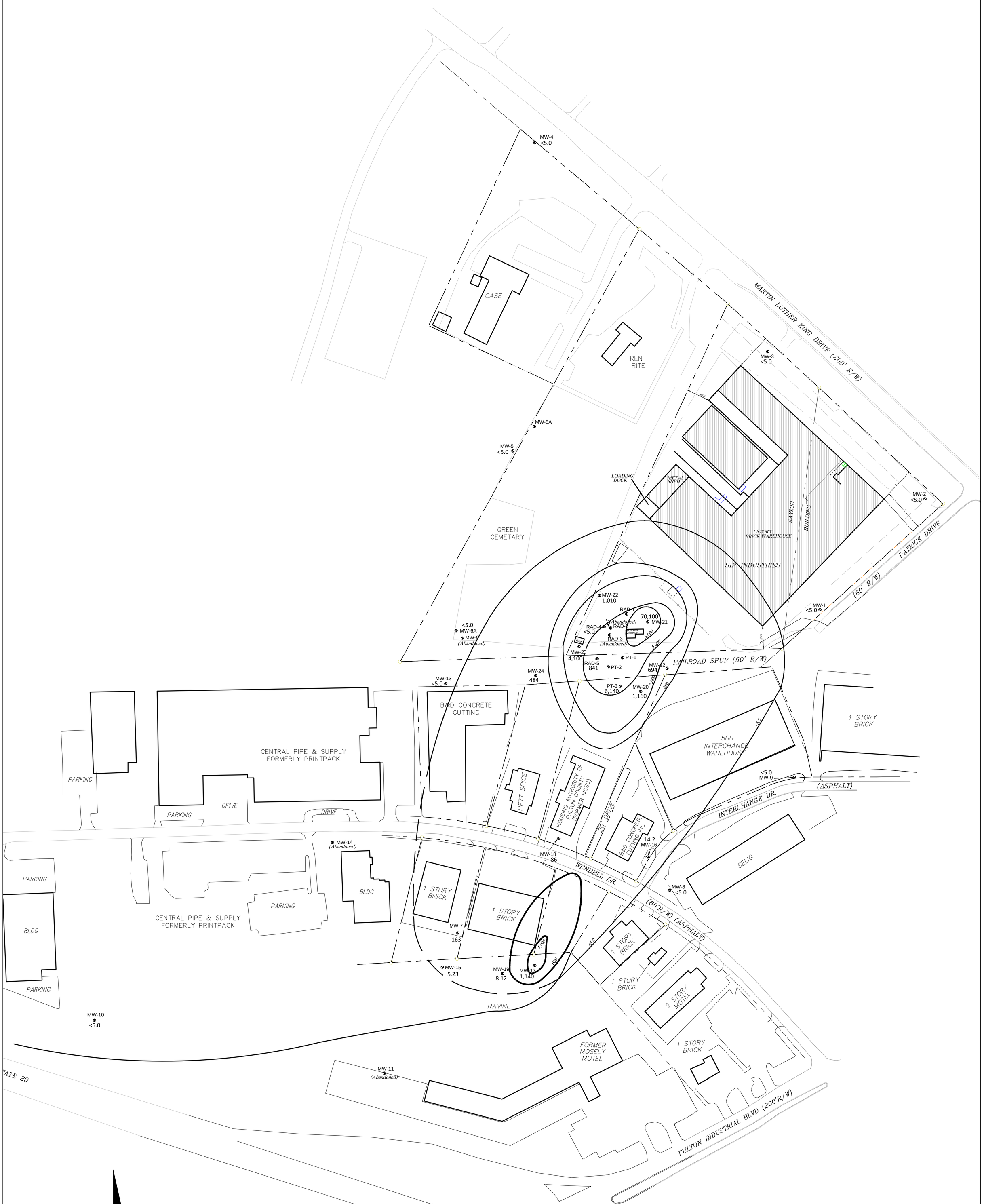
CLEARWATER ENVIRONMENTAL RESOURCES, LLC

Drawing:	Rayloc 4-6-2016.dwg	FIGURE 6
Revision #:	0	OCTOBER 2015 POTENTIOMETRIC-SURFACE MAP
Date:		RAYLOC FACILITY
Project #:	1502-1-3	OCTOBER 2015

Rayloc 4-6-2016.dwg

Clearwater Environmental Resources, LLC
OCTOBER 2015

Genuine Parts Company
Atlanta, GA



Rayloc 4-6-2016.dwg

CLEARWATER ENVIRONMENTAL RESOURCES, LLC

Drawing:	Rayloc 4-6-2016.dwg	FIGURE 7
Revision #:	0	OCTOBER 2015 PCE ISOCONCENTRATION MAP
Date:		RAYLOC FACILITY
Project #:	1502-1-3	OCTOBER 2015

Sage Environmental Consulting, L.P.
October 2015

Genuine Parts Company
Atlanta, GA

TABLES

Table 1
Historical PDA Sampling Results
Semi-Annual Progress Report #5
April 2016
Rayloc Facility
HSI# 10547

Sample Location	PD-2	PD-2	PD-2	PD-2	PD-2	PD-2	WD-2	WD-2	WD-2	WD-2	WD-2	WD-2
Sample Date	1/14/2014	6/26/2015	8/20/2015	10/19/2015	12/14/2015	3/10/2016	8/28/2014	6/26/2015	8/20/2015	10/19/2015	12/14/2015	3/10/2016
Sample Depth	10	10	10	10	10	10	10	10	10	10	10	10
1,2,4-Trimethylbenzene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525
1,2-Dichlorobenzene	--	<0.238	<0.193	<2.43	<0.183	<0.233	< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525
1,2-Dichloroethane	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525
1,2-Dichloroethene	--	<0.476	<0.193	<2.43	<0.183	<0.233	< 67.2	<0.419	<0.246	<0.265	<0.380	4.55
1,3,5-Trimethylbenzene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525
1,4-Dichlorobenzene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525
2-Butanone	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525
Acetone	2.02	<1.19	<0.967	<1.03	<0.913	<1.16	< 168	<1.05	<1.23	<1.33	<1.90	<2.63
Benzene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525
Bromomethane	--	<0.238	<0.193	<2.43	<0.183	<0.233	< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525
Carbon Disulfide	--	<0.238	<0.193	<2.43	<0.183	<0.233	< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525
Cis-1,2-dichloroethene	1.73	0.312	0.197	2.35	0.366	<0.233	< 33.6	0.242	<0.246	<0.265	0.737	4.55
Ethylbenzene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525
m,p-Xylene	--	<0.476	<0.193	<2.43	<0.183	<0.233	< 33.6	<0.419	<0.246	<0.265	<0.380	<0.525
o-Xylene	--	<0.238	<0.193	<2.43	<0.183	<0.233	< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525
Naphthalene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525
Styrene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525
Tetrachloroethene	**115**	**4.32**	**1.00**	**13.30**	**4.76**	**1.11**	**1,670**	**15**	**42.2**	**3.46**	**33.9**	**38.3**
Toluene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525
Trichloroethene	**1.69**	0.445	0.415	**2.33**	0.259	<0.233	< 33.6	0.214		<0.265	**0.589**	**1.52**
Vinyl Chloride	**0.404**	<0.238	<0.193	<2.43	<0.183	<0.233	< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525
Xylenes, Total	0.807	<0.714	<0.580	<0.618	<0.548	<0.699	< 67.2	<0.628	<0.739	<0.796	<1.14	<1.58

Notes:
Matrix: soil
Units: mg/kg
Indicates detection of compound greater than Type 3 HSRA RRS .

Table 1 (continued)

WD-4	WD-4	WD-4	WD-4	WD-4	WD-4	WD-8	WD-8	WD-8	WD-8	WD-8	WD-8	WD-11	WD-11	WD-11	WD-11	WD-11	WD-11
8/28/2014	**6/26/2015**	**8/20/2015**	**10/19/2015**	**12/14/2015**	**3/10/2016**	**11/17/2014**	**6/26/2015**	**8/20/2015**	**10/19/2015**	**12/14/2015**	**3/10/2016**	**11/17/2014**	**6/26/2015**	**8/20/2015**	**10/19/2015**	**12/14/2015**	**3/10/2016**
10	**10**	**10**	**10**	**10**	**10**	**5**	**5**	**5**	**5**	**5**	**5**	**10**	**10**	**10**	**10**	**10**	**10**
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.925	<0.832	<20.3	<4.21	<0.414	<4.51
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.925	<0.832	<20.3	<4.21	<0.414	<4.51
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.925	<0.832	<20.3	<4.21	<0.414	<4.51
< 93.0	1.94	<0.205	<3.93	<4.04	<22.0	<2.53	<35.1	<24.7	<0.996	<0.474	<27.1	<1.85	<3.61	<20.3	<8.43	<0.414	<4.51
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.925	<0.832	<20.3	<4.21	<0.414	<4.51
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.925	<0.832	<20.3	<4.21	<0.414	<4.51
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.925	<0.832	<20.3	<4.21	<0.414	<4.51
< 232	<4.06	<10.2	<3.93	<20.0	<110	<6.32	<87.6	<123	<0.996	<2.37	<135	<4.62	<4.16	<101	<21.1	<2.07	<22.6
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.925	<0.832	<20.3	<4.21	<0.414	<4.51
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.925	<0.832	<20.3	<4.21	<0.414	<4.51
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.925	<0.832	<20.3	<4.21	<0.414	<4.51
< 46.5	1.94	<0.205	**7.08**	6.51	<22.0	<1.26	<17.5	<24.7	**8.74**	**11.1**	**30.6**	1.57	3.61	<20.3	<4.21	1.2	<4.51
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.925	<0.832	<20.3	<4.21	<0.414	<4.51
< 46.5	<1.62	<0.205	<3.93	<4.04	<22.0	<1.26	<35.1	<24.7	<0.996	<0.474	<27.1	<0.925	<1.66	<20.3	<4.21	<0.414	<4.51
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.925	<0.832	<20.3	<4.21	<0.414	<4.51
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.925	<0.832	<20.3	<4.21	<0.414	<4.51
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.925	<0.832	<20.3	<4.21	<0.414	<4.51
2,190	**142**	**61.3**	**317**	**619**	**1,280**	**60.6**	**1,660**	**1,920**	**43**	**52**	**2590**	**150**	**108**	<20.3	**381**	**56.2**	**238**
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.925	<0.832	<20.3	<4.21	<0.414	<4.51
< 46.5	4.89	<0.205	**6.12**	**9.24**	<22.0	<1.26	<17.5	<24.7	**1.87**	**2.29**	<27.1	**2.24**	**2.53**	<20.3	<4.21	**1.08**	<4.51
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.925	<0.832	<20.3	<4.21	<0.414	<4.51
< 93.0	<2.43	<6.14	<11.8	<12.1	<66.0	<2.53	<52.6	<74	<2.99	<1.42	<81.2	<1.85	<2.50	<60.9	<12.6	<1.24	<13.5

Table 1 (continued)

ADD-1	ADD-1	ADD-1	ADD-1	ADD-1	ADD-1	ADD-2	ADD-2	ADD-2	ADD-2	ADD-2	ADD-2	Type 3 RRS
10/19/2015	12/14/2015	3/10/2016	10/19/2015	12/14/2015	3/10/2016	10/19/2015	12/14/2015	3/10/2016	10/19/2015	12/14/2015	3/10/2016	
6	6	6	10	10	10	5	5	5	10	10	10	
<0.476	<0.389	<0.468	<0.500	<0.392	<0.223	<44.9	<4.26	<47.2	<2.68	<10.5	<12.4	NA[2]
<0.476	<0.389	<0.468	<0.500	<0.392	<0.223	<44.9	<4.26	<47.2	<2.68	<10.5	<12.4	NA[2]
<0.476	<0.389	<0.468	<0.500	<0.392	<0.223	<44.9	<4.26	<47.2	<2.68	<10.5	<12.4	NA[2]
9.05	11.4	11.9	<0.500	5.53	3.88	<89.8	24.5	<47.2	6.01	22.8	<12.4	NA[2]
<0.476	<0.389	<0.468	<0.500	<0.392	<0.223	<44.9	<4.26	<47.2	<2.68	<10.5	<12.4	NA[2]
<0.476	<0.389	<0.468	<0.500	<0.392	<0.223	<44.9	<4.26	<47.2	<2.68	<10.5	<12.4	NA[2]
<0.476	<0.389	<0.468	<0.500	<0.392	<0.223	<44.9	<4.26	<47.2	<2.68	<10.5	<12.4	200
<2.38	<1.95	<2.34	<2.50	<1.96	<1.12	<225	<21.3	<236	<2.68	<52.4	<62.1	400
<0.476	<0.389	<0.468	<0.500	<0.392	<0.223	<44.9	<4.26	<47.2	<2.68	<10.5	<12.4	NA[2]
<0.476	<0.389	<0.468	<0.500	<0.392	<0.223	<44.9	<4.26	<47.2	<2.68	<10.5	<12.4	NA[2]
<0.476	<0.389	<0.468	<0.500	<0.392	<0.223	<44.9	<4.26	<47.2	<2.68	<10.5	<12.4	NA[2]
9.05	**11.4**	**11.8**	<0.500	5.21	3.81	<44.9	**24.5**	<47.2	6.01	**22.8**	**14.7**	7
<0.476	<0.389	<0.468	<0.500	<0.392	<0.223	<44.9	<4.26	<47.2	<2.68	<10.5	<12.4	70
<0.476	<0.389	<0.468	<0.500	<0.392	<0.223	<44.9	<4.26	<47.2	<2.68	<10.5	<12.4	NA[2]
<0.476	<0.389	<0.468	<0.500	<0.392	<0.223	<44.9	<4.26	<47.2	<2.68	<10.5	<12.4	NA[2]
<0.476	<0.389	<0.468	<0.500	<0.392	<0.223	<44.9	<4.26	<47.2	<2.68	<10.5	<12.4	NA[2]
<0.476	<0.389	<0.468	<0.500	<0.392	<0.223	**<44.9**	<4.26	<47.2	<2.68	<10.5	<12.4	14
30.4	**46.1**	**22.5**	**54.9**	**31.7**	**13.7**	**3100**	**455**	**3830**	**198**	**1830**	**764**	0.5
<0.476	<0.389	<0.468	<0.500	<0.392	<0.223	<44.9	<4.26	<47.2	<2.68	<10.5	<12.4	100
2.19	**3.74**	**3.09**	**5.36**	**3.73**	**2.92**	**48.7**	**37.4**	**72.1**	**6.26**	**61.6**	**35.7**	0.5
<0.476	<0.389	<0.468	<0.500	<0.392	<0.223	**<44.9**	<4.26	<47.2	<2.68	<10.5	<12.4	0.2
<1.43	<1.17	<1.40	<1.50	<1.18	<0.670	<135	<12.8	<141	<8.03	<31.4	<37.3	1,000

TABLE 2

Summary of Monitoring Well and Groundwater Elevations

Semi-Annual Progress Report #5

April 2016

Rayloc Facility

HSI# 10547

Monitoring Well Identification	Well Depth (feet)	Depth of Screened Interval (feet)	Top of Casing Elevation (TOC) (feet)	Static Water Level On 10/7 & 8/2015	Groundwater Elevation On 10/7 & 8/2015
MW-1	33	23 - 33	837.17	24.00	9.00
MW-2	41	31 - 41	852.76	32.74	8.26
MW-3	29	19 - 29	832.66	19.86	9.14
MW-4	17	7 - 17	797.56	6.62	10.38
MW-5	25	15 - 25	828.15	NM	NM
MW-5A	75	15 - 75	827.08	24.86	50.14
MW-6	37	27 - 37	840.42	Abandoned	Abandoned
MW-6A	50	40 - 50	840.04	39.92	10.08
MW-7	35	25 - 35	794.47	26.65	8.35
MW-8	27	17 - 27	806.23	20.73	6.27
MW-9	34	14 - 34	810.98	16.63	17.37
MW-10	44	34 -44	775.15	22.4	21.60
MW-11	75	70 - 75	850.81	Abandoned	Abandoned
MW-12	96	26 - 96	823.15	26.81	69.19
MW-13	43	23 - 43	822.30	30.36	12.64
MW-14	77	19 - 77	803.93	Abandoned	Abandoned
MW-15	40	5 - 40	775.29	8.75	31.25
MW-16	39	14 - 39	803.56	22.87	16.13
MW-17	31	5 - 31	776.86	8.55	22.45
MW-18	88	20 -88	801.82	26.24	61.76
MW-19	35	10 - 35	775.08	8.42	26.58
MW-20	70	20 - 70	816.72	22.13	47.87
MW-21	75	40 - 75	849.02	46.62	28.38
MW-22	70	40 - 70	850.26	43.86	26.14
MW-23	60	30 - 60	851.89	49.32	10.68
MW-24	35	25 - 35	823.1	23.42	11.58
PT-1	59	9 - 59	824.43	NM	NM
PT-2	63	8 - 63	825.28	NM	NM
PT-3	67.6	12.6 - 67.6	NM	22.59	NM
RAD-1	75	70 - 75	850.81	NM	NM
RAD-2	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned
RAD-3	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned
RAD-4	103	NI	852.12	48.86	54.14
RAD-5	88	NI	822.87	27.24	60.76

NI - Not Installed

NM - Not measured

TABLE 3
Summary of Historical Compliance Well Sampling Results
Semi-Annual Progress Report #5
April 2016
Rayloc Facility
HSI# 10547

Analyte		1,1-Dichloroethane	1,1-Dichloroethene	Acetone	Benzene	cis-1,2-DCE	Dichloroflouromethane	Chloromethane	Methylene Chloride	Tetrachloroethene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Xylenes	1,2-Dichlorobenzene	Chlorobenzene	Chloroform	Ethylbenzene	Isopropylbenzene	o-Xylene	m,p-Xylene	Styrene	Toluene	Trans-1,2-dichloroethane	1,4-dichlorbenzene	4 Methyl 2-pentanone	Carbon Disulfide	1,1,2-trichloroethane	2-Butanone	1,1,2,2-Tetrachloroethane
Type 3 RRS	μg/L	**4,000**	NA	**4,000**	NA	**0.07**	NA	NA	**5**	**5**	**5**	NA	**2**	**10,000**	NA	NA	NA	**700**	NA	NA	NA	**100**	**1,000**	NA	NA	NA	NA	NA	**2,000**	NA
Sample Location	**Date**																													
MW-1	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	**23.9**	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
MW-2	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
MW-3	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
MW-4	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-15	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
MW-5	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
	Oct-15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5A	Feb-09	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-15	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
MW-6 / MW-6A	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**32.7**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**20.4**	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
MW-7	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**20**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	**11**	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**9.2**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**16**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	19.8	<10	<10	<5.0	**114**	**32.6**	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	**42.2**	<10	<10	<5.0	**163**	**34.7**	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
MW-8	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
MW-9	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
MW-10	Oct-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
MW-12 @30'	Feb-09	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**270**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**930**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	**5.57**	<10	<10	<5.0	**285**	**13.9**	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12 @60'	Feb-09	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**230**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**940**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**239**	**13**	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	**31.4**	<10	<10	<5.0	**694**	**13.4**	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
MW-12 @90'	Feb-09	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**370**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**1,200**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	**6.16**	<10	<10	<5.0	**190**	**11.6**	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-13	Feb-09	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**7.6**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	**7.7**	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**9.18**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
MW-15	Feb-09	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	**93.7**	<10	<10	<5.0	**156**	**41.9**	<5.0	**132**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	**19.2**	<10	<10	<5.0	**5.23**	<5.0	<5.0	**55.2**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
MW-16	Feb-09	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**18**	**9.2**	<5.0	**2.1**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**120**	**6.6**	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-15	<5.0	<5.0	<20	<5.0	**8.15**	<10	<10	<5.0	**14.2**	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
MW-17	Feb-09	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**2,100**	**400**	<5.0	**11**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	**800**	<10	<10	<5.0	**2,000**	**660**	<5.0	**21**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	**6.9**	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	**590**	<10	<10	<5.0	**1,250**	**275**	<5.0	**32.1**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	**409**	<10	<10	<5.0	**1,140**	**210**	<5.0	**6.65**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
MW-18 @ 40'	Feb-09	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**110**	**5.8**	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	**12**	<10	<10	<5.0	**57**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	**22.1**	<10	<10	<5.0	**196**	**7.49**	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	NS	NS	NS	NS	**NS**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18 @ 60'	Jan-10	<5.0	<5.0	<20	<5.0	**11**	<10	<10	<5.0	**64**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	**22.5**	<10	<10	<5.0	**159**	**6.51**	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	**9.58**	<10	<10	<5.0	**86**	<5	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
MW-18 @ 80'	Feb-09	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**78**	**5.1**	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	**14**	<10	<10	<5.0	**67**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	**21.3**	<10	<10	<5.0	**165**	**6.14**	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	NS	NS	NS	NS	**NS**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19	Nov-12	<5.0	<5.0	<20	<5.0	**186**	<5.0	<5.0	<5.0	**97**	**19.9**	<5.0	**58.8**	<15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	**61.3**	<5.0	<5.0	<5.0	**8.12**	<5.0	<5.0	**12.0**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
MW-24	Nov-12	<5.0	<5.0	<20	<5.0	**458**	<5.0	<5.0	<5.0	**577**	**122**	<5.0	<5.0	<15	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	**536**	<5.0	<5.0	<5.0	**484**	**123**	<5.0	<2.0	<15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
RAD-1	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**49,000**	**5,400**	<5.0	<5.0	<15.0	**20**	**30**	**5.7**	**33**	**49**	**29**	<10.0	**280**	**160**	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**7,300**	**2,100**	<5.0	<5.0	**18.8**	<5.0	**12**	<5.0	**7.1**	<5.0	7.7	**11**	<5.0	**84**	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	**110**	<5.0	**400**	<10	<10	**8**	**3,200**	**400**	<5.0	**7.4**	<15.0	**5.7**	<5.0	**23**	<5.0	<5.0	<5.0	<10.0	<5.0	**23**	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
RAD-4	Sep-06	**11**	**6.9**	<20	<5.0	**880**	<10	<10	<5.0	**9300**	**2,100**	<5.0	**19**	<15.0	**63**	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	**7.3**	**8.9**	**23**	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	**15**	**58**	**120**	**17**	**45,000**	<10	<10	<5.0	**20,000**	**3,600**	<5.0	**21**	<15.0	**130**	<5.0	<5.0	**20**	<5.0	**22**	**63**	**6.7**	**44**	**120**	**9.9**	**18**	<5.0	<5.0	<10	<5.0
	Nov-12	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-15	<5.0	<5.0	<20	<5.0	**377**	<5.0	<5.0	<5.0	<5.0	<5.0	NS	NS	NS	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
RAD-5	Sep-06	<5.0	<5.0	<20	<5.0	**210**	<10	<10	<5.0	**400**	**260**	<5.0	<5.0	**18.8**	<5.0	**12**	<5.0	**7.1**	<5.0	7.7	**11**	<5.0	**84**	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	**33**	**190**	**55**	**49**	**71,000**	<10	<10	**18**	**11,000**	**3,500**	<5.0	**33**	<15.0	**180**	<5.0	<5.0	**7.4**	<5.0	**17**	**48**	**6.2**	**100**	**370**	**13**	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<500	<500	<500	<500	**78,400**	<500	<500	<500	**13,500**	**6,550**	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	**281**	<500	<500	<500	<500	<500	<500
	Oct-15	**5.68**	<5.0	<20	<5.0	**4,070**	<5.0	<5.0	<5.0	**841**	<500	<5	**8.53**	<15	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0

Table 4
Summary of Historical X_2 System Sampling Results
Semi-Annual Progress Report #5
April 2016
Rayloc Facility
HSI# 10547

Sample Location	Date	1,1-Dichloroethane	1,1-Dichloroethene	Acetone	Benzene	cis-1,2-DCE	Dichloroflouromethane	Chloromethane	Methylene Chloride	Tetrachloroethene	Trichloroethene
MW-7 @ 30'	Nov-12	<5.0	<5.0	<20.0	<5.0	**19.8**	<5.0	<5.0	<5.0	**114**	**32.6**
	Jul-13	<5.0	<5.0	<20.0	<5.0	**6.8**	<5.0	<5.0	<5.0	**35.3**	**9.46**
	Sep-13	<5.0	<5.0	<20.0	<5.0	<5.0	<5.0	<5.0	<5.0	**7.28**	<5.0
	Dec-13	<5.0	<5.0	<20.0	<5.0	<5.0	<5.0	<5.0	<5.0	**14.6**	<5.0
	Mar-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**5.35**	<5.0
	Jun-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**8.38**	<5.0
	Sep-14	<5.0	<5.0	<5.0	<5.0	**7.59**	<5.0	<5.0	<5.0	**38.2**	**9.17**
	Dec-14	<5.0	<5.0	<5.0	<5.0	**22.0**	<5.0	<5.0	<5.0	**65.4**	**19.1**
	Mar-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**6.31**	<5.0
	Jun-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**8.01**	<5.0
	Sep-15	<5.0	<5.0	<5.0	<5.0	9.72	<5.0	<5.0	<5.0	**28.6**	7.75
	Dec-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**10.3**	<5.0
	Feb-16	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-12 @ 60'	Nov-12	<5.0	<5.0	<20.0	<5.0	**4.97**	<5.0	<5.0	<5.0	**239**	**13**
	Jul-13	<10.0	<10.0	<20.0	<10.0	**58**	<10.0	<10.0	<10.0	**1250**	<10.0
	Sep-13	<10.0	<10.0	<20.0	<10.0	**105**	<10.0	<10.0	<10.0	**2280**	**19.1**
	Dec-13	<5.0	<5.0	<20.0	<5.0	**16.8**	<5.0	<5.0	<5.0	**557**	**10.8**
	Mar-14	<10.0	<10.0	<10.0	<10.0	**59.2**	<10.0	<10.0	<10.0	**1,590**	**12.3**
	Jun-14	<25.0	<25.0	<25.0	<25.0	**125**	<25.0	<25.0	<25.0	**1,350**	<25.0
	Sep-14	<5.0	<5.0	<5.0	<5.0	**22.2**	<5.0	<5.0	<5.0	**748**	**13.4**
	Dec-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**365**	**14.3**
	Mar-15	<10.0	<10.0	<10.0	<10.0	**34.3**	<10.0	<10.0	<10.0	**901**	<10.0
	Jun-15	<25.0	<25.0	<25.0	<25.0	**87.9**	<25.0	<25.0	<25.0	**1600**	<25.0
	Sep-15	<25.0	<25.0	<25.0	<25.0	**17.7**	<25.0	<25.0	<25.0	**538**	12.6
	Dec-15	<25.0	<25.0	<25.0	<25.0	**19.5**	<25.0	<25.0	<25.0	**667**	10.9
	Feb-16	<10.0	<10.0	<10.0	<10.0	**29.8**	<10.0	<10.0	<10.0	**867**	<10.0
MW-15 @ 30'	Nov-12	<5.0	<5.0	<20.0	<5.0	**93.7**	<5.0	<5.0	<5.0	**156**	**41.9**
	Jul-13	<5.0	<5.0	<20.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-13	<5.0	<5.0	<20.0	<5.0	**9.15**	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-13	<5.0	<5.0	<20.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-14	<5.0	<5.0	**5.17**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-14	<5.0	<5.0	<5.0	<5.0	**31.0**	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-15	<5.0	<5.0	<5.0	<5.0	16.9	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-15	<5.0	<5.0	**5.34**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Feb-16	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-17 @ 25'	Nov-12	<10.0	<10.0	<20.0	<10.0	**590**	<10.0	<10.0	<10.0	**1,250**	**275**
	Jul-13	<5.0	<5.0	<20.0	<5.0	**588**	<5.0	<5.0	<5.0	**1,370**	**266**
	Sep-13	<10.0	<10.0	<20.0	<10.0	**567**	<10.0	<10.0	<10.0	**1,510**	**300**
	Dec-13	<10.0	<10.0	<20.0	<10.0	**514**	<10.0	<10.0	<10.0	**1,330**	**353**
	Mar-14	<10.0	<10.0	<10.0	<10.0	**447**	<10.0	<10.0	<10.0	**1,210**	**238**
	Jun-14	<5.0	<5.0	<5.0	<5.0	**533**	<5.0	<5.0	<5.0	**1,180**	**235**
	Sep-14	<5.0	<5.0	<5.0	<5.0	**382**	<5.0	<5.0	<5.0	**734**	**180**
	Dec-14	<5.0	<5.0	<5.0	<5.0	**394**	<5.0	<5.0	<5.0	**922**	**190**
	Mar-15*	<5.0	<5.0	<5.0	<5.0	**361**	<5.0	<5.0	<5.0	**969**	**161**
	Jun-15	<10.0	<10.0	<10.0	<10.0	**383**	<10.0	<10.0	<10.0	**916**	**235**
	Sep-15	<10.0	<10.0	<10.0	<10.0	**409**	<10.0	<10.0	<10.0	**1090**	**219**
	Dec-15	<10.0	<10.0	<10.0	<10.0	**377**	<10.0	<10.0	<10.0	**952**	**206**
	Feb-16	<10.0	<10.0	<10.0	<10.0	**392**	<10.0	<10.0	<10.0	**978**	**179**
MW-19 @ 30'	Nov-12	<5.0	<5.0	<20.0	<5.0	**186**	<5.0	<5.0	<5.0	**97**	**19.9**
	Jul-13	<5.0	<5.0	<20.0	<5.0	**96.5**	<5.0	<5.0	<5.0	**69.1**	**14.8**
	Sep-13	<5.0	<5.0	<20.0	<5.0	**58.4**	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-13	<5.0	<5.0	<20.0	<5.0	**61.1**	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-14	<5.0	<5.0	<5.0	<5.0	**63.2**	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-14	<5.0	<5.0	<5.0	<5.0	**42.6**	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-14	<5.0	<5.0	<5.0	<5.0	**66.1**	<5.0	<5.0	<5.0	**9.69**	<5.0
	Dec-14	<5.0	<5.0	<5.0	<5.0	**92.1**	<5.0	<5.0	<5.0	**31.4**	**7.71**
	Mar-15*	<5.0	<5.0	<5.0	<5.0	**53.9**	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-15	<5.0	<5.0	<5.0	<5.0	**36.5**	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-15	<5.0	<5.0	<5.0	<5.0	**31.7**	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-15	<5.0	<5.0	<5.0	<5.0	**62.8**	<5.0	<5.0	<5.0	<5.0	<5.0
	Feb-16	<5.0	<5.0	<5.0	<5.0	**33.7**	<5.0	<5.0	<5.0	<5.0	<5.0
MW-20 @ 60'	Mar-13	<50.0	<50.0	<50.0	<50.0	**1,110**	<50.0	<50.0	<50.0	**889**	**99.8**
	Jul-13	<10.0	<10.0	<20.0	<10.0	**272**	<10.0	<10.0	<10.0	**1,380**	**98.7**
	Sep-13	<10.0	<10.0	<20.0	<10.0	**784**	<10.0	<10.0	<10.0	**254**	**51.7**
	Dec-13	<10.0	<10.0	<20.0	<10.0	**165**	<10.0	<10.0	<10.0	**1,270**	**154**
	Mar-14	<25.0	<25.0	<25.0	<25.0	**1,890**	<25.0	<25.0	<25.0	**2,850**	**288**
	Jun-14	<25.0	<25.0	<25.0	<25.0	**518**	<25.0	<25.0	<25.0	**1,310**	**150**
	Sep-14	<5.0	<5.0	<5.0	<5.0	**104**	<5.0	<5.0	<5.0	**1,460**	**140**
	Dec-14	<25.0	<25.0	<25.0	<25.0	**149**	<25.0	<25.0	<25.0	**984**	**105**
	Mar-15	<25.0	<25.0	<25.0	<25.0	**1,380**	<25.0	<25.0	<25.0	**2,070**	**248**
	Jun-15	<10.0	<10.0	<10.0	<10.0	**383**	<10.0	<10.0	<10.0	**1,220**	**153**
	Sep-15	<10.0	<10.0	<10.0	<10.0	**102**	<10.0	<10.0	<10.0	**1,160**	**133**
	Dec-15	<10.0	<10.0	<10.0	<10.0	**152**	<10.0	<10.0	<10.0	**1,460**	**113**
	Feb-16	<25.0	<25.0	<25.0	<25.0	**1,200**	<25.0	<25.0	<25.0	**2,360**	**330**
MW-21 @ 60'	Mar-13	<2,500	<2,500	<2,500	<2,500	<2,500	<2,500	<2,500	<2,500	**40,900**	<2,500
	Jul-13	<250	<250	<250	<250	<250	<250	<250	<250	**65,600**	**693**
	Sep-13	<25.0	<25.0	<25.0	<25.0	**82.9**	<25.0	<25.0	<25.0	**7,520**	**130**
	Dec-13	<50.0	<50.0	<50.0	<50.0	**58.4**	<50.0	<50.0	<50.0	**5,760**	**105**
	Mar-14	<25.0	<25.0	<25.0	<25.0	**58.2**	<25.0	<25.0	<25.0	**2,410**	**82.2**
	Jun-14	<50.0	<50.0	<50.0	<50.0	**83.5**	<50.0	<50.0	<50.0	**7,950**	**187**
	Sep-14	<250.0	<250.0	<250.0	<250.0	<250.0	<250.0	<250.0	<250.0	**38,900**	**738**
	Dec-14	<250.0	<250.0	<250.0	<250.0	<250.0	<250.0	<250.0	<250.0	**13,000**	**573**
	Mar-15	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	**7,680**	**81.1**
	Jun-15	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	**4,900**	**88.3**
	Sep-15	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	**70,100**	**1610**
	Dec-15	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	**6,180**	**169**
	Feb-16	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	**2,700**	**53.2**
MW-22 @ 60'	Mar-13	<250	<250	<250	<250	**4,270**	<250	<250	<250	**1,120**	**389**
	Jul-13	<25.0	<25.0	<25.0	<25.0	**1,910**	<25.0	<25.0	<25.0	**1,270**	**310**
	Sep-13	<10.0	**12.6**	<20.0	<10.0	**623**	<10.0	<10.0	<10.0	**1,310**	**265**
	Dec-13	<10.0	<10.0	<20.0	<10.0	**552**	<10.0	<10.0	<10.0	**1,200**	**239**
	Mar-14	<25.0	<25.0	<25.0	<25.0	**2,070**	<25.0	<25.0	<25.0	**2,210**	**347**
	Jun-14	<25.0	<25.0	<25.0	<25.0	**800**	<25.0	<25.0	<25.0	**1,090**	**244**
	Sep-14	<5.0	<5.0	<5.0	<5.0	**576**	<5.0	<5.0	<5.0	**1,760**	**263**
	Dec-14	<25.0	<25.0	<25.0	<25.0	**1990**	<25.0	<25.0	<25.0	**2,580**	**329**
	Mar-15	<50.0	<50.0	<50.0	<50.0	**4,600**	<50.0	<50.0	<50.0	**921**	**357**
	Jun-15	<10.0	<10.0	<10.0	<10.0	**2,730**	<10.0	<10.0	<10.0	**892**	**139**
	Sep-15	<10.0	<10.0	<10.0	<10.0	**436**	<10.0	<10.0	<10.0	**1,010**	**169**
	Dec-15	<10.0	<10.0	<10.0	<10.0	**2,550**	<10.0	<10.0	<10.0	**1,150**	**292**
	Feb-16	<50.0	<50.0	<50.0	<50.0	**4,440**	<50.0	<50.0	<50.0	**395**	**306**
MW-23 @ 60'	Mar-13	<250	<250	<250	<250	**2,870**	<250	<250	<250	**503**	<250
	Jul-13	<5.0	<5.0	<25.0	<5.0	**2,120**	<10	<10	<5.0	**1,650**	**314**
	Sep-13	<5.0	**5.32**	<20.0	<5.0	**1,250**	<5.0	<5.0	<5.0	**1,830**	**150**
	Dec-13	<10	<10	<20.0	<10	**2,750**	<10	<10	<10	**1,270**	**304**
	Mar-14	<25.0	<25.0	<25.0	<25.0	**2,180**	<25.0	<25.0	<25.0	**1,870**	**402**
	Jun-14	<25.0	<25.0	<25.0	<25.0	**1,970**	<25.0	<25.0	<25.0	**860**	**328**
	Sep-14	<25.0	<25.0	<25.0	<25.0	**2,730**	<25.0	<25.0	<25.0	**2,520**	**541**
	Dec-14	<25.0	<25.0	<25.0	<25.0	**1,990**	<25.0	<25.0	<25.0	**1,930**	**382**
	Mar-15	<25.0	<25.0	<25.0	<25.0	**3,220**	<25.0	<25.0	<25.0	**2,160**	**476**
	Jun-15	<25.0	<25.0	<25.0	<25.0	**2,730**	<25.0	<25.0	<25.0	**2,050**	**618**
	Sep-15	<25.0	<25.0	<25.0	<25.0	**6,790**	<25.0	<25.0	<25.0	**4,100**	**521**
	Dec-15	<25.0	<25.0	<25.0	<25.0	**3,480**	<25.0	<25.0	<25.0	**1,880**	**547**
	Feb-16	<25.0	<25.0	<25.0	<25.0	**1,570**	<25.0	<25.0	<25.0	**1,170**	**306**
MW-24 @ 30'	Nov-12	<5.0	<5.0	<20.0	<5.0	**458**	<5.0	<5.0	<5.0	**577**	**122**
	Jul-13	<10.0	<10.0	<20.0	<10.0	**1,040**	<10.0	<10.0	<10.0	**743**	**221**
	Sep-13	<5.0	**6.63**	<20.0	<5.0	**1,010**	<5.0	<5.0	<5.0	**743**	**212**
	Dec-13	<5.0	<5.0	<20.0	<5.0	**647**	<5.0	<5.0	<5.0	**356**	**144**
	Mar-14	<10.0	<10.0	<10.0	<10.0	**960**	<10.0	<10.0	<10.0	**695**	**195**
	Jun-14	<10.0	<10.0	<10.0	<10.0	**648**	<10.0	<10.0	<10.0	**385**	**153**
	Sep-14	<5.0	<5.0	<5.0	<5.0	**578**	<5.0	<5.0	<5.0	**547**	**139**
	Dec-14	<10.0	<10.0	<10.0	<10.0	**376**	<10.0	<10.0	<10.0	**335**	**95.8**
	Mar-15	<5.0	<5.0	<5.0	<5.0	**599**	<5.0	<5.0	<5.0	**392**	**116**
	Jun-15	<5.0	<5.0	<5.0	<5.0	**575**	<5.0	<5.0	<5.0	**386**	**166**
	Sep-15	<5.0	<5.0	<5.0	<5.0	**196**	<5.0	<5.0	<5.0	**150**	**40.6**
	Dec-15	<5.0	<5.0	<5.0	<5.0	**399**	<5.0	<5.0	<5.0	**280**	**94.1**
	Feb-16	<5.0	<5.0	<5.0	<5.0	**512**	<5.0	<5.0	<5.0	**347**	**104**
PT-3 @ 60'	Mar-13	<1,250	<1,250	**2,120**	<1,250	**13,700**	<1,250	<1,250	<1,250	**25,000**	**2,240**
	Jul-13	<250	<250	**6,080**	<250	**21,900**	<250	<250	**506**	**43,300**	**3,290**
	Sep-13	**391**	<250	**15,700**	<250	**51,000**	<250	<250	**900**	**42,600**	**3,560**
	Dec-13	**356**	<250	**9,460**	<250	**40,300**	<250	<250	**531**	**9,120**	**1,250**
	Mar-14	<100	<100	**496**	<100	**9,180**	<100	<100	**110**	**17,400**	**1,170**
	Jun-14	<500	<500	**13,800**	<500	**33,200**	<500	<500	<500	**10,900**	**1,390**
	Sep-14	<250	<250	**1,650**	<250	**7,460**	<250	<250	<250	**10,200**	**1,010**
	Dec-14	<50.0	<50.0	<50.0	<50.0	**789**	<50.0	<50.0	<50.0	**7,930**	**924**
	Mar-15	<250	<250	**1,460**	<250	**27,300**	<250	<250	<250	**5,140**	**895**
	Jun-15	<100	<100	**923**	<100	**27,300**	<100	<100	<100	**11,300**	**811**
	Sep-15	<100	<100	<100	<100	**520**	<100	<100	<100	**6,140**	**520**
	Dec-15	<100	<100	**5.34**	<100	**418**	<100	<100	<100	**9,320**	**680**
	Feb-16	<100	<100	<100	<100	**2,240**	<100	<100	<100	**8,100**	**741**

Sample Location	Date	Trichlorofluoromethane	Vinyl Chloride	Xylenes (Total)	1,2-Dichlorobenzene	Chlorobenzene	Chloroform	Ethylbenzene	Isopropylbenzene	o-Xylene	m,p-Xylene
MW-7 @ 30'	Nov-12	<5.0	<1.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Jul-13	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Sep-13	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Dec-13	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Mar-14	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Jun-14	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Sep-14	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Dec-14	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Mar-15	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Jun-15	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Sep-15	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Dec-15	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Feb-16	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-12 @ 60'	Nov-12	<5.0	<1.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Jul-13	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20
	Sep-13	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20
	Dec-13	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Mar-14	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Jun-14	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Sep-14	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Dec-14	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Mar-15	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Jun-15	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<75.0
	Sep-15	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<75.0
	Dec-15	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<75.0
	Feb-16	<10.0	<4.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<30.0
MW-15 @ 30'	Nov-12	<5.0	**132**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Jul-13	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Sep-13	<5.0	**6.83**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Dec-13	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Mar-14	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Jun-14	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Sep-14	<5.0	**98.8**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Dec-14	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Mar-15	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Jun-15	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0
	Sep-15	<5.0	**97.7**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0
	Dec-15	<5.0	**2.18**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0
	Feb-16	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0
MW-17 @ 25'	Nov-12	<10.0	**32.1**	<30	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20
	Jul-13	<5.0	**17.9**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Sep-13	<10.0	**33.7**	<30	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20
	Dec-13	<10.0	<10.0	<30	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20
	Mar-14	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Jun-14	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Sep-14	<5.0	**5.77**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Dec-14	<5.0	**7.74**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Mar-15*	<5.0	<10.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Jun-15	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Sep-15	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Dec-15	<10.0	**3.56**	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Feb-16	<10.0	<4.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
MW-19 @ 30'	Nov-12	<5.0	**58.8**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Jul-13	<5.0	**28.1**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Sep-13	<5.0	**15.4**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Dec-13	<5.0	**17.7**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Mar-14	<5.0	**14.5**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Jun-14	<5.0	**7.29**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Sep-14	<5.0	**15.9**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Dec-14	<5.0	**16.1**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Mar-15*	<5.0	**6.68**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Jun-15	<5.0	**<5.0**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0
	Sep-15	<5.0	**7.49**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0
	Dec-15	<5.0	**6.62**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0
	Feb-16	<5.0	**2.84**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0
MW-20 @ 60'	Mar-13	<50.0	<50.0	<150	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100
	Jul-13	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Sep-13	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Dec-13	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Mar-14	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Jun-14	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Sep-14	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Dec-14	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Mar-15	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Jun-15	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Sep-15	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Dec-15	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Feb-16	<25.0	<10.0	<75.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<50.0
MW-21 @ 60'	Mar-13	<2,500	<2,500	<7,500	<2,500	<2,500	<2,500	<2,500	<2,500	<2,500	<5,000
	Jul-13	<250	<250	<750	<250	<250	<250	<250	<250	<.250	<500
	Sep-13	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50
	Dec-13	<50.0	<50.0	<150	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100
	Mar-14	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Jun-14	<50.0	<50.0	<150	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100.0
	Sep-14	<250.0	<250.0	<750	<250.0	<250.0	<250.0	<250.0	<250.0	<250.0	<500.0
	Dec-14	<250.0	<250.0	<750	<250.0	<250.0	<250.0	<250.0	<250.0	<250.0	<500.0
	Mar-15	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100
	Jun-15	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Sep-15	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Dec-15	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Feb-16	<50.0	<20.0	<150.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100.0
MW-22 @ 60'	Mar-13	<250	<250	<750	<250	<250	<250	<250	<250	<250	<500
	Jul-13	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Sep-13	<10.0	<10.0	<30	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Dec-13	<10.0	<10.0	<30	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Mar-14	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Jun-14	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Sep-14	<5.0	<5.0	<15.0	**5.38**	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Dec-14	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Mar-15	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100
	Jun-15	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Sep-15	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Dec-15	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Feb-16	<50.0	**28.7**	<150.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100.0
MW-23 @ 60'	Mar-13	<250	<250	<750	<250	<250	<250	<250	<250	<250	<500
	Jul-13	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Sep-13	<5.0	<5.0	<15.0	**6.33**	<5.0	**9.60**	<5.0	<5.0	<5.0	<10.0
	Dec-13	<10	<10	<30.0	**10.5**	<10	**12.6**	<10	<10	<10	<20.0
	Mar-14	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Jun-14	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Sep-14	<25.0	<25.0	<75.0	**26.1**	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Dec-14	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Mar-15	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Jun-15	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Sep-15	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Dec-15	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
	Feb-16	<25.0	<10.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0
MW-24 @ 30'	Nov-12	<5.0	<1.0	<15.0	<5.0	<5.0	**14.4**	<5.0	<5.0	<5.0	<10.0
	Jul-13	<10.0	<10.0	<30.0	<10.0	<10.0	**16**	<10.0	<10.0	<10.0	<20.0
	Sep-13	<5.0	<5.0	<15.0	<5.0	<5.0	**14.6**	<5.0	<5.0	<5.0	<10.0
	Dec-13	<5.0	<5.0	<5.0	<5.0	<5.0	**8.76**	<5.0	<5.0	<5.0	<5.0
	Mar-14	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Jun-14	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Sep-14	<5.0	<5.0	<15.0	<5.0	<5.0	**7.07**	<5.0	<5.0	<5.0	<10.0
	Dec-14	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0
	Mar-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0
	Jun-15	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<10.0
	Sep-15	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<10.0
	Dec-15	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<10.0
	Feb-16	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<10.0
PT-3 @ 60'	Mar-13	<1,250	<1,250	<3,750	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<2,500
	Jul-13	<250	<250	<750	<250	<250	<250	<250	<250	<250	<500
	Sep-13	<250	**270**	<750	<250	<250	<250	<250	<250	<250	<500
	Dec-13	<250	<250	<750	<250	<250	<250	<250	<250	<250	<500
	Mar-14	<100	<100	<300	<100	<100	<100	<100	<100	<100	<200
	Jun-14	<500	<500	<1,500	<500	<500	<500	<500	<500	<500	<1,000
	Sep-14	<250	<250	<750	<250	<250	<250	<250	<250	<250	<500
	Dec-14	<50.0	<50.0	<150	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100
	Mar-15	<250	<250	<250	<250	<250	<250	<250	<250	<250	<500
	Jun-15	<100	<100	<300	<100	<100	<100	<100	<100	<100	<200
	Sep-15	<100	<100	<300	<100	<100	<100	<100	<100	<100	<200
	Dec-15	<100	<100	<300	<100	<100	<100	<100	<100	<100	<200
	Feb-16	<100	<40.0	<300	<100	<100	<100	<100	<100	<100	<200

Sample Location	Date	Styrene	Toluene	Trans-1,2-dichloroethene	1,4-dichlorbenzene	4 Methyl 2-pentanone	Carbon Disulfide	1,1,2-Trichloroethane	2-Butanone	1,1,2,2-Tetrachloroethane
MW-7 @ 30'	Nov-12	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jul-13	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-13	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-13	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Feb-16	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-12 @ 60'	Nov-12	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jul-13	<10.0	<10.0	<10.0	<10.0	<10	<10.0	<10.0	<10	<10.0
	Sep-13	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Dec-13	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-14	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Jun-14	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Sep-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-15	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Jun-15	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Sep-15	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Dec-15	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Feb-16	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
MW-15 @ 30'	Nov-12	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jul-13	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-13	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-13	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Feb-16	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-17 @ 25'	Nov-12	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Jul-13	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-13	<10.0	<10.0	**10.2**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Dec-13	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Mar-14	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Jun-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-15*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-15	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Sep-15	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Dec-15	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Feb-16	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
MW-19 @ 30'	Nov-12	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jul-13	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-13	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-13	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-15*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Feb-16	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-20 @ 60'	Mar-13	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
	Jul-13	<10.0	<10.0	<10.0	<10.0	<10	<10.0	<10.0	<10	<10.0
	Sep-13	<10.0	<10.0	**11.1**	<10.0	<10	<10.0	<10.0	<10	<10.0
	Dec-13	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Mar-14	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Jun-14	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Sep-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-14	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Mar-15	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Jun-15	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Sep-15	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Dec-15	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Feb-16	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
MW-21 @ 60'	Mar-13	<2,500	<2,500	<2,500	<2,500	<2,500	<2,500	<2,500	<2,500	<2,500
	Jul-13	<250	<250	<250	<250	<250	<250	<250	<250	<250
	Sep-13	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Dec-13	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
	Mar-14	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Jun-14	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
	Sep-14	<250.0	<250.0	<250.0	<250.0	<250.0	<250.0	<250.0	<250.0	<250.0
	Dec-14	<250.0	<250.0	<250.0	<250.0	<250.0	<250.0	<250.0	<250.0	<250.0
	Mar-15	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
	Jun-15	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Sep-15	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Dec-15	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Feb-16	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
MW-22 @ 60'	Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250
	Jul-13	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Sep-13	<10.0	<10.0	**10.1**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Dec-13	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Mar-14	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Jun-14	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Sep-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-14	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Mar-15	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
	Jun-15	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Sep-15	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Dec-15	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Feb-16	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
MW-23 @ 60'	Mar-13	<250	<250	<250	<250	<250	<250	<250	<250	<250
	Jul-13	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-13	<5.0	<5.0	**5.95**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-13	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Mar-14	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Jun-14	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Sep-14	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Dec-14	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Mar-15	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Jun-15	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Sep-15	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Dec-15	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Feb-16	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
MW-24 @ 30'	Nov-12	<5.0	<5.0	**2.07**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jul-13	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Sep-13	<5.0	<5.0	**11.6**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-13	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-14	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Jun-14	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Sep-14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-14	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Mar-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Feb-16	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
PT-3 @ 60'	Mar-13	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250
	Jul-13	<250	<250	**389**	<250	<250	<250	<250	**294**	<250
	Sep-13	<250	**271**	**650**	<250	**293**	<250	<250	**1010**	<250
	Dec-13	<250	<250	<250	<250	<250	<250	<250	**471**	<250
	Mar-14	<100	<100	**106**	<100	<100	<100	<100	<100	<100
	Jun-14	<500	<500	<500	<500	<500	<500	<500	<500	<500
	Sep-14	<250	<250	<250	<250	<250	<250	<250	<250	<250
	Dec-14	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
	Mar-15	<250	<250	<250	<250	<250	<250	<250	<250	<250
	Jun-15	<100	<100	<100	<100	<100	<100	<100	<100	<100
	Sep-15	<100	<100	<100	<100	<100	<100	<100	<100	<100
	Dec-15	<100	<100	<100	<100	<100	<100	<100	<100	<100
	Feb-16	<100	<100	<100	<100	<100	<100	<100	<100	<100

Notes:
The analytical results that exceed the laboratory detection limits are bolded.
ug/L = micrograms per Liter
NS = Not Sampled
* Samples for MW-17 and MW-19 were mislabeled in the field. This table shows the correct results.

TABLE 5

Summary of Professional Oversight Hours
Semi-Annual Progress Report #5
April 2016
Rayloc Facility
HSI# 10547

Month	Hours
Novemeber	58
December	56
January	38
February	42
March	56
April	18

APPENDIX A
DECEMBER 2015 AND MARCH 2016
PDA LABORATORY REPORTS

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC
7979 Innovation Park Dr.
Baton Rouge, LA 70820

Report Date 12/28/2015

GCAL Report 215121648

Project Rayloc PDA Confirmation Sampli

Deliver To	***Additional Recipients***
Jack Wintle Clearwater Env. Resources Peachtree Industrial blvd Duluth, GA 30096 678-491-4601	Jack Wintle, Clearwater Env. Resources

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations that may be Utilized in this Report

ND	Indicates the result was Not Detected at the specified reporting limit
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
DL	Detection Limit
DL	Diluted analysis – when appended to Client Sample ID
LOD	Limit of Detection
LOQ	Limit of Quantitation
RE	Re-analysis
00:01	Reported as a time equivalent to 12:00 AM

Reporting Flags that may be Utilized in this Report

J or I	Indicates the result is between the MDL and LOQ
J	DOD flag on analyte in the parent sample for MS/MSD outside acceptance criteria
U	Indicates the compound was analyzed for but not detected
B or V	Indicates the analyte was detected in the associated Method Blank
Q	Indicates a non-compliant QC Result (See Q Flag Application Report)
*****	Indicates a non-compliant or not applicable QC recovery or RPD – see narrative
E	The result is estimated because it exceeded the instrument calibration range
E	Metals - % diference for the serial dilution is > 10%

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC Institute standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

_____

Authorized Signature
GCAL Report 215121648

Certifications

10/02/2015

Certification	Certification Number
DOD ELAP	L14-243
Alabama	01955
Arizona	AZ0718
Arkansas	12-060-0
Colorado	01955
Delaware	01955
Florida	E87854
Georgia	01955
Hawaii	01955
Idaho	01955
Illinois	200048
Indiana	01955
Kansas	E-10354
Kentucky	95
Louisiana	01955
Maryland	01955
Massachusetts	01955
Michigan	01955
Mississippi	01955
Missouri	01955
Montana	N/A
Nebraska	01955
New Mexico	01955
North Carolina	618
North Dakota	R-195
Oklahoma	9403
South Carolina	73006001
South Dakota	01955
Tennessee	01955
Texas	T104704178
Vermont	01955
Virginia	460215
USDA Soil Permit	P330-10-00117

Case Narrative

Client: Clearwater Environmental Resources **Report:** 215121648

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the Report Sample Summary page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

VOLATILES MASS SPECTROMETRY

In the EPA 8260B analysis, samples 21512164801 (PD-2 @ 10'), 21512164802 (WD-2 @ 10'), 21512164803 (WD-4 @ 10'), 21512164804 (WD-8 @ 5'), 21512164805 (WD-11 @ 10'), 21512164806 (ADD-1 @ 6'), 21512164807 (ADD-1 @ 10'), 21512164808 (ADD-2 @ 5'), and 21512164809 (ADD-2 @ 10') had to be diluted to bracket the concentration of target analytes within the calibration range of the instrument. The dilutions are reflected in elevated detection limits.

In the EPA 8260B analysis for analytical batch 575413, the LCS and/or LCSD recoveries are outside control limits for Carbon disulfide and Trichlortrifluoroethane. All other recoveries are acceptable.

MISCELLANEOUS

All samples were received outside of the prescribed temperature range. Please refer to the preservative checklist for details on the temperature upon receipt. The client was contacted and authorized the laboratory to proceed with the analyses.

Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21512164801	PD-2 @ 10'	Solid	12/14/2015 10:01	12/16/2015 10:20
21512164802	WD-2 @ 10'	Solid	12/14/2015 10:27	12/16/2015 10:20
21512164803	WD-4 @ 10'	Solid	12/14/2015 11:20	12/16/2015 10:20
21512164804	WD-8 @ 5'	Solid	12/14/2015 10:40	12/16/2015 10:20
21512164805	WD-11 @ 10'	Solid	12/14/2015 10:58	12/16/2015 10:20
21512164806	ADD-1 @ 6'	Solid	12/14/2015 11:37	12/16/2015 10:20
21512164807	ADD-1 @ 10'	Solid	12/14/2015 11:37	12/16/2015 10:20
21512164808	ADD-2 @ 5'	Solid	12/14/2015 11:50	12/16/2015 10:20
21512164809	ADD-2 @ 10'	Solid	12/14/2015 11:50	12/16/2015 10:20
21512164810	TRIP BLANK	Water	12/14/2015 14:30	12/16/2015 10:20

Summary of Compounds Detected

PD-2 @ 10'

Collect Date 12/14/2015 10:01 **GCAL ID** 21512164801
Receive Date 12/16/2015 10:20 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	0.366	0.365	mg/kg
156-59-2	cis-1,2-Dichloroethene	0.366	0.183	mg/kg
127-18-4	Tetrachloroethene	4.76	0.183	mg/kg
79-01-6	Trichloroethene	0.259	0.183	mg/kg

WD-2 @ 10'

Collect Date 12/14/2015 10:27 **GCAL ID** 21512164802
Receive Date 12/16/2015 10:20 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
156-59-2	cis-1,2-Dichloroethene	0.737	0.380	mg/kg
127-18-4	Tetrachloroethene	33.9	3.80	mg/kg
79-01-6	Trichloroethene	0.589	0.380	mg/kg

WD-4 @ 10'

Collect Date 12/14/2015 11:20 **GCAL ID** 21512164803
Receive Date 12/16/2015 10:20 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
156-59-2	cis-1,2-Dichloroethene	6.51	4.04	mg/kg
127-18-4	Tetrachloroethene	619	40.4	mg/kg
79-01-6	Trichloroethene	9.24	4.04	mg/kg

WD-8 @ 5'

Collect Date 12/14/2015 10:40 **GCAL ID** 21512164804
Receive Date 12/16/2015 10:20 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	11.1	0.948	mg/kg
156-59-2	cis-1,2-Dichloroethene	11.1	0.474	mg/kg
127-18-4	Tetrachloroethene	52.3	4.74	mg/kg

Summary of Compounds Detected

WD-8 @ 5'

Collect Date 12/14/2015 10:40 **GCAL ID** 21512164804
Receive Date 12/16/2015 10:20 **Matrix** Solid

EPA 8260B (Continued) *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
79-01-6	Trichloroethene	2.29	0.474	mg/kg

WD-11 @ 10'

Collect Date 12/14/2015 10:58 **GCAL ID** 21512164805
Receive Date 12/16/2015 10:20 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	1.20	0.829	mg/kg
156-59-2	cis-1,2-Dichloroethene	1.20	0.414	mg/kg
127-18-4	Tetrachloroethene	56.2	4.15	mg/kg
79-01-6	Trichloroethene	1.08	0.414	mg/kg

ADD-1 @ 6'

Collect Date 12/14/2015 11:37 **GCAL ID** 21512164806
Receive Date 12/16/2015 10:20 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	11.4	0.778	mg/kg
156-59-2	cis-1,2-Dichloroethene	11.4	0.389	mg/kg
127-18-4	Tetrachloroethene	46.1	3.89	mg/kg
79-01-6	Trichloroethene	3.74	0.389	mg/kg

ADD-1 @ 10'

Collect Date 12/14/2015 11:37 **GCAL ID** 21512164807
Receive Date 12/16/2015 10:20 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	5.53	0.785	mg/kg
156-59-2	cis-1,2-Dichloroethene	5.21	0.392	mg/kg
127-18-4	Tetrachloroethene	31.7	3.92	mg/kg
79-01-6	Trichloroethene	3.73	0.392	mg/kg

Summary of Compounds Detected

ADD-2 @ 5'

Collect Date 12/14/2015 11:50 **GCAL ID** 21512164808
Receive Date 12/16/2015 10:20 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	24.5	8.51	mg/kg
156-59-2	cis-1,2-Dichloroethene	24.5	4.26	mg/kg
127-18-4	Tetrachloroethene	455	42.5	mg/kg
79-01-6	Trichloroethene	37.4	4.26	mg/kg

ADD-2 @ 10'

Collect Date 12/14/2015 11:50 **GCAL ID** 21512164809
Receive Date 12/16/2015 10:20 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	22.8	20.9	mg/kg
156-59-2	cis-1,2-Dichloroethene	22.8	10.5	mg/kg
127-18-4	Tetrachloroethene	1830	105	mg/kg
79-01-6	Trichloroethene	61.6	10.5	mg/kg

Sample Results

PD-2 @ 10'	**Collect Date**	12/14/2015 10:01	**GCAL ID**	21512164801
	Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50	12/23/2015 15:00	LBH	575373

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.183	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.183	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.183	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.183	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.183	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.183	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.183	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.183	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.183	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.183	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.183	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.183	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.183	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.183	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**0.366**	**0.365**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.183	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.183	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.183	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.183	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.183	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.183	mg/kg
78-93-3	2-Butanone	ND	0.183	mg/kg
95-49-8	2-Chlorotoluene	ND	0.183	mg/kg
591-78-6	2-Hexanone	ND	0.183	mg/kg
106-43-4	4-Chlorotoluene	ND	0.183	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.183	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.183	mg/kg
67-64-1	Acetone	ND	0.913	mg/kg
71-43-2	Benzene	ND	0.183	mg/kg
108-86-1	Bromobenzene	ND	0.183	mg/kg
74-97-5	Bromochloromethane	ND	0.183	mg/kg
75-27-4	Bromodichloromethane	ND	0.183	mg/kg
75-25-2	Bromoform	ND	0.183	mg/kg
74-83-9	Bromomethane	ND	0.183	mg/kg
75-15-0	Carbon disulfide	ND	0.183	mg/kg
56-23-5	Carbon tetrachloride	ND	0.183	mg/kg
108-90-7	Chlorobenzene	ND	0.183	mg/kg
75-00-3	Chloroethane	ND	0.183	mg/kg
67-66-3	Chloroform	ND	0.183	mg/kg
74-87-3	Chloromethane	ND	0.183	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**0.366**	**0.183**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.183	mg/kg
124-48-1	Dibromochloromethane	ND	0.183	mg/kg
74-95-3	Dibromomethane	ND	0.183	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.183	mg/kg
100-41-4	Ethylbenzene	ND	0.183	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.183	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.183	mg/kg

Sample Results

PD-2 @ 10'

Collect Date	12/14/2015 10:01	**GCAL ID**	21512164801
Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B (Continued)

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50	12/23/2015 15:00	LBH	575373

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.365	mg/kg
74-88-4	Methyl iodide	ND	0.183	mg/kg
75-09-2	Methylene chloride	ND	0.365	mg/kg
91-20-3	Naphthalene	ND	0.183	mg/kg
104-51-8	n-Butylbenzene	ND	0.183	mg/kg
103-65-1	n-Propylbenzene	ND	0.183	mg/kg
95-47-6	o-Xylene	ND	0.183	mg/kg
135-98-8	sec-Butylbenzene	ND	0.183	mg/kg
100-42-5	Styrene	ND	0.183	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.183	mg/kg
98-06-6	tert-Butylbenzene	ND	0.183	mg/kg
127-18-4	**Tetrachloroethene**	**4.76**	**0.183**	**mg/kg**
108-88-3	Toluene	ND	0.183	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.183	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.183	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.183	mg/kg
79-01-6	**Trichloroethene**	**0.259**	**0.183**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.183	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.183	mg/kg
75-01-4	Vinyl chloride	ND	0.183	mg/kg
1330-20-7	Xylene (total)	ND	0.548	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1.63	1.64	ug/Kg	101	62 - 127
1868-53-7	Dibromofluoromethane	1.63	1.54	ug/Kg	94	65 - 130
2037-26-5	Toluene d8	1.63	1.64	ug/Kg	101	71 - 132
17060-07-0	1,2-Dichloroethane-d4	1.63	1.68	ug/Kg	103	62 - 125

WD-2 @ 10'

Collect Date	12/14/2015 10:27	**GCAL ID**	21512164802
Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	12/23/2015 16:09	LBH	575373

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.380	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.380	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.380	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.380	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.380	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.380	mg/kg

Sample Results

WD-2 @ 10'	**Collect Date**	12/14/2015 10:27	**GCAL ID**	21512164802
	Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B (Continued)

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	12/23/2015 16:09	LBH	575373

CAS#	Parameter	Result	LOQ	Units
563-58-6	1,1-Dichloropropene	ND	0.380	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.380	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.380	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.380	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.380	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.380	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.380	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.380	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.761	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.380	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.380	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.380	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.380	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.380	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.380	mg/kg
78-93-3	2-Butanone	ND	0.380	mg/kg
95-49-8	2-Chlorotoluene	ND	0.380	mg/kg
591-78-6	2-Hexanone	ND	0.380	mg/kg
106-43-4	4-Chlorotoluene	ND	0.380	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.380	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.380	mg/kg
67-64-1	Acetone	ND	1.90	mg/kg
71-43-2	Benzene	ND	0.380	mg/kg
108-86-1	Bromobenzene	ND	0.380	mg/kg
74-97-5	Bromochloromethane	ND	0.380	mg/kg
75-27-4	Bromodichloromethane	ND	0.380	mg/kg
75-25-2	Bromoform	ND	0.380	mg/kg
74-83-9	Bromomethane	ND	0.380	mg/kg
75-15-0	Carbon disulfide	ND	0.380	mg/kg
56-23-5	Carbon tetrachloride	ND	0.380	mg/kg
108-90-7	Chlorobenzene	ND	0.380	mg/kg
75-00-3	Chloroethane	ND	0.380	mg/kg
67-66-3	Chloroform	ND	0.380	mg/kg
74-87-3	Chloromethane	ND	0.380	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**0.737**	**0.380**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.380	mg/kg
124-48-1	Dibromochloromethane	ND	0.380	mg/kg
74-95-3	Dibromomethane	ND	0.380	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.380	mg/kg
100-41-4	Ethylbenzene	ND	0.380	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.380	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.380	mg/kg
136777-61-2	m,p-Xylene	ND	0.761	mg/kg
74-88-4	Methyl iodide	ND	0.380	mg/kg
75-09-2	Methylene chloride	ND	0.761	mg/kg
91-20-3	Naphthalene	ND	0.380	mg/kg
104-51-8	n-Butylbenzene	ND	0.380	mg/kg
103-65-1	n-Propylbenzene	ND	0.380	mg/kg

Sample Results

WD-2 @ 10'	**Collect Date**	12/14/2015 10:27	**GCAL ID**	21512164802
	Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B (Continued) *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	12/23/2015 16:09	LBH	575373

CAS#	Parameter	Result	LOQ	Units
95-47-6	o-Xylene	ND	0.380	mg/kg
135-98-8	sec-Butylbenzene	ND	0.380	mg/kg
100-42-5	Styrene	ND	0.380	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.380	mg/kg
98-06-6	tert-Butylbenzene	ND	0.380	mg/kg
108-88-3	Toluene	ND	0.380	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.380	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.380	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.380	mg/kg
79-01-6	**Trichloroethene**	**0.589**	**0.380**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.380	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.380	mg/kg
75-01-4	Vinyl chloride	ND	0.380	mg/kg
1330-20-7	Xylene (total)	ND	1.14	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	3.37	3.44	ug/Kg	102	62 - 127
1868-53-7	Dibromofluoromethane	3.37	3.3	ug/Kg	98	65 - 130
2037-26-5	Toluene d8	3.37	3.33	ug/Kg	99	71 - 132
17060-07-0	1,2-Dichloroethane-d4	3.37	3.48	ug/Kg	103	62 - 125

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	12/23/2015 15:46	LBH	575373

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**33.9**	**3.80**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	33.70	32.7	ug/Kg	97	62 - 127
1868-53-7	Dibromofluoromethane	33.70	32.3	ug/Kg	96	65 - 130
2037-26-5	Toluene d8	33.70	34.4	ug/Kg	102	71 - 132
17060-07-0	1,2-Dichloroethane-d4	33.70	32.4	ug/Kg	96	62 - 125

Sample Results

WD-4 @ 10'	**Collect Date**	12/14/2015 11:20	**GCAL ID**	21512164803
	Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	12/23/2015 17:18	LBH	575373

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.04	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	4.04	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.04	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	4.04	mg/kg
75-34-3	1,1-Dichloroethane	ND	4.04	mg/kg
75-35-4	1,1-Dichloroethene	ND	4.04	mg/kg
563-58-6	1,1-Dichloropropene	ND	4.04	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	4.04	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	4.04	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	4.04	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.04	mg/kg
106-93-4	1,2-Dibromoethane	ND	4.04	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	4.04	mg/kg
107-06-2	1,2-Dichloroethane	ND	4.04	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	8.08	mg/kg
78-87-5	1,2-Dichloropropane	ND	4.04	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	4.04	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	4.04	mg/kg
142-28-9	1,3-Dichloropropane	ND	4.04	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	4.04	mg/kg
594-20-7	2,2-Dichloropropane	ND	4.04	mg/kg
78-93-3	2-Butanone	ND	4.04	mg/kg
95-49-8	2-Chlorotoluene	ND	4.04	mg/kg
591-78-6	2-Hexanone	ND	4.04	mg/kg
106-43-4	4-Chlorotoluene	ND	4.04	mg/kg
99-87-6	4-Isopropyltoluene	ND	4.04	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	4.04	mg/kg
67-64-1	Acetone	ND	20.2	mg/kg
71-43-2	Benzene	ND	4.04	mg/kg
108-86-1	Bromobenzene	ND	4.04	mg/kg
74-97-5	Bromochloromethane	ND	4.04	mg/kg
75-27-4	Bromodichloromethane	ND	4.04	mg/kg
75-25-2	Bromoform	ND	4.04	mg/kg
74-83-9	Bromomethane	ND	4.04	mg/kg
75-15-0	Carbon disulfide	ND	4.04	mg/kg
56-23-5	Carbon tetrachloride	ND	4.04	mg/kg
108-90-7	Chlorobenzene	ND	4.04	mg/kg
75-00-3	Chloroethane	ND	4.04	mg/kg
67-66-3	Chloroform	ND	4.04	mg/kg
74-87-3	Chloromethane	ND	4.04	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**6.51**	**4.04**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	4.04	mg/kg
124-48-1	Dibromochloromethane	ND	4.04	mg/kg
74-95-3	Dibromomethane	ND	4.04	mg/kg
75-71-8	Dichlorodifluoromethane	ND	4.04	mg/kg
100-41-4	Ethylbenzene	ND	4.04	mg/kg
87-68-3	Hexachlorobutadiene	ND	4.04	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	4.04	mg/kg

Sample Results

WD-4 @ 10'	**Collect Date**	12/14/2015 11:20	**GCAL ID**	21512164803
	Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B (Continued) *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	12/23/2015 17:18	LBH	575373

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	8.08	mg/kg
74-88-4	Methyl iodide	ND	4.04	mg/kg
75-09-2	Methylene chloride	ND	8.08	mg/kg
91-20-3	Naphthalene	ND	4.04	mg/kg
104-51-8	n-Butylbenzene	ND	4.04	mg/kg
103-65-1	n-Propylbenzene	ND	4.04	mg/kg
95-47-6	o-Xylene	ND	4.04	mg/kg
135-98-8	sec-Butylbenzene	ND	4.04	mg/kg
100-42-5	Styrene	ND	4.04	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	4.04	mg/kg
98-06-6	tert-Butylbenzene	ND	4.04	mg/kg
108-88-3	Toluene	ND	4.04	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	4.04	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	4.04	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	4.04	mg/kg
79-01-6	**Trichloroethene**	**9.24**	**4.04**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	4.04	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	4.04	mg/kg
75-01-4	Vinyl chloride	ND	4.04	mg/kg
1330-20-7	Xylene (total)	ND	12.1	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	33.20	33.7	ug/Kg	102	62 - 127
1868-53-7	Dibromofluoromethane	33.20	32.6	ug/Kg	98	65 - 130
2037-26-5	Toluene d8	33.20	33.3	ug/Kg	100	71 - 132
17060-07-0	1,2-Dichloroethane-d4	33.20	32.3	ug/Kg	97	62 - 125

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	10000	12/23/2015 16:55	JCK	575373

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**619**	**40.4**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	332	324	ug/Kg	98	62 - 127
1868-53-7	Dibromofluoromethane	332	320	ug/Kg	96	65 - 130
2037-26-5	Toluene d8	332	342	ug/Kg	103	71 - 132
17060-07-0	1,2-Dichloroethane-d4	332	323	ug/Kg	97	62 - 125

Sample Results

WD-8 @ 5'	**Collect Date**	12/14/2015 10:40	**GCAL ID**	21512164804
	Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	12/23/2015 18:27	LBH	575373

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.474	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.474	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.474	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.474	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.474	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.474	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.474	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.474	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.474	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.474	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.474	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.474	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.474	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.474	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**11.1**	**0.948**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.474	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.474	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.474	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.474	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.474	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.474	mg/kg
78-93-3	2-Butanone	ND	0.474	mg/kg
95-49-8	2-Chlorotoluene	ND	0.474	mg/kg
591-78-6	2-Hexanone	ND	0.474	mg/kg
106-43-4	4-Chlorotoluene	ND	0.474	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.474	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.474	mg/kg
67-64-1	Acetone	ND	2.37	mg/kg
71-43-2	Benzene	ND	0.474	mg/kg
108-86-1	Bromobenzene	ND	0.474	mg/kg
74-97-5	Bromochloromethane	ND	0.474	mg/kg
75-27-4	Bromodichloromethane	ND	0.474	mg/kg
75-25-2	Bromoform	ND	0.474	mg/kg
74-83-9	Bromomethane	ND	0.474	mg/kg
75-15-0	Carbon disulfide	ND	0.474	mg/kg
56-23-5	Carbon tetrachloride	ND	0.474	mg/kg
108-90-7	Chlorobenzene	ND	0.474	mg/kg
75-00-3	Chloroethane	ND	0.474	mg/kg
67-66-3	Chloroform	ND	0.474	mg/kg
74-87-3	Chloromethane	ND	0.474	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**11.1**	**0.474**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.474	mg/kg
124-48-1	Dibromochloromethane	ND	0.474	mg/kg
74-95-3	Dibromomethane	ND	0.474	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.474	mg/kg
100-41-4	Ethylbenzene	ND	0.474	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.474	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.474	mg/kg

Sample Results

WD-8 @ 5'	**Collect Date**	12/14/2015 10:40	**GCAL ID**	21512164804
	Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B (Continued) *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	12/23/2015 18:27	LBH	575373

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.948	mg/kg
74-88-4	Methyl iodide	ND	0.474	mg/kg
75-09-2	Methylene chloride	ND	0.948	mg/kg
91-20-3	Naphthalene	ND	0.474	mg/kg
104-51-8	n-Butylbenzene	ND	0.474	mg/kg
103-65-1	n-Propylbenzene	ND	0.474	mg/kg
95-47-6	o-Xylene	ND	0.474	mg/kg
135-98-8	sec-Butylbenzene	ND	0.474	mg/kg
100-42-5	Styrene	ND	0.474	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.474	mg/kg
98-06-6	tert-Butylbenzene	ND	0.474	mg/kg
108-88-3	Toluene	ND	0.474	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.474	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.474	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.474	mg/kg
79-01-6	**Trichloroethene**	**2.29**	**0.474**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.474	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.474	mg/kg
75-01-4	Vinyl chloride	ND	0.474	mg/kg
1330-20-7	Xylene (total)	ND	1.42	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	3.72	3.8	ug/Kg	102	62 - 127
1868-53-7	Dibromofluoromethane	3.72	3.61	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	3.72	3.67	ug/Kg	99	71 - 132
17060-07-0	1,2-Dichloroethane-d4	3.72	3.7	ug/Kg	99	62 - 125

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	12/23/2015 18:04	LBH	575373

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**52.3**	**4.74**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	37.20	36.5	ug/Kg	98	62 - 127
1868-53-7	Dibromofluoromethane	37.20	36.2	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	37.20	38.3	ug/Kg	103	71 - 132
17060-07-0	1,2-Dichloroethane-d4	37.20	36.7	ug/Kg	99	62 - 125

Sample Results

WD-11 @ 10'	**Collect Date**	12/14/2015 10:58	**GCAL ID**	21512164805
	Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	12/24/2015 04:16	LBH	575413

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.414	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.414	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.414	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.414	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.414	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.414	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.414	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.414	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.414	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.414	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.414	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.414	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.414	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.414	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**1.20**	**0.829**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.414	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.414	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.414	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.414	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.414	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.414	mg/kg
78-93-3	2-Butanone	ND	0.414	mg/kg
95-49-8	2-Chlorotoluene	ND	0.414	mg/kg
591-78-6	2-Hexanone	ND	0.414	mg/kg
106-43-4	4-Chlorotoluene	ND	0.414	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.414	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.414	mg/kg
67-64-1	Acetone	ND	2.07	mg/kg
71-43-2	Benzene	ND	0.414	mg/kg
108-86-1	Bromobenzene	ND	0.414	mg/kg
74-97-5	Bromochloromethane	ND	0.414	mg/kg
75-27-4	Bromodichloromethane	ND	0.414	mg/kg
75-25-2	Bromoform	ND	0.414	mg/kg
74-83-9	Bromomethane	ND	0.414	mg/kg
75-15-0	Carbon disulfide	ND	0.414	mg/kg
56-23-5	Carbon tetrachloride	ND	0.414	mg/kg
108-90-7	Chlorobenzene	ND	0.414	mg/kg
75-00-3	Chloroethane	ND	0.414	mg/kg
67-66-3	Chloroform	ND	0.414	mg/kg
74-87-3	Chloromethane	ND	0.414	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**1.20**	**0.414**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.414	mg/kg
124-48-1	Dibromochloromethane	ND	0.414	mg/kg
74-95-3	Dibromomethane	ND	0.414	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.414	mg/kg
100-41-4	Ethylbenzene	ND	0.414	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.414	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.414	mg/kg

Sample Results

WD-11 @ 10'	**Collect Date**	12/14/2015 10:58	**GCAL ID**	21512164805
	Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B (Continued) *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	12/24/2015 04:16	LBH	575413

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.829	mg/kg
74-88-4	Methyl iodide	ND	0.414	mg/kg
75-09-2	Methylene chloride	ND	0.829	mg/kg
91-20-3	Naphthalene	ND	0.414	mg/kg
104-51-8	n-Butylbenzene	ND	0.414	mg/kg
103-65-1	n-Propylbenzene	ND	0.414	mg/kg
95-47-6	o-Xylene	ND	0.414	mg/kg
135-98-8	sec-Butylbenzene	ND	0.414	mg/kg
100-42-5	Styrene	ND	0.414	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.414	mg/kg
98-06-6	tert-Butylbenzene	ND	0.414	mg/kg
108-88-3	Toluene	ND	0.414	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.414	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.414	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.414	mg/kg
79-01-6	**Trichloroethene**	**1.08**	**0.414**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.414	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.414	mg/kg
75-01-4	Vinyl chloride	ND	0.414	mg/kg
1330-20-7	Xylene (total)	ND	1.24	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	3.56	3.86	ug/Kg	109	62 - 127
1868-53-7	Dibromofluoromethane	3.56	3.46	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	3.56	3.47	ug/Kg	98	71 - 132
17060-07-0	1,2-Dichloroethane-d4	3.56	3.54	ug/Kg	100	62 - 125

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	12/24/2015 00:04	LBH	575413

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**56.2**	**4.15**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	35.60	36.8	ug/Kg	103	62 - 127
1868-53-7	Dibromofluoromethane	35.60	33.4	ug/Kg	94	65 - 130
2037-26-5	Toluene d8	35.60	35.8	ug/Kg	101	71 - 132
17060-07-0	1,2-Dichloroethane-d4	35.60	33.9	ug/Kg	95	62 - 125

Sample Results

ADD-1 @ 6'	**Collect Date**	12/14/2015 11:37	**GCAL ID**	21512164806
	Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	12/24/2015 04:39	LBH	575413

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.389	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.389	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.389	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.389	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.389	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.389	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.389	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.389	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.389	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.389	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.389	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.389	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.389	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.389	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**11.4**	**0.778**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.389	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.389	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.389	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.389	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.389	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.389	mg/kg
78-93-3	2-Butanone	ND	0.389	mg/kg
95-49-8	2-Chlorotoluene	ND	0.389	mg/kg
591-78-6	2-Hexanone	ND	0.389	mg/kg
106-43-4	4-Chlorotoluene	ND	0.389	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.389	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.389	mg/kg
67-64-1	Acetone	ND	1.95	mg/kg
71-43-2	Benzene	ND	0.389	mg/kg
108-86-1	Bromobenzene	ND	0.389	mg/kg
74-97-5	Bromochloromethane	ND	0.389	mg/kg
75-27-4	Bromodichloromethane	ND	0.389	mg/kg
75-25-2	Bromoform	ND	0.389	mg/kg
74-83-9	Bromomethane	ND	0.389	mg/kg
75-15-0	Carbon disulfide	ND	0.389	mg/kg
56-23-5	Carbon tetrachloride	ND	0.389	mg/kg
108-90-7	Chlorobenzene	ND	0.389	mg/kg
75-00-3	Chloroethane	ND	0.389	mg/kg
67-66-3	Chloroform	ND	0.389	mg/kg
74-87-3	Chloromethane	ND	0.389	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**11.4**	**0.389**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.389	mg/kg
124-48-1	Dibromochloromethane	ND	0.389	mg/kg
74-95-3	Dibromomethane	ND	0.389	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.389	mg/kg
100-41-4	Ethylbenzene	ND	0.389	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.389	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.389	mg/kg

Sample Results

ADD-1 @ 6'	**Collect Date**	12/14/2015 11:37	**GCAL ID**	21512164806
	Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B (Continued) *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	12/24/2015 04:39	LBH	575413

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.778	mg/kg
74-88-4	Methyl iodide	ND	0.389	mg/kg
75-09-2	Methylene chloride	ND	0.778	mg/kg
91-20-3	Naphthalene	ND	0.389	mg/kg
104-51-8	n-Butylbenzene	ND	0.389	mg/kg
103-65-1	n-Propylbenzene	ND	0.389	mg/kg
95-47-6	o-Xylene	ND	0.389	mg/kg
135-98-8	sec-Butylbenzene	ND	0.389	mg/kg
100-42-5	Styrene	ND	0.389	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.389	mg/kg
98-06-6	tert-Butylbenzene	ND	0.389	mg/kg
108-88-3	Toluene	ND	0.389	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.389	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.389	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.389	mg/kg
79-01-6	**Trichloroethene**	**3.74**	**0.389**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.389	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.389	mg/kg
75-01-4	Vinyl chloride	ND	0.389	mg/kg
1330-20-7	Xylene (total)	ND	1.17	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	3.35	3.38	ug/Kg	101	62 - 127
1868-53-7	Dibromofluoromethane	3.35	3.22	ug/Kg	96	65 - 130
2037-26-5	Toluene d8	3.35	3.43	ug/Kg	102	71 - 132
17060-07-0	1,2-Dichloroethane-d4	3.35	3.37	ug/Kg	101	62 - 125

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	12/24/2015 00:26	LBH	575413

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**46.1**	**3.89**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	33.50	33.4	ug/Kg	100	62 - 127
1868-53-7	Dibromofluoromethane	33.50	32	ug/Kg	96	65 - 130
2037-26-5	Toluene d8	33.50	34.7	ug/Kg	104	71 - 132
17060-07-0	1,2-Dichloroethane-d4	33.50	31.9	ug/Kg	95	62 - 125

Sample Results

ADD-1 @ 10'	**Collect Date**	12/14/2015 11:37	**GCAL ID**	21512164807
	Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	12/24/2015 05:01	LBH	575413

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.392	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.392	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.392	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.392	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.392	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.392	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.392	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.392	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.392	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.392	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.392	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.392	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.392	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.392	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**5.53**	**0.785**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.392	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.392	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.392	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.392	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.392	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.392	mg/kg
78-93-3	2-Butanone	ND	0.392	mg/kg
95-49-8	2-Chlorotoluene	ND	0.392	mg/kg
591-78-6	2-Hexanone	ND	0.392	mg/kg
106-43-4	4-Chlorotoluene	ND	0.392	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.392	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.392	mg/kg
67-64-1	Acetone	ND	1.96	mg/kg
71-43-2	Benzene	ND	0.392	mg/kg
108-86-1	Bromobenzene	ND	0.392	mg/kg
74-97-5	Bromochloromethane	ND	0.392	mg/kg
75-27-4	Bromodichloromethane	ND	0.392	mg/kg
75-25-2	Bromoform	ND	0.392	mg/kg
74-83-9	Bromomethane	ND	0.392	mg/kg
75-15-0	Carbon disulfide	ND	0.392	mg/kg
56-23-5	Carbon tetrachloride	ND	0.392	mg/kg
108-90-7	Chlorobenzene	ND	0.392	mg/kg
75-00-3	Chloroethane	ND	0.392	mg/kg
67-66-3	Chloroform	ND	0.392	mg/kg
74-87-3	Chloromethane	ND	0.392	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**5.21**	**0.392**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.392	mg/kg
124-48-1	Dibromochloromethane	ND	0.392	mg/kg
74-95-3	Dibromomethane	ND	0.392	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.392	mg/kg
100-41-4	Ethylbenzene	ND	0.392	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.392	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.392	mg/kg

Sample Results

ADD-1 @ 10'	**Collect Date**	12/14/2015 11:37	**GCAL ID**	21512164807
	Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B (Continued) *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	12/24/2015 05:01	LBH	575413

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.785	mg/kg
74-88-4	Methyl iodide	ND	0.392	mg/kg
75-09-2	Methylene chloride	ND	0.785	mg/kg
91-20-3	Naphthalene	ND	0.392	mg/kg
104-51-8	n-Butylbenzene	ND	0.392	mg/kg
103-65-1	n-Propylbenzene	ND	0.392	mg/kg
95-47-6	o-Xylene	ND	0.392	mg/kg
135-98-8	sec-Butylbenzene	ND	0.392	mg/kg
100-42-5	Styrene	ND	0.392	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.392	mg/kg
98-06-6	tert-Butylbenzene	ND	0.392	mg/kg
108-88-3	Toluene	ND	0.392	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.392	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.392	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.392	mg/kg
79-01-6	**Trichloroethene**	**3.73**	**0.392**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.392	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.392	mg/kg
75-01-4	Vinyl chloride	ND	0.392	mg/kg
1330-20-7	Xylene (total)	ND	1.18	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	3.36	3.51	ug/Kg	104	62 - 127
1868-53-7	Dibromofluoromethane	3.36	3.25	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	3.36	3.38	ug/Kg	100	71 - 132
17060-07-0	1,2-Dichloroethane-d4	3.36	3.31	ug/Kg	98	62 - 125

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	12/24/2015 00:49	LBH	575413

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**31.7**	**3.92**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	33.70	33.2	ug/Kg	99	62 - 127
1868-53-7	Dibromofluoromethane	33.70	32.7	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	33.70	34.3	ug/Kg	102	71 - 132
17060-07-0	1,2-Dichloroethane-d4	33.70	31.4	ug/Kg	93	62 - 125

Sample Results

ADD-2 @ 5'

Collect Date	12/14/2015 11:50	**GCAL ID**	21512164808
Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	12/24/2015 05:48	LBH	575413

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.26	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	4.26	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.26	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	4.26	mg/kg
75-34-3	1,1-Dichloroethane	ND	4.26	mg/kg
75-35-4	1,1-Dichloroethene	ND	4.26	mg/kg
563-58-6	1,1-Dichloropropene	ND	4.26	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	4.26	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	4.26	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	4.26	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.26	mg/kg
106-93-4	1,2-Dibromoethane	ND	4.26	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	4.26	mg/kg
107-06-2	1,2-Dichloroethane	ND	4.26	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**24.5**	**8.51**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	4.26	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	4.26	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	4.26	mg/kg
142-28-9	1,3-Dichloropropane	ND	4.26	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	4.26	mg/kg
594-20-7	2,2-Dichloropropane	ND	4.26	mg/kg
78-93-3	2-Butanone	ND	4.26	mg/kg
95-49-8	2-Chlorotoluene	ND	4.26	mg/kg
591-78-6	2-Hexanone	ND	4.26	mg/kg
106-43-4	4-Chlorotoluene	ND	4.26	mg/kg
99-87-6	4-Isopropyltoluene	ND	4.26	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	4.26	mg/kg
67-64-1	Acetone	ND	21.3	mg/kg
71-43-2	Benzene	ND	4.26	mg/kg
108-86-1	Bromobenzene	ND	4.26	mg/kg
74-97-5	Bromochloromethane	ND	4.26	mg/kg
75-27-4	Bromodichloromethane	ND	4.26	mg/kg
75-25-2	Bromoform	ND	4.26	mg/kg
74-83-9	Bromomethane	ND	4.26	mg/kg
75-15-0	Carbon disulfide	ND	4.26	mg/kg
56-23-5	Carbon tetrachloride	ND	4.26	mg/kg
108-90-7	Chlorobenzene	ND	4.26	mg/kg
75-00-3	Chloroethane	ND	4.26	mg/kg
67-66-3	Chloroform	ND	4.26	mg/kg
74-87-3	Chloromethane	ND	4.26	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**24.5**	**4.26**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	4.26	mg/kg
124-48-1	Dibromochloromethane	ND	4.26	mg/kg
74-95-3	Dibromomethane	ND	4.26	mg/kg
75-71-8	Dichlorodifluoromethane	ND	4.26	mg/kg
100-41-4	Ethylbenzene	ND	4.26	mg/kg
87-68-3	Hexachlorobutadiene	ND	4.26	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	4.26	mg/kg

Sample Results

ADD-2 @ 5'	**Collect Date**	12/14/2015 11:50	**GCAL ID**	21512164808
	Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B (Continued) *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	12/24/2015 05:48	LBH	575413

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	8.51	mg/kg
74-88-4	Methyl iodide	ND	4.26	mg/kg
75-09-2	Methylene chloride	ND	8.51	mg/kg
91-20-3	Naphthalene	ND	4.26	mg/kg
104-51-8	n-Butylbenzene	ND	4.26	mg/kg
103-65-1	n-Propylbenzene	ND	4.26	mg/kg
95-47-6	o-Xylene	ND	4.26	mg/kg
135-98-8	sec-Butylbenzene	ND	4.26	mg/kg
100-42-5	Styrene	ND	4.26	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	4.26	mg/kg
98-06-6	tert-Butylbenzene	ND	4.26	mg/kg
108-88-3	Toluene	ND	4.26	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	4.26	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	4.26	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	4.26	mg/kg
79-01-6	**Trichloroethene**	**37.4**	**4.26**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	4.26	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	4.26	mg/kg
75-01-4	Vinyl chloride	ND	4.26	mg/kg
1330-20-7	Xylene (total)	ND	12.8	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	34	34.7	ug/Kg	102	62 - 127
1868-53-7	Dibromofluoromethane	34	33.5	ug/Kg	98	65 - 130
2037-26-5	Toluene d8	34	35.4	ug/Kg	104	71 - 132
17060-07-0	1,2-Dichloroethane-d4	34	32.8	ug/Kg	96	62 - 125

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	10000	12/24/2015 01:12	LBH	575413

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**455**	**42.5**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	340	343	ug/Kg	101	62 - 127
1868-53-7	Dibromofluoromethane	340	325	ug/Kg	96	65 - 130
2037-26-5	Toluene d8	340	348	ug/Kg	102	71 - 132
17060-07-0	1,2-Dichloroethane-d4	340	320	ug/Kg	94	62 - 125

Sample Results

ADD-2 @ 10'	**Collect Date**	12/14/2015 11:50	**GCAL ID**	21512164809
	Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2500	12/24/2015 06:11	LBH	575413

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	10.5	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	10.5	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	10.5	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	10.5	mg/kg
75-34-3	1,1-Dichloroethane	ND	10.5	mg/kg
75-35-4	1,1-Dichloroethene	ND	10.5	mg/kg
563-58-6	1,1-Dichloropropene	ND	10.5	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	10.5	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	10.5	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	10.5	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	10.5	mg/kg
106-93-4	1,2-Dibromoethane	ND	10.5	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	10.5	mg/kg
107-06-2	1,2-Dichloroethane	ND	10.5	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**22.8**	**20.9**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	10.5	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	10.5	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	10.5	mg/kg
142-28-9	1,3-Dichloropropane	ND	10.5	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	10.5	mg/kg
594-20-7	2,2-Dichloropropane	ND	10.5	mg/kg
78-93-3	2-Butanone	ND	10.5	mg/kg
95-49-8	2-Chlorotoluene	ND	10.5	mg/kg
591-78-6	2-Hexanone	ND	10.5	mg/kg
106-43-4	4-Chlorotoluene	ND	10.5	mg/kg
99-87-6	4-Isopropyltoluene	ND	10.5	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	10.5	mg/kg
67-64-1	Acetone	ND	52.4	mg/kg
71-43-2	Benzene	ND	10.5	mg/kg
108-86-1	Bromobenzene	ND	10.5	mg/kg
74-97-5	Bromochloromethane	ND	10.5	mg/kg
75-27-4	Bromodichloromethane	ND	10.5	mg/kg
75-25-2	Bromoform	ND	10.5	mg/kg
74-83-9	Bromomethane	ND	10.5	mg/kg
75-15-0	Carbon disulfide	ND	10.5	mg/kg
56-23-5	Carbon tetrachloride	ND	10.5	mg/kg
108-90-7	Chlorobenzene	ND	10.5	mg/kg
75-00-3	Chloroethane	ND	10.5	mg/kg
67-66-3	Chloroform	ND	10.5	mg/kg
74-87-3	Chloromethane	ND	10.5	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**22.8**	**10.5**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	10.5	mg/kg
124-48-1	Dibromochloromethane	ND	10.5	mg/kg
74-95-3	Dibromomethane	ND	10.5	mg/kg
75-71-8	Dichlorodifluoromethane	ND	10.5	mg/kg
100-41-4	Ethylbenzene	ND	10.5	mg/kg
87-68-3	Hexachlorobutadiene	ND	10.5	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	10.5	mg/kg

Sample Results

ADD-2 @ 10'

Collect Date	12/14/2015 11:50	**GCAL ID**	21512164809
Receive Date	12/16/2015 10:20	**Matrix**	Solid

EPA 8260B (Continued)

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2500	12/24/2015 06:11	LBH	575413

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	20.9	mg/kg
74-88-4	Methyl iodide	ND	10.5	mg/kg
75-09-2	Methylene chloride	ND	20.9	mg/kg
91-20-3	Naphthalene	ND	10.5	mg/kg
104-51-8	n-Butylbenzene	ND	10.5	mg/kg
103-65-1	n-Propylbenzene	ND	10.5	mg/kg
95-47-6	o-Xylene	ND	10.5	mg/kg
135-98-8	sec-Butylbenzene	ND	10.5	mg/kg
100-42-5	Styrene	ND	10.5	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	10.5	mg/kg
98-06-6	tert-Butylbenzene	ND	10.5	mg/kg
108-88-3	Toluene	ND	10.5	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	10.5	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	10.5	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	10.5	mg/kg
79-01-6	**Trichloroethene**	**61.6**	**10.5**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	10.5	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	10.5	mg/kg
75-01-4	Vinyl chloride	ND	10.5	mg/kg
1330-20-7	Xylene (total)	ND	31.4	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	91.80	95.5	ug/Kg	104	62 - 127
1868-53-7	Dibromofluoromethane	91.80	89.7	ug/Kg	98	65 - 130
2037-26-5	Toluene d8	91.80	91.3	ug/Kg	99	71 - 132
17060-07-0	1,2-Dichloroethane-d4	91.80	89.9	ug/Kg	98	62 - 125

EPA 8260B

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	25000	12/24/2015 01:35	LBH	575413

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**1830**	**105**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	918	928	ug/Kg	101	62 - 127
1868-53-7	Dibromofluoromethane	918	868	ug/Kg	95	65 - 130
2037-26-5	Toluene d8	918	951	ug/Kg	104	71 - 132
17060-07-0	1,2-Dichloroethane-d4	918	870	ug/Kg	95	62 - 125

Sample Results

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Collect Date	12/14/2015 14:30	**GCAL ID**	21512164810
Receive Date	12/16/2015 10:20	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	12/18/2015 14:04	MMM	574942

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	ND	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	ND	5.00	ug/L
75-34-3	1,1-Dichloroethane	ND	5.00	ug/L
75-35-4	1,1-Dichloroethene	ND	5.00	ug/L
563-58-6	1,1-Dichloropropene	ND	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	ND	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	ND	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	ND	5.00	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.00	ug/L
106-93-4	1,2-Dibromoethane	ND	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	ND	5.00	ug/L
107-06-2	1,2-Dichloroethane	ND	5.00	ug/L
540-59-0	1,2-Dichloroethene(Total)	ND	10.0	ug/L
78-87-5	1,2-Dichloropropane	ND	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	ND	5.00	ug/L
541-73-1	1,3-Dichlorobenzene	ND	5.00	ug/L
142-28-9	1,3-Dichloropropane	ND	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	ND	5.00	ug/L
594-20-7	2,2-Dichloropropane	ND	5.00	ug/L
78-93-3	2-Butanone	ND	5.00	ug/L
95-49-8	2-Chlorotoluene	ND	5.00	ug/L
591-78-6	2-Hexanone	ND	5.00	ug/L
106-43-4	4-Chlorotoluene	ND	5.00	ug/L
99-87-6	4-Isopropyltoluene	ND	5.00	ug/L
108-10-1	4-Methyl-2-pentanone	ND	5.00	ug/L
67-64-1	Acetone	ND	5.00	ug/L
71-43-2	Benzene	ND	5.00	ug/L
108-86-1	Bromobenzene	ND	5.00	ug/L
74-97-5	Bromochloromethane	ND	5.00	ug/L
75-27-4	Bromodichloromethane	ND	5.00	ug/L
75-25-2	Bromoform	ND	5.00	ug/L
74-83-9	Bromomethane	ND	5.00	ug/L
75-15-0	Carbon disulfide	ND	5.00	ug/L
56-23-5	Carbon tetrachloride	ND	5.00	ug/L
108-90-7	Chlorobenzene	ND	5.00	ug/L
75-00-3	Chloroethane	ND	5.00	ug/L
67-66-3	Chloroform	ND	5.00	ug/L
74-87-3	Chloromethane	ND	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	ND	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	ND	5.00	ug/L
124-48-1	Dibromochloromethane	ND	5.00	ug/L
74-95-3	Dibromomethane	ND	5.00	ug/L
75-71-8	Dichlorodifluoromethane	ND	5.00	ug/L
100-41-4	Ethylbenzene	ND	5.00	ug/L
87-68-3	Hexachlorobutadiene	ND	5.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	ND	5.00	ug/L

Sample Results

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Collect Date	12/14/2015 14:30	**GCAL ID**	21512164810
Receive Date	12/16/2015 10:20	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	12/18/2015 14:04	MMM	574942

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	10.0	ug/L
74-88-4	Methyl iodide	ND	5.00	ug/L
75-09-2	Methylene chloride	ND	5.00	ug/L
91-20-3	Naphthalene	ND	5.00	ug/L
104-51-8	n-Butylbenzene	ND	5.00	ug/L
103-65-1	n-Propylbenzene	ND	5.00	ug/L
95-47-6	o-Xylene	ND	5.00	ug/L
135-98-8	sec-Butylbenzene	ND	5.00	ug/L
100-42-5	Styrene	ND	5.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	5.00	ug/L
98-06-6	tert-Butylbenzene	ND	5.00	ug/L
127-18-4	Tetrachloroethene	ND	5.00	ug/L
108-88-3	Toluene	ND	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	5.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	ND	5.00	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.00	ug/L
79-01-6	Trichloroethene	ND	5.00	ug/L
75-69-4	Trichlorofluoromethane	ND	5.00	ug/L
76-13-1	Trichlorotrifluoroethane	ND	5.00	ug/L
75-01-4	Vinyl chloride	ND	2.00	ug/L
1330-20-7	Xylene (total)	ND	15.0	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	46.5	ug/L	93	78 - 130
1868-53-7	Dibromofluoromethane	50	52.7	ug/L	105	77 - 127
2037-26-5	Toluene d8	50	52.2	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	52.7	ug/L	105	71 - 127

GC/MS Volatiles QC Summary

Analytical Batch 575373	Client ID	MB575373		LCS575373				LCSD575373				
	GCAL ID	1523069		1523070				1523071				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	12/23/2015 11:57		12/23/2015 09:14				12/23/2015 10:25				
	Matrix	Solid		Solid				Solid				
EPA 8260B		Units Result	mg/kg LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	630-20-6	ND	0.250	2.50	2.54	102	77 - 122	2.50	2.62	105	3	30
1,1,1-Trichloroethane	71-55-6	ND	0.250	2.50	2.60	104	70 - 130	2.50	2.69	108	3	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.250	2.50	2.37	95	66 - 129	2.50	2.41	96	2	30
1,1,2-Trichloroethane	79-00-5	ND	0.250	2.50	2.60	104	74 - 120	2.50	2.66	106	2	30
1,1-Dichloroethane	75-34-3	ND	0.250	2.50	2.75	110	71 - 126	2.50	2.79	112	1	30
1,1-Dichloroethene	75-35-4	ND	0.250	2.50	2.45	98	68 - 129	2.50	2.71	108	10	20
1,1-Dichloropropene	563-58-6	ND	0.250	2.50	2.41	96	70 - 138	2.50	2.49	100	3	30
1,2,3-Trichloropropane	96-18-4	ND	0.250	2.50	2.40	96	63 - 132	2.50	2.49	100	4	30
1,2,4-Trichlorobenzene	120-82-1	ND	0.250	2.50	2.31	92	64 - 135	2.50	2.43	97	5	30
1,2,4-Trimethylbenzene	95-63-6	ND	0.250	2.50	2.75	110	75 - 130	2.50	2.89	116	5	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.250	2.50	2.43	97	60 - 123	2.50	2.52	101	4	30
1,2-Dibromoethane	106-93-4	ND	0.250	2.50	2.84	114	74 - 122	2.50	2.90	116	2	30
1,2-Dichlorobenzene	95-50-1	ND	0.250	2.50	2.52	101	76 - 125	2.50	2.62	105	4	30
1,2-Dichloroethane	107-06-2	ND	0.250	2.50	2.42	97	68 - 126	2.50	2.44	98	1	30
1,2-Dichloroethene(Total)	540-59-0	ND	0.500	5.00	4.78	96	72 - 129	5.00	4.91	98	3	30
1,2-Dichloropropane	78-87-5	ND	0.250	2.50	2.78	111	72 - 129	2.50	2.85	114	2	30
1,3,5-Trimethylbenzene	108-67-8	ND	0.250	2.50	2.69	108	74 - 136	2.50	2.77	111	3	30
1,3-Dichlorobenzene	541-73-1	ND	0.250	2.50	2.54	102	77 - 127	2.50	2.61	104	3	30
1,3-Dichloropropane	142-28-9	ND	0.250	2.50	2.74	110	77 - 121	2.50	2.80	112	2	30
1,4-Dichlorobenzene	106-46-7	ND	0.250	2.50	2.36	94	74 - 123	2.50	2.43	97	3	30
2,2-Dichloropropane	594-20-7	ND	0.250	2.50	2.81	112	74 - 129	2.50	2.83	113	1	30
2-Butanone	78-93-3	ND	0.250	2.50	2.79	112	47 - 142	2.50	2.69	108	4	30
2-Chlorotoluene	95-49-8	ND	0.250	2.50	2.50	100	75 - 132	2.50	2.58	103	3	30
2-Hexanone	591-78-6	ND	0.250	2.50	2.80	112	47 - 137	2.50	2.80	112	0	30
4-Chlorotoluene	106-43-4	ND	0.250	2.50	2.62	105	74 - 133	2.50	2.70	108	3	30
4-Isopropyltoluene	99-87-6	ND	0.250	2.50	2.58	103	71 - 136	2.50	2.66	106	3	30
4-Methyl-2-pentanone	108-10-1	ND	0.250	2.50	2.95	118	52 - 136	2.50	3.03	121	3	30
Acetone	67-64-1	ND	1.25	2.50	2.59	104	38 - 152	2.50	2.45	98	6	30
Benzene	71-43-2	ND	0.250	2.50	2.75	110	73 - 128	2.50	2.79	112	1	20
Bromobenzene	108-86-1	ND	0.250	2.50	2.35	94	73 - 124	2.50	2.43	97	3	30
Bromochloromethane	74-97-5	ND	0.250	2.50	2.61	104	73 - 127	2.50	2.71	108	4	30
Bromodichloromethane	75-27-4	ND	0.250	2.50	2.57	103	74 - 126	2.50	2.60	104	1	30
Bromoform	75-25-2	ND	0.250	2.50	2.46	98	67 - 122	2.50	2.50	100	2	30
Bromomethane	74-83-9	ND	0.250	2.50	2.04	82	48 - 139	2.50	2.04	82	0	30
Carbon disulfide	75-15-0	ND	0.250	2.50	2.53	101	68 - 133	2.50	2.86	114	12	30
Carbon tetrachloride	56-23-5	ND	0.250	2.50	2.74	110	71 - 133	2.50	2.79	112	2	30
Chlorobenzene	108-90-7	ND	0.250	2.50	2.52	101	75 - 121	2.50	2.60	104	3	20
Chloroethane	75-00-3	ND	0.250	2.50	3.11	124	57 - 144	2.50	3.03	121	3	30
Chloroform	67-66-3	ND	0.250	2.50	2.48	99	74 - 124	2.50	2.54	102	2	30
Chloromethane	74-87-3	ND	0.250	2.50	2.46	98	61 - 130	2.50	2.51	100	2	30
cis-1,2-Dichloroethene	156-59-2	ND	0.250	2.50	2.42	97	72 - 130	2.50	2.48	99	2	30
cis-1,3-Dichloropropene	10061-01-5	ND	0.250	2.50	2.48	99	72 - 129	2.50	2.51	100	1	30
Dibromochloromethane	124-48-1	ND	0.250	2.50	2.67	107	74 - 122	2.50	2.72	109	2	30
Dibromomethane	74-95-3	ND	0.250	2.50	2.72	109	72 - 125	2.50	2.72	109	0	30
Dichlorodifluoromethane	75-71-8	ND	0.250	2.50	2.91	116	59 - 138	2.50	2.86	114	2	30
Ethylbenzene	100-41-4	ND	0.250	2.50	2.68	107	74 - 130	2.50	2.79	112	4	30
Hexachlorobutadiene	87-68-3	ND	0.250	2.50	2.79	112	71 - 140	2.50	2.83	113	1	30
Isopropylbenzene (Cumene)	98-82-8	ND	0.250	2.50	2.60	104	74 - 125	2.50	2.67	107	3	30
m,p-Xylene	136777-61-2	ND	0.500	5.00	5.26	105	72 - 128	5.00	5.42	108	3	30
Methyl iodide	74-88-4	ND	0.250	2.50	1.88	75	54 - 140	2.50	1.81	72	4	30
Methylene chloride	75-09-2	ND	0.500	2.50	2.40	96	66 - 130	2.50	2.46	98	2	30
Naphthalene	91-20-3	ND	0.250	2.50	2.20	88	54 - 132	2.50	2.34	94	6	35
n-Butylbenzene	104-51-8	ND	0.250	2.50	2.47	99	68 - 144	2.50	2.53	101	2	30
n-Propylbenzene	103-65-1	ND	0.250	2.50	2.54	102	73 - 137	2.50	2.67	107	5	30
o-Xylene	95-47-6	ND	0.250	2.50	2.53	101	69 - 133	2.50	2.60	104	3	30
sec-Butylbenzene	135-98-8	ND	0.250	2.50	2.77	111	72 - 141	2.50	2.86	114	3	30
Styrene	100-42-5	ND	0.250	2.50	2.54	102	72 - 128	2.50	2.59	104	2	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	0.250	2.50	2.78	111	69 - 126	2.50	2.83	113	2	30

GC/MS Volatiles QC Summary

Analytical Batch 575373	Client ID	MB575373		LCS575373				LCSD575373				
	GCAL ID	1523069		1523070				1523071				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	12/23/2015 11:57		12/23/2015 09:14				12/23/2015 10:25				
	Matrix	Solid		Solid				Solid				
EPA 8260B		Units Result	mg/kg LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
tert-Butylbenzene	98-06-6	ND	0.250	2.50	2.60	104	72 - 136	2.50	2.71	108	4	30
Tetrachloroethene	127-18-4	ND	0.250	2.50	2.64	106	70 - 127	2.50	2.76	110	4	30
Toluene	108-88-3	ND	0.250	2.50	2.61	104	74 - 121	2.50	2.69	108	3	20
trans-1,2-Dichloroethene	156-60-5	ND	0.250	2.50	2.36	94	67 - 134	2.50	2.43	97	3	30
trans-1,3-Dichloropropene	10061-02-6	ND	0.250	2.50	2.36	94	72 - 126	2.50	2.40	96	2	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.250	2.50	2.13	85	44 - 146	2.50	2.37	95	11	30
Trichloroethene	79-01-6	ND	0.250	2.50	2.63	105	78 - 127	2.50	2.71	108	3	20
Trichlorofluoromethane	75-69-4	ND	0.250	2.50	2.55	102	64 - 141	2.50	2.64	106	3	30
Trichlorotrifluoroethane	76-13-1	ND	0.250	2.50	2.71	108	66 - 139	2.50	2.95	118	8	30
Vinyl chloride	75-01-4	ND	0.250	2.50	2.89	116	67 - 131	2.50	2.94	118	2	30
Xylene (total)	1330-20-7	ND	0.750	7.50	7.79	104	71 - 129	7.50	8.02	107	3	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	2.6	104	2.5	2.55	102	62 - 125	2.5	2.55	102		NA
4-Bromofluorobenzene	460-00-4	2.51	100	2.5	2.6	104	62 - 127	2.5	2.65	106		NA
Dibromofluoromethane	1868-53-7	2.42	97	2.5	2.46	98	65 - 130	2.5	2.46	98		NA
Toluene d8	2037-26-5	2.56	102	2.5	2.49	100	71 - 132	2.5	2.51	100		NA

Analytical Batch 575413	Client ID	MB575413		LCS575413				LCSD575413				
	GCAL ID	1523261		1523262				1523263				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	12/23/2015 23:18		12/23/2015 21:23				12/23/2015 21:46				
	Matrix	Solid		Solid				Solid				
EPA 8260B		Units Result	mg/kg LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	630-20-6	ND	0.250	2.50	2.48	99	77 - 122	2.50	2.51	100	1	30
1,1,1-Trichloroethane	71-55-6	ND	0.250	2.50	2.43	97	70 - 130	2.50	2.44	98	0	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.250	2.50	2.31	92	66 - 129	2.50	2.38	95	3	30
1,1,2-Trichloroethane	79-00-5	ND	0.250	2.50	2.56	102	74 - 120	2.50	2.63	105	3	30
1,1-Dichloroethane	75-34-3	ND	0.250	2.50	2.63	105	71 - 126	2.50	2.66	106	1	30
1,1-Dichloroethene	75-35-4	ND	0.250	2.50	2.01	80	68 - 129	2.50	1.69	68	17	20
1,1-Dichloropropene	563-58-6	ND	0.250	2.50	2.31	92	70 - 138	2.50	2.34	94	1	30
1,2,3-Trichloropropane	96-18-4	ND	0.250	2.50	2.40	96	63 - 132	2.50	2.48	99	3	30
1,2,4-Trichlorobenzene	120-82-1	ND	0.250	2.50	2.47	99	64 - 135	2.50	2.49	100	1	30
1,2,4-Trimethylbenzene	95-63-6	ND	0.250	2.50	2.84	114	75 - 130	2.50	2.78	111	2	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.250	2.50	2.46	98	60 - 123	2.50	2.62	105	6	30
1,2-Dibromoethane	106-93-4	ND	0.250	2.50	2.77	111	74 - 122	2.50	2.85	114	3	30
1,2-Dichlorobenzene	95-50-1	ND	0.250	2.50	2.55	102	76 - 125	2.50	2.56	102	0	30
1,2-Dichloroethane	107-06-2	ND	0.250	2.50	2.29	92	68 - 126	2.50	2.31	92	1	30
1,2-Dichloroethene(Total)	540-59-0	ND	0.500	5.00	4.69	94	72 - 129	5.00	4.76	95	1	30
1,2-Dichloropropane	78-87-5	ND	0.250	2.50	2.69	108	72 - 129	2.50	2.73	109	1	30
1,3,5-Trimethylbenzene	108-67-8	ND	0.250	2.50	2.69	108	74 - 136	2.50	2.62	105	3	30
1,3-Dichlorobenzene	541-73-1	ND	0.250	2.50	2.61	104	77 - 127	2.50	2.53	101	3	30
1,3-Dichloropropane	142-28-9	ND	0.250	2.50	2.68	107	77 - 121	2.50	2.77	111	3	30
1,4-Dichlorobenzene	106-46-7	ND	0.250	2.50	2.40	96	74 - 123	2.50	2.38	95	1	30
2,2-Dichloropropane	594-20-7	ND	0.250	2.50	2.69	108	74 - 129	2.50	2.67	107	1	30
2-Butanone	78-93-3	ND	0.250	2.50	2.53	101	47 - 142	2.50	2.68	107	6	30
2-Chlorotoluene	95-49-8	ND	0.250	2.50	2.50	100	75 - 132	2.50	2.45	98	2	30
2-Hexanone	591-78-6	ND	0.250	2.50	2.73	109	47 - 137	2.50	2.96	118	8	30
4-Chlorotoluene	106-43-4	ND	0.250	2.50	2.65	106	74 - 133	2.50	2.60	104	2	30
4-Isopropyltoluene	99-87-6	ND	0.250	2.50	2.63	105	71 - 136	2.50	2.54	102	3	30
4-Methyl-2-pentanone	108-10-1	ND	0.250	2.50	2.89	116	52 - 136	2.50	3.13	125	8	30
Acetone	67-64-1	ND	1.25	2.50	2.34	94	38 - 152	2.50	2.52	101	7	30
Benzene	71-43-2	ND	0.250	2.50	2.67	107	73 - 128	2.50	2.71	108	1	20
Bromobenzene	108-86-1	ND	0.250	2.50	2.35	94	73 - 124	2.50	2.33	93	1	30
Bromochloromethane	74-97-5	ND	0.250	2.50	2.59	104	73 - 127	2.50	2.65	106	2	30
Bromodichloromethane	75-27-4	ND	0.250	2.50	2.45	98	74 - 126	2.50	2.50	100	2	30

GC/MS Volatiles QC Summary

Analytical Batch 575413	Client ID	MB575413		LCS575413				LCSD575413				
	GCAL ID	1523261		1523262				1523263				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	12/23/2015 23:18		12/23/2015 21:23				12/23/2015 21:46				
	Matrix	Solid		Solid				Solid				
EPA 8260B		Units Result	mg/kg LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Bromoform	75-25-2	ND	0.250	2.50	2.38	95	67 - 122	2.50	2.47	99	4	30
Bromomethane	74-83-9	ND	0.250	2.50	1.92	77	48 - 139	2.50	1.88	75	2	30
Carbon disulfide	75-15-0	ND	0.250	2.50	1.89	76	68 - 133	2.50	1.55	**62***	20	30
Carbon tetrachloride	56-23-5	ND	0.250	2.50	2.48	99	71 - 133	2.50	2.49	100	0	30
Chlorobenzene	108-90-7	ND	0.250	2.50	2.50	100	75 - 121	2.50	2.50	100	0	20
Chloroethane	75-00-3	ND	0.250	2.50	2.68	107	57 - 144	2.50	2.54	102	5	30
Chloroform	67-66-3	ND	0.250	2.50	2.41	96	74 - 124	2.50	2.43	97	1	30
Chloromethane	74-87-3	ND	0.250	2.50	2.46	98	61 - 130	2.50	2.54	102	3	30
cis-1,2-Dichloroethene	156-59-2	ND	0.250	2.50	2.34	94	72 - 130	2.50	2.39	96	2	30
cis-1,3-Dichloropropene	10061-01-5	ND	0.250	2.50	2.39	96	72 - 129	2.50	2.42	97	1	30
Dibromochloromethane	124-48-1	ND	0.250	2.50	2.58	103	74 - 122	2.50	2.64	106	2	30
Dibromomethane	74-95-3	ND	0.250	2.50	2.57	103	72 - 125	2.50	2.67	107	4	30
Dichlorodifluoromethane	75-71-8	ND	0.250	2.50	2.57	103	59 - 138	2.50	2.52	101	2	30
Ethylbenzene	100-41-4	ND	0.250	2.50	2.68	107	74 - 130	2.50	2.65	106	1	30
Hexachlorobutadiene	87-68-3	ND	0.250	2.50	2.90	116	71 - 140	2.50	2.81	112	3	30
Isopropylbenzene (Cumene)	98-82-8	ND	0.250	2.50	2.58	103	74 - 125	2.50	2.54	102	2	30
m,p-Xylene	136777-61-2	ND	0.500	5.00	5.28	106	72 - 128	5.00	5.24	105	1	30
Methyl iodide	74-88-4	ND	0.250	2.50	1.87	75	54 - 140	2.50	1.96	78	5	30
Methylene chloride	75-09-2	ND	0.500	2.50	2.34	94	66 - 130	2.50	2.37	95	1	30
Naphthalene	91-20-3	ND	0.250	2.50	2.46	98	54 - 132	2.50	2.64	106	7	35
n-Butylbenzene	104-51-8	ND	0.250	2.50	2.55	102	68 - 144	2.50	2.46	98	4	30
n-Propylbenzene	103-65-1	ND	0.250	2.50	2.56	102	73 - 137	2.50	2.48	99	3	30
o-Xylene	95-47-6	ND	0.250	2.50	2.57	103	69 - 133	2.50	2.58	103	0	30
sec-Butylbenzene	135-98-8	ND	0.250	2.50	2.74	110	72 - 141	2.50	2.65	106	3	30
Styrene	100-42-5	ND	0.250	2.50	2.61	104	72 - 128	2.50	2.60	104	0	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	0.250	2.50	2.74	110	69 - 126	2.50	2.87	115	5	30
tert-Butylbenzene	98-06-6	ND	0.250	2.50	2.60	104	72 - 136	2.50	2.53	101	3	30
Tetrachloroethene	127-18-4	ND	0.250	2.50	2.61	104	70 - 127	2.50	2.59	104	1	30
Toluene	108-88-3	ND	0.250	2.50	2.62	105	74 - 121	2.50	2.60	104	1	20
trans-1,2-Dichloroethene	156-60-5	ND	0.250	2.50	2.35	94	67 - 134	2.50	2.38	95	1	30
trans-1,3-Dichloropropene	10061-02-6	ND	0.250	2.50	2.29	92	72 - 126	2.50	2.35	94	3	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.250	2.50	2.27	91	44 - 146	2.50	2.37	95	4	30
Trichloroethene	79-01-6	ND	0.250	2.50	2.50	100	78 - 127	2.50	2.56	102	2	20
Trichlorofluoromethane	75-69-4	ND	0.250	2.50	2.41	96	64 - 141	2.50	2.42	97	0	30
Trichlorotrifluoroethane	76-13-1	ND	0.250	2.50	2.03	81	66 - 139	2.50	1.61	**64***	23	30
Vinyl chloride	75-01-4	ND	0.250	2.50	2.75	110	67 - 131	2.50	2.73	109	1	30
Xylene (total)	1330-20-7	ND	0.750	7.50	7.85	105	71 - 129	7.50	7.82	104	0	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	2.54	102	2.5	2.45	98	62 - 125	2.5	2.46	98		NA
4-Bromofluorobenzene	460-00-4	2.59	104	2.5	2.65	106	62 - 127	2.5	2.66	106		NA
Dibromofluoromethane	1868-53-7	2.36	94	2.5	2.37	95	65 - 130	2.5	2.42	97		NA
Toluene d8	2037-26-5	2.52	101	2.5	2.53	101	71 - 132	2.5	2.51	100		NA

Analytical Batch 574942	Client ID	MB574942		LCS574942				LCSD574942				
	GCAL ID	1520890		1520891				1520892				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	12/18/2015 11:38		12/18/2015 09:49				12/18/2015 11:59				
	Matrix	Water		Water				Water				
EPA 8260B		Units Result	ug/L LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	630-20-6	ND	5.00	50.0	45.0	90	75 - 124	50.0	44.1	88	2	30
1,1,1-Trichloroethane	71-55-6	ND	5.00	50.0	42.4	85	76 - 126	50.0	44.2	88	4	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	5.00	50.0	51.0	102	70 - 122	50.0	50.9	102	0	30
1,1,2-Trichloroethane	79-00-5	ND	5.00	50.0	47.6	95	72 - 121	50.0	46.7	93	2	30
1,1-Dichloroethane	75-34-3	ND	5.00	50.0	42.1	84	74 - 127	50.0	43.2	86	3	30
1,1-Dichloroethene	75-35-4	ND	5.00	50.0	41.2	82	69 - 129	50.0	44.5	89	8	20

GC/MS Volatiles QC Summary

Analytical Batch 574942	Client ID	MB574942	LCS574942	LCSD574942
	GCAL ID	1520890	1520891	1520892
	Sample Type	MB	LCS	LCSD
	Prep Date	NA	NA	NA
	Analysis Date	12/18/2015 11:38	12/18/2015 09:49	12/18/2015 11:59
	Matrix	Water	Water	Water

EPA 8260B		Units	ug/L	Spike			Control	Spike				
		Result	LOQ	Added	Result	%R	Limits%R	Added	Result	%R	RPD	RPD Limit
1,1-Dichloropropene	563-58-6	ND	5.00	50.0	45.1	90	72 - 131	50.0	46.1	92	2	30
1,2,3-Trichloropropane	96-18-4	ND	5.00	50.0	47.0	94	70 - 120	50.0	46.8	94	0	30
1,2,4-Trichlorobenzene	120-82-1	ND	5.00	50.0	49.7	99	61 - 135	50.0	47.0	94	6	30
1,2,4-Trimethylbenzene	95-63-6	ND	5.00	50.0	53.0	106	74 - 125	50.0	53.3	107	1	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	5.00	50.0	47.5	95	57 - 121	50.0	44.3	89	7	30
1,2-Dibromoethane	106-93-4	ND	5.00	50.0	45.8	92	70 - 124	50.0	45.9	92	0	30
1,2-Dichlorobenzene	95-50-1	ND	5.00	50.0	46.8	94	71 - 126	50.0	46.9	94	0	30
1,2-Dichloroethane	107-06-2	ND	5.00	50.0	45.9	92	71 - 129	50.0	45.2	90	2	30
1,2-Dichloroethene(Total)	540-59-0	ND	10.0	100	84.7	85	74 - 128	100	87.7	88	3	30
1,2-Dichloropropane	78-87-5	ND	5.00	50.0	44.6	89	72 - 128	50.0	45.5	91	2	30
1,3,5-Trimethylbenzene	108-67-8	ND	5.00	50.0	49.9	100	71 - 132	50.0	51.7	103	4	30
1,3-Dichlorobenzene	541-73-1	ND	5.00	50.0	46.8	94	74 - 126	50.0	47.1	94	1	30
1,3-Dichloropropane	142-28-9	ND	5.00	50.0	47.6	95	74 - 122	50.0	47.0	94	1	30
1,4-Dichlorobenzene	106-46-7	ND	5.00	50.0	44.9	90	72 - 122	50.0	44.7	89	0	30
2,2-Dichloropropane	594-20-7	ND	5.00	50.0	44.4	89	77 - 124	50.0	45.3	91	2	30
2-Butanone	78-93-3	ND	5.00	50.0	47.6	95	58 - 137	50.0	48.2	96	1	30
2-Chlorotoluene	95-49-8	ND	5.00	50.0	46.9	94	72 - 127	50.0	47.1	94	0	30
2-Hexanone	591-78-6	ND	5.00	50.0	57.8	116	50 - 135	50.0	53.5	107	8	30
4-Chlorotoluene	106-43-4	ND	5.00	50.0	49.0	98	75 - 126	50.0	49.0	98	0	30
4-Isopropyltoluene	99-87-6	ND	5.00	50.0	54.2	108	71 - 129	50.0	54.8	110	1	30
4-Methyl-2-pentanone	108-10-1	ND	5.00	50.0	49.6	99	57 - 132	50.0	47.9	96	3	30
Acetone	67-64-1	ND	5.00	50.0	51.0	102	44 - 156	50.0	49.5	99	3	30
Benzene	71-43-2	ND	5.00	50.0	45.1	90	70 - 129	50.0	46.2	92	2	20
Bromobenzene	108-86-1	ND	5.00	50.0	46.7	93	71 - 120	50.0	47.2	94	1	30
Bromochloromethane	74-97-5	ND	5.00	50.0	45.6	91	76 - 130	50.0	46.4	93	2	30
Bromodichloromethane	75-27-4	ND	5.00	50.0	43.9	88	74 - 125	50.0	44.3	89	1	30
Bromoform	75-25-2	ND	5.00	50.0	46.3	93	64 - 122	50.0	45.5	91	2	30
Bromomethane	74-83-9	ND	5.00	50.0	47.5	95	47 - 138	50.0	46.2	92	3	30
Carbon disulfide	75-15-0	ND	5.00	50.0	42.1	84	69 - 136	50.0	44.9	90	6	30
Carbon tetrachloride	56-23-5	ND	5.00	50.0	44.4	89	76 - 128	50.0	46.5	93	5	30
Chlorobenzene	108-90-7	ND	5.00	50.0	45.3	91	74 - 123	50.0	46.1	92	2	20
Chloroethane	75-00-3	ND	5.00	50.0	41.0	82	62 - 141	50.0	48.7	97	17	30
Chloroform	67-66-3	ND	5.00	50.0	43.2	86	75 - 122	50.0	43.8	88	1	30
Chloromethane	74-87-3	ND	5.00	50.0	46.4	93	59 - 132	50.0	49.6	99	7	30
cis-1,2-Dichloroethene	156-59-2	ND	5.00	50.0	42.3	85	73 - 130	50.0	43.8	88	3	30
cis-1,3-Dichloropropene	10061-01-5	ND	5.00	50.0	46.7	93	71 - 132	50.0	46.3	93	1	30
Dibromochloromethane	124-48-1	ND	5.00	50.0	46.6	93	71 - 123	50.0	45.6	91	2	30
Dibromomethane	74-95-3	ND	5.00	50.0	46.1	92	72 - 129	50.0	45.8	92	1	30
Dichlorodifluoromethane	75-71-8	ND	5.00	50.0	38.8	78	58 - 140	50.0	40.2	80	4	30
Ethylbenzene	100-41-4	ND	5.00	50.0	44.6	89	74 - 126	50.0	45.9	92	3	30
Hexachlorobutadiene	87-68-3	ND	5.00	50.0	42.5	85	61 - 144	50.0	41.3	83	3	30
Isopropylbenzene (Cumene)	98-82-8	ND	5.00	50.0	50.2	100	71 - 125	50.0	51.0	102	2	30
m,p-Xylene	136777-61-2	ND	10.0	100	92.3	92	74 - 126	100	94.9	95	3	30
Methyl iodide	74-88-4	ND	5.00	50.0	48.3	97	57 - 141	50.0	45.1	90	7	30
Methylene chloride	75-09-2	ND	5.00	50.0	45.3	91	68 - 132	50.0	46.6	93	3	30
Naphthalene	91-20-3	ND	5.00	50.0	57.0	114	57 - 138	50.0	52.1	104	9	35
n-Butylbenzene	104-51-8	ND	5.00	50.0	51.4	103	69 - 134	50.0	52.2	104	2	30
n-Propylbenzene	103-65-1	ND	5.00	50.0	50.1	100	75 - 129	50.0	51.4	103	3	30
o-Xylene	95-47-6	ND	5.00	50.0	47.1	94	73 - 130	50.0	47.1	94	0	30
sec-Butylbenzene	135-98-8	ND	5.00	50.0	49.1	98	70 - 136	50.0	50.3	101	2	30
Styrene	100-42-5	ND	5.00	50.0	54.3	109	71 - 127	50.0	54.4	109	0	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	5.00	50.0	49.7	99	71 - 125	50.0	50.1	100	1	30
tert-Butylbenzene	98-06-6	ND	5.00	50.0	47.7	95	72 - 126	50.0	49.0	98	3	30
Tetrachloroethene	127-18-4	ND	5.00	50.0	40.9	82	68 - 128	50.0	41.6	83	2	30
Toluene	108-88-3	ND	5.00	50.0	44.8	90	72 - 120	50.0	45.8	92	2	20
trans-1,2-Dichloroethene	156-60-5	ND	5.00	50.0	42.3	85	69 - 132	50.0	43.9	88	4	30
trans-1,3-Dichloropropene	10061-02-6	ND	5.00	50.0	48.5	97	71 - 131	50.0	48.5	97	0	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	5.00	50.0	54.5	109	56 - 132	50.0	54.2	108	1	30

GC/MS Volatiles QC Summary

Analytical Batch 574942	Client ID	MB574942		LCS574942				LCSD574942				
	GCAL ID	1520890		1520891				1520892				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	12/18/2015 11:38		12/18/2015 09:49				12/18/2015 11:59				
	Matrix	Water		Water				Water				
EPA 8260B		Units Result	ug/L LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Trichloroethene	79-01-6	ND	5.00	50.0	43.8	88	76 - 129	50.0	45.0	90	3	20
Trichlorofluoromethane	75-69-4	ND	5.00	50.0	43.7	87	72 - 136	50.0	46.3	93	6	30
Trichlorotrifluoroethane	76-13-1	ND	5.00	50.0	42.9	86	72 - 136	50.0	45.6	91	6	30
Vinyl chloride	75-01-4	ND	2.00	50.0	41.6	83	68 - 132	50.0	43.0	86	3	30
Xylene (total)	1330-20-7	ND	15.0	150	139	93	74 - 127	150	142	95	2	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	52.4	105	50	49.4	99	71 - 127	50	48.9	98		NA
4-Bromofluorobenzene	460-00-4	46.2	92	50	47.2	94	78 - 130	50	46.3	93		NA
Dibromofluoromethane	1868-53-7	51.8	104	50	49.6	99	77 - 127	50	49.6	99		NA
Toluene d8	2037-26-5	52.8	106	50	50.6	101	76 - 134	50	49.8	100		NA

GCAL ANALYTICAL LABORATORIES, LLC

7979 Innovation Park Dr., Baton Rouge, LA 70820-7402
Phone: 225.769.4900 • Fax: 225.767.5717 • www.gcal.com

CHAIN OF CUSTODY RECORD

Client ID: 4912 - Clearwater Environmental Resources
SDG: 215121648
PM: SAK

Report to:
Client: Clearwater Environmental Resources
Address: 3870 Peachtree Ind. Blvd ste. 340139, Duluth, GA 30096
Contact: Jack Wintle
Phone: 678-491-4601
E-mail: Jack.Wintle@clearwaterenv.net

Bill to:
Client: SAME
Address:
Contact:
Phone:
E-mail:

P.O. Number: —
Project Name/Number: Rayloc PDA Confirmation Sampling
Sampled By: Matthew R. Howe

GCAL use only:
Custody Seal used ☐ yes ☐ no intact ☐ yes ☐ no
Temperature °C: 7.5 E26

☐ Dissolved Analysis Requested
☐ Field filtered
☐ Lab filtered

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	No Containers	Analytical Requests & Method: EPA Method 8260B - VOCs (Methanol)	EPA Method 8260B - VOCs (HCL)	Preservative
S	12/14/15	1001		X	PD-2E 10'	4	X		1
		1027			WD-2E 10'				2
		1120			WD-4E 10'				3
		1040			WD-8E 5'				4
		1058			WD-11E 10'				5
		1137			ADD-1E 6'				6
		1137			ADD-1E 10'				7
		1150			ADD-2E 5'				8
		1150			ADD-2E 10'				9
W		1430	—	—	Trip Blank	3		X	10

Air Bill No: 775207678950

Turn Around Time (Business Days): ☐ 24h* ☐ 48h* ☐ 3 days* ☐ 1 week* ☒ Standard (Per Contract/Quote)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	12/14/15	1430	[signature]	12/14/15	1430
[signature]	12/15/15	1160	FEDEX		
Fedex	12-16-15	1020	[signature]	12-16-15	1020

Note: Page 1 of 1

By submitting these samples, you agree to GCAL's terms and conditions contained in our most recent schedule of services.

Matrix[1]: W = water, S = solid, L = liquid, T = tissue

*Requires prior approval, rush charges may apply.

We cannot accept verbal changes. Please email written changes to your PM.

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT

GCAL ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIVING CHECKLIST

215121648

SAMPLE DELIVERY GROUP 215121648

Client PM SAK 4912 - Clearwater Environmental Resources	**Transport Method** FEDEX
Profile Number 259985	**Received By** Lofton, Katie E.
Line Item(s) 1 - VOC 2 - Soils	**Receive Date(s)** 12/16/15

CHECKLIST	YES	NO	NA
Were all samples received using proper thermal preservation?	☐	☑	☐
When used, were all custody seals intact?	☑	☐	☐
Were all samples received in proper containers?	☑	☐	☐
Were all samples received using proper chemical preservation?	☑	☐	☐
Was preservative added to any container at the lab?	☐	☑	☐
Were all containers received in good condition?	☑	☐	☐
Were all VOC water samples received without head space?	☑	☐	☐
Do all sample labels match the Chain of Custody?	☑	☐	☐
Did the Chain of Custody list the sampling technician?	☑	☐	☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?	☑	☐	☐

COOLERS

Airbill	Thermometer ID: E26	Temp(°C)
7752 0767 8950		7.5

DISCREPANCIES

Sample temperature > 6C:
2151216 4801 - PD-2 @ 10'
2151216 4802 - WD-2 @ 10'
2151216 4803 - WD-4 @ 10'
2151216 4804 - WD-8 @ 5'
2151216 4805 - WD-11 @ 10'
2151216 4806 - ADD-1 @ 6'
2151216 4807 - ADD-1 @ 10'
2151216 4808 - ADD-2 @ 5'
2151216 4809 - ADD-2 @ 10'
2151216 4810 - TRIP BLANK

LAB PRESERVATIONS

None

NOTES

Revision 1.4

Page 1 of 1

NELAP CERTIFICATE NUMBER: 01955
DOD ELAP CERTIFICATE NUMBER: L14-243

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC
7979 Innovation Park Dr.
Baton Rouge, LA 70820

Report Date 03/21/2016

GCAL Report 216031403

Project Rayloc PDA

Deliver To	***Additional Recipients***
Jack Wintle Clearwater Env. Resources Peachtree Industrial blvd Duluth, GA 30096 678-491-4601	NONE

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations that may be Utilized in this Report

ND	Indicates the result was Not Detected at the specified reporting limit
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
DL	Detection Limit
DL	Diluted analysis – when appended to Client Sample ID
LOD	Limit of Detection
LOQ	Limit of Quantitation
RE	Re-analysis
CF	HPLC or GC Confirmation
00:01	Reported as a time equivalent to 12:00 AM

Reporting Flags that may be Utilized in this Report

J or I	Indicates the result is between the MDL and LOQ
J	DOD flag on analyte in the parent sample for MS/MSD outside acceptance criteria
U	Indicates the compound was analyzed for but not detected
B or V	Indicates the analyte was detected in the associated Method Blank
Q	Indicates a non-compliant QC Result (See Q Flag Application Report)
*****	Indicates a non-compliant or not applicable QC recovery or RPD – see narrative
E	The result is estimated because it exceeded the instrument calibration range
E	Metals - % diference for the serial dilution is > 10%
P	RPD between primary and confirmation result is greater than 40

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with The NELAC Institute (TNI) Standard 2009 and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

_____
Authorized Signature
GCAL Report 216031403

Certifications

Certification	Certification Number
DOD ELAP	L14-243
Alabama	01955
Arkansas	12-060-0
Colorado	01955
Delaware	01955
Florida	E87854
Georgia	01955
Hawaii	01955
Idaho	01955
Illinois	200048
Indiana	01955
Kansas	E-10354
Kentucky	95
Louisiana	01955
Maryland	01955
Massachusetts	01955
Michigan	01955
Mississippi	01955
Missouri	01955
Montana	N/A
Nebraska	01955
New Mexico	01955
North Carolina	618
North Dakota	R-195
Oklahoma	9403
South Carolina	73006001
South Dakota	01955
Tennessee	01955
Texas	T104704178
Vermont	01955
Virginia	460215
USDA Soil Permit	P330-10-00117

Case Narrative

Client: Clearwater Environmental Resources **Report:** 216031403

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the Report Sample Summary page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

VOLATILES MASS SPECTROMETRY

In the EPA 8260B analysis, all samples had to be diluted due to the presence of non-target background and/or to bracket the concentration of target compounds within the calibration range of the instrument. The dilution is reflected in elevated detection limits.

Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21603140301	WD-2 @ 10	Solid	03/10/2016 09:35	03/12/2016 09:37
21603140302	WD-8 @ 5	Solid	03/10/2016 09:45	03/12/2016 09:37
21603140303	PD-2 @ 10	Solid	03/10/2016 09:55	03/12/2016 09:37
21603140304	WD-11 @ 10	Solid	03/10/2016 10:05	03/12/2016 09:37
21603140305	WD-4 @ 4	Solid	03/10/2016 10:15	03/12/2016 09:37
21603140306	ADD-1 @ 6	Solid	03/10/2016 10:28	03/12/2016 09:37
21603140307	ADD-1 @ 10	Solid	03/10/2016 10:20	03/12/2016 09:37
21603140308	ADD-2 @ 5	Solid	03/10/2016 10:25	03/12/2016 09:37
21603140309	ADD-2 @ 10	Solid	03/10/2016 10:30	03/12/2016 09:37

Summary of Compounds Detected

WD-2 @ 10

Collect Date 03/10/2016 09:35 **GCAL ID** 21603140301
Receive Date 03/12/2016 09:37 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	4.55	1.05	mg/kg
156-59-2	cis-1,2-Dichloroethene	4.55	0.525	mg/kg
127-18-4	Tetrachloroethene	38.3	5.25	mg/kg
79-01-6	Trichloroethene	1.52	0.525	mg/kg

WD-8 @ 5

Collect Date 03/10/2016 09:45 **GCAL ID** 21603140302
Receive Date 03/12/2016 09:37 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
156-59-2	cis-1,2-Dichloroethene	30.6	27.1	mg/kg
127-18-4	Tetrachloroethene	2590	271	mg/kg

PD-2 @ 10

Collect Date 03/10/2016 09:55 **GCAL ID** 21603140303
Receive Date 03/12/2016 09:37 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	1.11	0.233	mg/kg

WD-11 @ 10

Collect Date 03/10/2016 10:05 **GCAL ID** 21603140304
Receive Date 03/12/2016 09:37 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	238	45.1	mg/kg

Summary of Compounds Detected

WD-4 @ 4

Collect Date 03/10/2016 10:15 **GCAL ID** 21603140305
Receive Date 03/12/2016 09:37 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	1280	220	mg/kg

ADD-1 @ 6

Collect Date 03/10/2016 10:28 **GCAL ID** 21603140306
Receive Date 03/12/2016 09:37 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	11.9	0.935	mg/kg
156-59-2	cis-1,2-Dichloroethene	11.8	0.468	mg/kg
127-18-4	Tetrachloroethene	22.5	4.68	mg/kg
79-01-6	Trichloroethene	3.09	0.468	mg/kg

ADD-1 @ 10

Collect Date 03/10/2016 10:20 **GCAL ID** 21603140307
Receive Date 03/12/2016 09:37 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	3.88	0.447	mg/kg
156-59-2	cis-1,2-Dichloroethene	3.81	0.223	mg/kg
127-18-4	Tetrachloroethene	13.7	4.47	mg/kg
79-01-6	Trichloroethene	2.92	0.223	mg/kg

ADD-2 @ 5

Collect Date 03/10/2016 10:25 **GCAL ID** 21603140308
Receive Date 03/12/2016 09:37 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	3830	472	mg/kg
79-01-6	Trichloroethene	72.1	47.2	mg/kg

Summary of Compounds Detected

ADD-2 @ 10	**Collect Date**	03/10/2016 10:30	**GCAL ID**	21603140309
	Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
156-59-2	cis-1,2-Dichloroethene	14.7	12.4	mg/kg
127-18-4	Tetrachloroethene	764	124	mg/kg
79-01-6	Trichloroethene	35.7	12.4	mg/kg

Sample Results

WD-2 @ 10	**Collect Date**	03/10/2016 09:35	**GCAL ID**	21603140301
	Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	03/15/2016 21:00	JCK	581708

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.525	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.525	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.525	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.525	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.525	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.525	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.525	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.525	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.525	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.525	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.525	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.525	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.525	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.525	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**4.55**	**1.05**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.525	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.525	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.525	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.525	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.525	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.525	mg/kg
78-93-3	2-Butanone	ND	0.525	mg/kg
95-49-8	2-Chlorotoluene	ND	0.525	mg/kg
591-78-6	2-Hexanone	ND	0.525	mg/kg
106-43-4	4-Chlorotoluene	ND	0.525	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.525	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.525	mg/kg
67-64-1	Acetone	ND	2.63	mg/kg
71-43-2	Benzene	ND	0.525	mg/kg
108-86-1	Bromobenzene	ND	0.525	mg/kg
74-97-5	Bromochloromethane	ND	0.525	mg/kg
75-27-4	Bromodichloromethane	ND	0.525	mg/kg
75-25-2	Bromoform	ND	0.525	mg/kg
74-83-9	Bromomethane	ND	0.525	mg/kg
75-15-0	Carbon disulfide	ND	0.525	mg/kg
56-23-5	Carbon tetrachloride	ND	0.525	mg/kg
108-90-7	Chlorobenzene	ND	0.525	mg/kg
75-00-3	Chloroethane	ND	0.525	mg/kg
67-66-3	Chloroform	ND	0.525	mg/kg
74-87-3	Chloromethane	ND	0.525	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**4.55**	**0.525**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.525	mg/kg
124-48-1	Dibromochloromethane	ND	0.525	mg/kg
74-95-3	Dibromomethane	ND	0.525	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.525	mg/kg
100-41-4	Ethylbenzene	ND	0.525	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.525	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.525	mg/kg

Sample Results

WD-2 @ 10	**Collect Date**	03/10/2016 09:35	**GCAL ID**	21603140301
	Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B (Continued) *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	03/15/2016 21:00	JCK	581708

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	1.05	mg/kg
74-88-4	Methyl iodide	ND	0.525	mg/kg
75-09-2	Methylene chloride	ND	1.05	mg/kg
91-20-3	Naphthalene	ND	0.525	mg/kg
104-51-8	n-Butylbenzene	ND	0.525	mg/kg
103-65-1	n-Propylbenzene	ND	0.525	mg/kg
95-47-6	o-Xylene	ND	0.525	mg/kg
135-98-8	sec-Butylbenzene	ND	0.525	mg/kg
100-42-5	Styrene	ND	0.525	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.525	mg/kg
98-06-6	tert-Butylbenzene	ND	0.525	mg/kg
108-88-3	Toluene	ND	0.525	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.525	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.525	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.525	mg/kg
79-01-6	**Trichloroethene**	**1.52**	**0.525**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.525	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.525	mg/kg
75-01-4	Vinyl chloride	ND	0.525	mg/kg
1330-20-7	Xylene (total)	ND	1.58	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	3.88	3.88	ug/Kg	100	62 - 127
1868-53-7	Dibromofluoromethane	3.88	4.25	ug/Kg	110	65 - 130
2037-26-5	Toluene d8	3.88	3.66	ug/Kg	94	71 - 132
17060-07-0	1,2-Dichloroethane-d4	3.88	4.54	ug/Kg	117	62 - 125

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	03/15/2016 17:44	CJR	581708

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**38.3**	**5.25**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	38.80	39.9	ug/Kg	103	62 - 127
1868-53-7	Dibromofluoromethane	38.80	41.3	ug/Kg	107	65 - 130
2037-26-5	Toluene d8	38.80	37.8	ug/Kg	98	71 - 132
17060-07-0	1,2-Dichloroethane-d4	38.80	42.6	ug/Kg	110	62 - 125

Sample Results

WD-8 @ 5

Collect Date	03/10/2016 09:45	**GCAL ID**	21603140302
Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5000	03/15/2016 21:21	JCK	581708

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	27.1	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	27.1	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	27.1	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	27.1	mg/kg
75-34-3	1,1-Dichloroethane	ND	27.1	mg/kg
75-35-4	1,1-Dichloroethene	ND	27.1	mg/kg
563-58-6	1,1-Dichloropropene	ND	27.1	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	27.1	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	27.1	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	27.1	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	27.1	mg/kg
106-93-4	1,2-Dibromoethane	ND	27.1	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	27.1	mg/kg
107-06-2	1,2-Dichloroethane	ND	27.1	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	54.1	mg/kg
78-87-5	1,2-Dichloropropane	ND	27.1	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	27.1	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	27.1	mg/kg
142-28-9	1,3-Dichloropropane	ND	27.1	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	27.1	mg/kg
594-20-7	2,2-Dichloropropane	ND	27.1	mg/kg
78-93-3	2-Butanone	ND	27.1	mg/kg
95-49-8	2-Chlorotoluene	ND	27.1	mg/kg
591-78-6	2-Hexanone	ND	27.1	mg/kg
106-43-4	4-Chlorotoluene	ND	27.1	mg/kg
99-87-6	4-Isopropyltoluene	ND	27.1	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	27.1	mg/kg
67-64-1	Acetone	ND	135	mg/kg
71-43-2	Benzene	ND	27.1	mg/kg
108-86-1	Bromobenzene	ND	27.1	mg/kg
74-97-5	Bromochloromethane	ND	27.1	mg/kg
75-27-4	Bromodichloromethane	ND	27.1	mg/kg
75-25-2	Bromoform	ND	27.1	mg/kg
74-83-9	Bromomethane	ND	27.1	mg/kg
75-15-0	Carbon disulfide	ND	27.1	mg/kg
56-23-5	Carbon tetrachloride	ND	27.1	mg/kg
108-90-7	Chlorobenzene	ND	27.1	mg/kg
75-00-3	Chloroethane	ND	27.1	mg/kg
67-66-3	Chloroform	ND	27.1	mg/kg
74-87-3	Chloromethane	ND	27.1	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**30.6**	**27.1**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	27.1	mg/kg
124-48-1	Dibromochloromethane	ND	27.1	mg/kg
74-95-3	Dibromomethane	ND	27.1	mg/kg
75-71-8	Dichlorodifluoromethane	ND	27.1	mg/kg
100-41-4	Ethylbenzene	ND	27.1	mg/kg
87-68-3	Hexachlorobutadiene	ND	27.1	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	27.1	mg/kg

Sample Results

WD-8 @ 5	**Collect Date**	03/10/2016 09:45	**GCAL ID**	21603140302
	Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B (Continued) *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5000	03/15/2016 21:21	JCK	581708

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	54.1	mg/kg
74-88-4	Methyl iodide	ND	27.1	mg/kg
75-09-2	Methylene chloride	ND	54.1	mg/kg
91-20-3	Naphthalene	ND	27.1	mg/kg
104-51-8	n-Butylbenzene	ND	27.1	mg/kg
103-65-1	n-Propylbenzene	ND	27.1	mg/kg
95-47-6	o-Xylene	ND	27.1	mg/kg
135-98-8	sec-Butylbenzene	ND	27.1	mg/kg
100-42-5	Styrene	ND	27.1	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	27.1	mg/kg
98-06-6	tert-Butylbenzene	ND	27.1	mg/kg
108-88-3	Toluene	ND	27.1	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	27.1	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	27.1	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	27.1	mg/kg
79-01-6	Trichloroethene	ND	27.1	mg/kg
75-69-4	Trichlorofluoromethane	ND	27.1	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	27.1	mg/kg
75-01-4	Vinyl chloride	ND	27.1	mg/kg
1330-20-7	Xylene (total)	ND	81.2	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	212	219	ug/Kg	103	62 - 127
1868-53-7	Dibromofluoromethane	212	233	ug/Kg	110	65 - 130
2037-26-5	Toluene d8	212	197	ug/Kg	93	71 - 132
17060-07-0	1,2-Dichloroethane-d4	212	248	ug/Kg	117	62 - 125

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50000	03/15/2016 18:06	CJR	581708

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**2590**	**271**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2120	2160	ug/Kg	102	62 - 127
1868-53-7	Dibromofluoromethane	2120	2210	ug/Kg	104	65 - 130
2037-26-5	Toluene d8	2120	2170	ug/Kg	102	71 - 132
17060-07-0	1,2-Dichloroethane-d4	2120	2260	ug/Kg	106	62 - 125

Sample Results

PD-2 @ 10	**Collect Date**	03/10/2016 09:55	**GCAL ID**	21603140303
	Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50	03/15/2016 18:28	CJR	581708

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.233	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.233	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.233	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.233	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.233	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.233	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.233	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.233	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.233	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.233	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.233	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.233	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.233	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.233	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.466	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.233	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.233	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.233	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.233	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.233	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.233	mg/kg
78-93-3	2-Butanone	ND	0.233	mg/kg
95-49-8	2-Chlorotoluene	ND	0.233	mg/kg
591-78-6	2-Hexanone	ND	0.233	mg/kg
106-43-4	4-Chlorotoluene	ND	0.233	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.233	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.233	mg/kg
67-64-1	Acetone	ND	1.16	mg/kg
71-43-2	Benzene	ND	0.233	mg/kg
108-86-1	Bromobenzene	ND	0.233	mg/kg
74-97-5	Bromochloromethane	ND	0.233	mg/kg
75-27-4	Bromodichloromethane	ND	0.233	mg/kg
75-25-2	Bromoform	ND	0.233	mg/kg
74-83-9	Bromomethane	ND	0.233	mg/kg
75-15-0	Carbon disulfide	ND	0.233	mg/kg
56-23-5	Carbon tetrachloride	ND	0.233	mg/kg
108-90-7	Chlorobenzene	ND	0.233	mg/kg
75-00-3	Chloroethane	ND	0.233	mg/kg
67-66-3	Chloroform	ND	0.233	mg/kg
74-87-3	Chloromethane	ND	0.233	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	0.233	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.233	mg/kg
124-48-1	Dibromochloromethane	ND	0.233	mg/kg
74-95-3	Dibromomethane	ND	0.233	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.233	mg/kg
100-41-4	Ethylbenzene	ND	0.233	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.233	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.233	mg/kg

Sample Results

PD-2 @ 10

Collect Date	03/10/2016 09:55	**GCAL ID**	21603140303
Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B (Continued) *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50	03/15/2016 18:28	CJR	581708

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.466	mg/kg
74-88-4	Methyl iodide	ND	0.233	mg/kg
75-09-2	Methylene chloride	ND	0.466	mg/kg
91-20-3	Naphthalene	ND	0.233	mg/kg
104-51-8	n-Butylbenzene	ND	0.233	mg/kg
103-65-1	n-Propylbenzene	ND	0.233	mg/kg
95-47-6	o-Xylene	ND	0.233	mg/kg
135-98-8	sec-Butylbenzene	ND	0.233	mg/kg
100-42-5	Styrene	ND	0.233	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.233	mg/kg
98-06-6	tert-Butylbenzene	ND	0.233	mg/kg
127-18-4	**Tetrachloroethene**	**1.11**	**0.233**	**mg/kg**
108-88-3	Toluene	ND	0.233	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.233	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.233	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.233	mg/kg
79-01-6	Trichloroethene	ND	0.233	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.233	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.233	mg/kg
75-01-4	Vinyl chloride	ND	0.233	mg/kg
1330-20-7	Xylene (total)	ND	0.699	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1.99	2.05	ug/Kg	103	62 - 127
1868-53-7	Dibromofluoromethane	1.99	2.08	ug/Kg	104	65 - 130
2037-26-5	Toluene d8	1.99	1.95	ug/Kg	98	71 - 132
17060-07-0	1,2-Dichloroethane-d4	1.99	2.16	ug/Kg	108	62 - 125

WD-11 @ 10

Collect Date	03/10/2016 10:05	**GCAL ID**	21603140304
Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	03/15/2016 21:43	JCK	581708

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.51	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	4.51	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.51	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	4.51	mg/kg
75-34-3	1,1-Dichloroethane	ND	4.51	mg/kg
75-35-4	1,1-Dichloroethene	ND	4.51	mg/kg

Sample Results

WD-11 @ 10	**Collect Date**	03/10/2016 10:05	**GCAL ID**	21603140304
	Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B (Continued) *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	03/15/2016 21:43	JCK	581708

CAS#	Parameter	Result	LOQ	Units
563-58-6	1,1-Dichloropropene	ND	4.51	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	4.51	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	4.51	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	4.51	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.51	mg/kg
106-93-4	1,2-Dibromoethane	ND	4.51	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	4.51	mg/kg
107-06-2	1,2-Dichloroethane	ND	4.51	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	9.02	mg/kg
78-87-5	1,2-Dichloropropane	ND	4.51	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	4.51	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	4.51	mg/kg
142-28-9	1,3-Dichloropropane	ND	4.51	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	4.51	mg/kg
594-20-7	2,2-Dichloropropane	ND	4.51	mg/kg
78-93-3	2-Butanone	ND	4.51	mg/kg
95-49-8	2-Chlorotoluene	ND	4.51	mg/kg
591-78-6	2-Hexanone	ND	4.51	mg/kg
106-43-4	4-Chlorotoluene	ND	4.51	mg/kg
99-87-6	4-Isopropyltoluene	ND	4.51	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	4.51	mg/kg
67-64-1	Acetone	ND	22.6	mg/kg
71-43-2	Benzene	ND	4.51	mg/kg
108-86-1	Bromobenzene	ND	4.51	mg/kg
74-97-5	Bromochloromethane	ND	4.51	mg/kg
75-27-4	Bromodichloromethane	ND	4.51	mg/kg
75-25-2	Bromoform	ND	4.51	mg/kg
74-83-9	Bromomethane	ND	4.51	mg/kg
75-15-0	Carbon disulfide	ND	4.51	mg/kg
56-23-5	Carbon tetrachloride	ND	4.51	mg/kg
108-90-7	Chlorobenzene	ND	4.51	mg/kg
75-00-3	Chloroethane	ND	4.51	mg/kg
67-66-3	Chloroform	ND	4.51	mg/kg
74-87-3	Chloromethane	ND	4.51	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	4.51	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	4.51	mg/kg
124-48-1	Dibromochloromethane	ND	4.51	mg/kg
74-95-3	Dibromomethane	ND	4.51	mg/kg
75-71-8	Dichlorodifluoromethane	ND	4.51	mg/kg
100-41-4	Ethylbenzene	ND	4.51	mg/kg
87-68-3	Hexachlorobutadiene	ND	4.51	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	4.51	mg/kg
136777-61-2	m,p-Xylene	ND	9.02	mg/kg
74-88-4	Methyl iodide	ND	4.51	mg/kg
75-09-2	Methylene chloride	ND	9.02	mg/kg
91-20-3	Naphthalene	ND	4.51	mg/kg
104-51-8	n-Butylbenzene	ND	4.51	mg/kg
103-65-1	n-Propylbenzene	ND	4.51	mg/kg

Sample Results

WD-11 @ 10	**Collect Date**	03/10/2016 10:05	**GCAL ID**	21603140304
	Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B (Continued)

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	03/15/2016 21:43	JCK	581708

CAS#	Parameter	Result	LOQ	Units
95-47-6	o-Xylene	ND	4.51	mg/kg
135-98-8	sec-Butylbenzene	ND	4.51	mg/kg
100-42-5	Styrene	ND	4.51	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	4.51	mg/kg
98-06-6	tert-Butylbenzene	ND	4.51	mg/kg
108-88-3	Toluene	ND	4.51	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	4.51	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	4.51	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	4.51	mg/kg
79-01-6	Trichloroethene	ND	4.51	mg/kg
75-69-4	Trichlorofluoromethane	ND	4.51	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	4.51	mg/kg
75-01-4	Vinyl chloride	ND	4.51	mg/kg
1330-20-7	Xylene (total)	ND	13.5	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	37.80	38.6	ug/Kg	102	62 - 127
1868-53-7	Dibromofluoromethane	37.80	42.4	ug/Kg	112	65 - 130
2037-26-5	Toluene d8	37.80	35.1	ug/Kg	93	71 - 132
17060-07-0	1,2-Dichloroethane-d4	37.80	43.6	ug/Kg	115	62 - 125

EPA 8260B

*Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	10000	03/15/2016 18:49	CJR	581708

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**238**	**45.1**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	378	381	ug/Kg	101	62 - 127
1868-53-7	Dibromofluoromethane	378	404	ug/Kg	107	65 - 130
2037-26-5	Toluene d8	378	367	ug/Kg	97	71 - 132
17060-07-0	1,2-Dichloroethane-d4	378	420	ug/Kg	111	62 - 125

Sample Results

WD-4 @ 4	**Collect Date**	03/10/2016 10:15	**GCAL ID**	21603140305
	Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5000	03/18/2016 18:12	JCK	581979

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	22.0	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	22.0	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	22.0	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	22.0	mg/kg
75-34-3	1,1-Dichloroethane	ND	22.0	mg/kg
75-35-4	1,1-Dichloroethene	ND	22.0	mg/kg
563-58-6	1,1-Dichloropropene	ND	22.0	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	22.0	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	22.0	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	22.0	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	22.0	mg/kg
106-93-4	1,2-Dibromoethane	ND	22.0	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	22.0	mg/kg
107-06-2	1,2-Dichloroethane	ND	22.0	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	44.0	mg/kg
78-87-5	1,2-Dichloropropane	ND	22.0	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	22.0	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	22.0	mg/kg
142-28-9	1,3-Dichloropropane	ND	22.0	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	22.0	mg/kg
594-20-7	2,2-Dichloropropane	ND	22.0	mg/kg
78-93-3	2-Butanone	ND	22.0	mg/kg
95-49-8	2-Chlorotoluene	ND	22.0	mg/kg
591-78-6	2-Hexanone	ND	22.0	mg/kg
106-43-4	4-Chlorotoluene	ND	22.0	mg/kg
99-87-6	4-Isopropyltoluene	ND	22.0	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	22.0	mg/kg
67-64-1	Acetone	ND	110	mg/kg
71-43-2	Benzene	ND	22.0	mg/kg
108-86-1	Bromobenzene	ND	22.0	mg/kg
74-97-5	Bromochloromethane	ND	22.0	mg/kg
75-27-4	Bromodichloromethane	ND	22.0	mg/kg
75-25-2	Bromoform	ND	22.0	mg/kg
74-83-9	Bromomethane	ND	22.0	mg/kg
75-15-0	Carbon disulfide	ND	22.0	mg/kg
56-23-5	Carbon tetrachloride	ND	22.0	mg/kg
108-90-7	Chlorobenzene	ND	22.0	mg/kg
75-00-3	Chloroethane	ND	22.0	mg/kg
67-66-3	Chloroform	ND	22.0	mg/kg
74-87-3	Chloromethane	ND	22.0	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	22.0	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	22.0	mg/kg
124-48-1	Dibromochloromethane	ND	22.0	mg/kg
74-95-3	Dibromomethane	ND	22.0	mg/kg
75-71-8	Dichlorodifluoromethane	ND	22.0	mg/kg
100-41-4	Ethylbenzene	ND	22.0	mg/kg
87-68-3	Hexachlorobutadiene	ND	22.0	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	22.0	mg/kg

Sample Results

WD-4 @ 4	**Collect Date**	03/10/2016 10:15	**GCAL ID**	21603140305
	Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B (Continued) *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5000	03/18/2016 18:12	JCK	581979

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	44.0	mg/kg
74-88-4	Methyl iodide	ND	22.0	mg/kg
75-09-2	Methylene chloride	ND	44.0	mg/kg
91-20-3	Naphthalene	ND	22.0	mg/kg
104-51-8	n-Butylbenzene	ND	22.0	mg/kg
103-65-1	n-Propylbenzene	ND	22.0	mg/kg
95-47-6	o-Xylene	ND	22.0	mg/kg
135-98-8	sec-Butylbenzene	ND	22.0	mg/kg
100-42-5	Styrene	ND	22.0	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	22.0	mg/kg
98-06-6	tert-Butylbenzene	ND	22.0	mg/kg
108-88-3	Toluene	ND	22.0	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	22.0	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	22.0	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	22.0	mg/kg
79-01-6	Trichloroethene	ND	22.0	mg/kg
75-69-4	Trichlorofluoromethane	ND	22.0	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	22.0	mg/kg
75-01-4	Vinyl chloride	ND	22.0	mg/kg
1330-20-7	Xylene (total)	ND	66.0	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	189	187	ug/Kg	99	62 - 127
1868-53-7	Dibromofluoromethane	189	191	ug/Kg	101	65 - 130
2037-26-5	Toluene d8	189	191	ug/Kg	101	71 - 132
17060-07-0	1,2-Dichloroethane-d4	189	191	ug/Kg	101	62 - 125

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50000	03/18/2016 17:28	JCK	581979

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**1280**	**220**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1890	1850	ug/Kg	98	62 - 127
1868-53-7	Dibromofluoromethane	1890	1880	ug/Kg	100	65 - 130
2037-26-5	Toluene d8	1890	1940	ug/Kg	103	71 - 132
17060-07-0	1,2-Dichloroethane-d4	1890	1890	ug/Kg	100	62 - 125

Sample Results

ADD-1 @ 6	**Collect Date**	03/10/2016 10:28	**GCAL ID**	21603140306
	Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	03/18/2016 00:27	JCK	581885

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.468	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.468	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.468	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.468	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.468	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.468	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.468	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.468	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.468	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.468	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.468	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.468	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.468	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.468	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**11.9**	**0.935**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.468	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.468	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.468	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.468	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.468	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.468	mg/kg
78-93-3	2-Butanone	ND	0.468	mg/kg
95-49-8	2-Chlorotoluene	ND	0.468	mg/kg
591-78-6	2-Hexanone	ND	0.468	mg/kg
106-43-4	4-Chlorotoluene	ND	0.468	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.468	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.468	mg/kg
67-64-1	Acetone	ND	2.34	mg/kg
71-43-2	Benzene	ND	0.468	mg/kg
108-86-1	Bromobenzene	ND	0.468	mg/kg
74-97-5	Bromochloromethane	ND	0.468	mg/kg
75-27-4	Bromodichloromethane	ND	0.468	mg/kg
75-25-2	Bromoform	ND	0.468	mg/kg
74-83-9	Bromomethane	ND	0.468	mg/kg
75-15-0	Carbon disulfide	ND	0.468	mg/kg
56-23-5	Carbon tetrachloride	ND	0.468	mg/kg
108-90-7	Chlorobenzene	ND	0.468	mg/kg
75-00-3	Chloroethane	ND	0.468	mg/kg
67-66-3	Chloroform	ND	0.468	mg/kg
74-87-3	Chloromethane	ND	0.468	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**11.8**	**0.468**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.468	mg/kg
124-48-1	Dibromochloromethane	ND	0.468	mg/kg
74-95-3	Dibromomethane	ND	0.468	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.468	mg/kg
100-41-4	Ethylbenzene	ND	0.468	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.468	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.468	mg/kg

Sample Results

ADD-1 @ 6	**Collect Date**	03/10/2016 10:28	**GCAL ID**	21603140306
	Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B (Continued) *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	03/18/2016 00:27	JCK	581885

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.935	mg/kg
74-88-4	Methyl iodide	ND	0.468	mg/kg
75-09-2	Methylene chloride	ND	0.935	mg/kg
91-20-3	Naphthalene	ND	0.468	mg/kg
104-51-8	n-Butylbenzene	ND	0.468	mg/kg
103-65-1	n-Propylbenzene	ND	0.468	mg/kg
95-47-6	o-Xylene	ND	0.468	mg/kg
135-98-8	sec-Butylbenzene	ND	0.468	mg/kg
100-42-5	Styrene	ND	0.468	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.468	mg/kg
98-06-6	tert-Butylbenzene	ND	0.468	mg/kg
108-88-3	Toluene	ND	0.468	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.468	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.468	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.468	mg/kg
79-01-6	**Trichloroethene**	**3.09**	**0.468**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.468	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.468	mg/kg
75-01-4	Vinyl chloride	ND	0.468	mg/kg
1330-20-7	Xylene (total)	ND	1.40	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	3.82	3.84	ug/Kg	100	62 - 127
1868-53-7	Dibromofluoromethane	3.82	3.72	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	3.82	3.88	ug/Kg	102	71 - 132
17060-07-0	1,2-Dichloroethane-d4	3.82	3.8	ug/Kg	99	62 - 125

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	03/15/2016 19:33	CJR	581708

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**22.5**	**4.68**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	38.20	38.4	ug/Kg	100	62 - 127
1868-53-7	Dibromofluoromethane	38.20	41.3	ug/Kg	108	65 - 130
2037-26-5	Toluene d8	38.20	36.5	ug/Kg	95	71 - 132
17060-07-0	1,2-Dichloroethane-d4	38.20	43.9	ug/Kg	115	62 - 125

Sample Results

ADD-1 @ 10	**Collect Date**	03/10/2016 10:20	**GCAL ID**	21603140307
	Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50	03/18/2016 00:48	JCK	581885

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.223	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.223	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.223	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.223	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.223	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.223	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.223	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.223	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.223	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.223	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.223	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.223	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.223	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.223	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**3.88**	**0.447**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.223	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.223	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.223	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.223	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.223	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.223	mg/kg
78-93-3	2-Butanone	ND	0.223	mg/kg
95-49-8	2-Chlorotoluene	ND	0.223	mg/kg
591-78-6	2-Hexanone	ND	0.223	mg/kg
106-43-4	4-Chlorotoluene	ND	0.223	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.223	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.223	mg/kg
67-64-1	Acetone	ND	1.12	mg/kg
71-43-2	Benzene	ND	0.223	mg/kg
108-86-1	Bromobenzene	ND	0.223	mg/kg
74-97-5	Bromochloromethane	ND	0.223	mg/kg
75-27-4	Bromodichloromethane	ND	0.223	mg/kg
75-25-2	Bromoform	ND	0.223	mg/kg
74-83-9	Bromomethane	ND	0.223	mg/kg
75-15-0	Carbon disulfide	ND	0.223	mg/kg
56-23-5	Carbon tetrachloride	ND	0.223	mg/kg
108-90-7	Chlorobenzene	ND	0.223	mg/kg
75-00-3	Chloroethane	ND	0.223	mg/kg
67-66-3	Chloroform	ND	0.223	mg/kg
74-87-3	Chloromethane	ND	0.223	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**3.81**	**0.223**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.223	mg/kg
124-48-1	Dibromochloromethane	ND	0.223	mg/kg
74-95-3	Dibromomethane	ND	0.223	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.223	mg/kg
100-41-4	Ethylbenzene	ND	0.223	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.223	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.223	mg/kg

Sample Results

ADD-1 @ 10	**Collect Date**	03/10/2016 10:20	**GCAL ID**	21603140307
	Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B (Continued) *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50	03/18/2016 00:48	JCK	581885

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.447	mg/kg
74-88-4	Methyl iodide	ND	0.223	mg/kg
75-09-2	Methylene chloride	ND	0.447	mg/kg
91-20-3	Naphthalene	ND	0.223	mg/kg
104-51-8	n-Butylbenzene	ND	0.223	mg/kg
103-65-1	n-Propylbenzene	ND	0.223	mg/kg
95-47-6	o-Xylene	ND	0.223	mg/kg
135-98-8	sec-Butylbenzene	ND	0.223	mg/kg
100-42-5	Styrene	ND	0.223	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.223	mg/kg
98-06-6	tert-Butylbenzene	ND	0.223	mg/kg
108-88-3	Toluene	ND	0.223	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.223	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.223	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.223	mg/kg
79-01-6	**Trichloroethene**	**2.92**	**0.223**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.223	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.223	mg/kg
75-01-4	Vinyl chloride	ND	0.223	mg/kg
1330-20-7	Xylene (total)	ND	0.670	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1.92	1.99	ug/Kg	104	62 - 127
1868-53-7	Dibromofluoromethane	1.92	1.86	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	1.92	1.94	ug/Kg	101	71 - 132
17060-07-0	1,2-Dichloroethane-d4	1.92	1.92	ug/Kg	100	62 - 125

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1000	03/15/2016 19:55	JCK	581708

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**13.7**	**4.47**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	38.30	39.6	ug/Kg	103	62 - 127
1868-53-7	Dibromofluoromethane	38.30	40.9	ug/Kg	107	65 - 130
2037-26-5	Toluene d8	38.30	36.5	ug/Kg	95	71 - 132
17060-07-0	1,2-Dichloroethane-d4	38.30	43.2	ug/Kg	113	62 - 125

Sample Results

ADD-2 @ 5

Collect Date	03/10/2016 10:25	**GCAL ID**	21603140308
Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	10000	03/18/2016 18:33	JCK	581979

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	47.2	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	47.2	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	47.2	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	47.2	mg/kg
75-34-3	1,1-Dichloroethane	ND	47.2	mg/kg
75-35-4	1,1-Dichloroethene	ND	47.2	mg/kg
563-58-6	1,1-Dichloropropene	ND	47.2	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	47.2	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	47.2	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	47.2	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	47.2	mg/kg
106-93-4	1,2-Dibromoethane	ND	47.2	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	47.2	mg/kg
107-06-2	1,2-Dichloroethane	ND	47.2	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	94.3	mg/kg
78-87-5	1,2-Dichloropropane	ND	47.2	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	47.2	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	47.2	mg/kg
142-28-9	1,3-Dichloropropane	ND	47.2	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	47.2	mg/kg
594-20-7	2,2-Dichloropropane	ND	47.2	mg/kg
78-93-3	2-Butanone	ND	47.2	mg/kg
95-49-8	2-Chlorotoluene	ND	47.2	mg/kg
591-78-6	2-Hexanone	ND	47.2	mg/kg
106-43-4	4-Chlorotoluene	ND	47.2	mg/kg
99-87-6	4-Isopropyltoluene	ND	47.2	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	47.2	mg/kg
67-64-1	Acetone	ND	236	mg/kg
71-43-2	Benzene	ND	47.2	mg/kg
108-86-1	Bromobenzene	ND	47.2	mg/kg
74-97-5	Bromochloromethane	ND	47.2	mg/kg
75-27-4	Bromodichloromethane	ND	47.2	mg/kg
75-25-2	Bromoform	ND	47.2	mg/kg
74-83-9	Bromomethane	ND	47.2	mg/kg
75-15-0	Carbon disulfide	ND	47.2	mg/kg
56-23-5	Carbon tetrachloride	ND	47.2	mg/kg
108-90-7	Chlorobenzene	ND	47.2	mg/kg
75-00-3	Chloroethane	ND	47.2	mg/kg
67-66-3	Chloroform	ND	47.2	mg/kg
74-87-3	Chloromethane	ND	47.2	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	47.2	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	47.2	mg/kg
124-48-1	Dibromochloromethane	ND	47.2	mg/kg
74-95-3	Dibromomethane	ND	47.2	mg/kg
75-71-8	Dichlorodifluoromethane	ND	47.2	mg/kg
100-41-4	Ethylbenzene	ND	47.2	mg/kg
87-68-3	Hexachlorobutadiene	ND	47.2	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	47.2	mg/kg

Sample Results

ADD-2 @ 5	**Collect Date**	03/10/2016 10:25	**GCAL ID**	21603140308
	Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B (Continued) *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	10000	03/18/2016 18:33	JCK	581979

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	94.3	mg/kg
74-88-4	Methyl iodide	ND	47.2	mg/kg
75-09-2	Methylene chloride	ND	94.3	mg/kg
91-20-3	Naphthalene	ND	47.2	mg/kg
104-51-8	n-Butylbenzene	ND	47.2	mg/kg
103-65-1	n-Propylbenzene	ND	47.2	mg/kg
95-47-6	o-Xylene	ND	47.2	mg/kg
135-98-8	sec-Butylbenzene	ND	47.2	mg/kg
100-42-5	Styrene	ND	47.2	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	47.2	mg/kg
98-06-6	tert-Butylbenzene	ND	47.2	mg/kg
108-88-3	Toluene	ND	47.2	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	47.2	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	47.2	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	47.2	mg/kg
79-01-6	**Trichloroethene**	**72.1**	**47.2**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	47.2	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	47.2	mg/kg
75-01-4	Vinyl chloride	ND	47.2	mg/kg
1330-20-7	Xylene (total)	ND	141	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	396	382	ug/Kg	97	62 - 127
1868-53-7	Dibromofluoromethane	396	393	ug/Kg	99	65 - 130
2037-26-5	Toluene d8	396	392	ug/Kg	99	71 - 132
17060-07-0	1,2-Dichloroethane-d4	396	394	ug/Kg	100	62 - 125

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100000	03/18/2016 17:51	JCK	581979

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**3830**	**472**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	3960	3880	ug/Kg	98	62 - 127
1868-53-7	Dibromofluoromethane	3960	3930	ug/Kg	99	65 - 130
2037-26-5	Toluene d8	3960	4040	ug/Kg	102	71 - 132
17060-07-0	1,2-Dichloroethane-d4	3960	3970	ug/Kg	100	62 - 125

Sample Results

ADD-2 @ 10

Collect Date	03/10/2016 10:30	**GCAL ID**	21603140309
Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2500	03/18/2016 01:29	JCK	581885

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	12.4	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	12.4	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	12.4	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	12.4	mg/kg
75-34-3	1,1-Dichloroethane	ND	12.4	mg/kg
75-35-4	1,1-Dichloroethene	ND	12.4	mg/kg
563-58-6	1,1-Dichloropropene	ND	12.4	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	12.4	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	12.4	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	12.4	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	12.4	mg/kg
106-93-4	1,2-Dibromoethane	ND	12.4	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	12.4	mg/kg
107-06-2	1,2-Dichloroethane	ND	12.4	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	24.9	mg/kg
78-87-5	1,2-Dichloropropane	ND	12.4	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	12.4	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	12.4	mg/kg
142-28-9	1,3-Dichloropropane	ND	12.4	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	12.4	mg/kg
594-20-7	2,2-Dichloropropane	ND	12.4	mg/kg
78-93-3	2-Butanone	ND	12.4	mg/kg
95-49-8	2-Chlorotoluene	ND	12.4	mg/kg
591-78-6	2-Hexanone	ND	12.4	mg/kg
106-43-4	4-Chlorotoluene	ND	12.4	mg/kg
99-87-6	4-Isopropyltoluene	ND	12.4	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	12.4	mg/kg
67-64-1	Acetone	ND	62.1	mg/kg
71-43-2	Benzene	ND	12.4	mg/kg
108-86-1	Bromobenzene	ND	12.4	mg/kg
74-97-5	Bromochloromethane	ND	12.4	mg/kg
75-27-4	Bromodichloromethane	ND	12.4	mg/kg
75-25-2	Bromoform	ND	12.4	mg/kg
74-83-9	Bromomethane	ND	12.4	mg/kg
75-15-0	Carbon disulfide	ND	12.4	mg/kg
56-23-5	Carbon tetrachloride	ND	12.4	mg/kg
108-90-7	Chlorobenzene	ND	12.4	mg/kg
75-00-3	Chloroethane	ND	12.4	mg/kg
67-66-3	Chloroform	ND	12.4	mg/kg
74-87-3	Chloromethane	ND	12.4	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**14.7**	**12.4**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	12.4	mg/kg
124-48-1	Dibromochloromethane	ND	12.4	mg/kg
74-95-3	Dibromomethane	ND	12.4	mg/kg
75-71-8	Dichlorodifluoromethane	ND	12.4	mg/kg
100-41-4	Ethylbenzene	ND	12.4	mg/kg
87-68-3	Hexachlorobutadiene	ND	12.4	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	12.4	mg/kg

Sample Results

ADD-2 @ 10	**Collect Date**	03/10/2016 10:30	**GCAL ID**	21603140309
	Receive Date	03/12/2016 09:37	**Matrix**	Solid

EPA 8260B (Continued) *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2500	03/18/2016 01:29	JCK	581885

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	24.9	mg/kg
74-88-4	Methyl iodide	ND	12.4	mg/kg
75-09-2	Methylene chloride	ND	24.9	mg/kg
91-20-3	Naphthalene	ND	12.4	mg/kg
104-51-8	n-Butylbenzene	ND	12.4	mg/kg
103-65-1	n-Propylbenzene	ND	12.4	mg/kg
95-47-6	o-Xylene	ND	12.4	mg/kg
135-98-8	sec-Butylbenzene	ND	12.4	mg/kg
100-42-5	Styrene	ND	12.4	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	12.4	mg/kg
98-06-6	tert-Butylbenzene	ND	12.4	mg/kg
108-88-3	Toluene	ND	12.4	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	12.4	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	12.4	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	12.4	mg/kg
79-01-6	**Trichloroethene**	**35.7**	**12.4**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	12.4	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	12.4	mg/kg
75-01-4	Vinyl chloride	ND	12.4	mg/kg
1330-20-7	Xylene (total)	ND	37.3	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	103	101	ug/Kg	98	62 - 127
1868-53-7	Dibromofluoromethane	103	101	ug/Kg	98	65 - 130
2037-26-5	Toluene d8	103	101	ug/Kg	98	71 - 132
17060-07-0	1,2-Dichloroethane-d4	103	103	ug/Kg	100	62 - 125

EPA 8260B *Results Reported on Dry Weight Basis

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	25000	03/17/2016 22:42	JCK	581885

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**764**	**124**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1030	1020	ug/Kg	99	62 - 127
1868-53-7	Dibromofluoromethane	1030	1000	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	1030	1060	ug/Kg	103	71 - 132
17060-07-0	1,2-Dichloroethane-d4	1030	1030	ug/Kg	100	62 - 125

GC/MS Volatiles QC Summary

Analytical Batch 581708	Client ID	MB581708		LCS581708				LCSD581708				
	GCAL ID	1549990		1549991				1549992				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	03/15/2016 13:11		03/15/2016 11:20				03/15/2016 11:42				
	Matrix	Solid		Solid				Solid				
EPA 8260B		Units Result	mg/kg LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	630-20-6	ND	0.250	2.50	2.36	94	77 - 122	2.50	2.35	94	0	30
1,1,1-Trichloroethane	71-55-6	ND	0.250	2.50	2.74	110	70 - 130	2.50	2.58	103	6	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.250	2.50	2.28	91	66 - 129	2.50	2.31	92	1	30
1,1,2-Trichloroethane	79-00-5	ND	0.250	2.50	2.15	86	74 - 120	2.50	2.20	88	2	30
1,1-Dichloroethane	75-34-3	ND	0.250	2.50	2.63	105	71 - 126	2.50	2.53	101	4	30
1,1-Dichloroethene	75-35-4	ND	0.250	2.50	2.55	102	68 - 129	2.50	2.25	90	13	20
1,1-Dichloropropene	563-58-6	ND	0.250	2.50	2.65	106	70 - 138	2.50	2.55	102	4	30
1,2,3-Trichloropropane	96-18-4	ND	0.250	2.50	2.25	90	63 - 132	2.50	2.21	88	2	30
1,2,4-Trichlorobenzene	120-82-1	ND	0.250	2.50	2.51	100	64 - 135	2.50	2.34	94	7	30
1,2,4-Trimethylbenzene	95-63-6	ND	0.250	2.50	2.41	96	75 - 130	2.50	2.29	92	5	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.250	2.50	2.29	92	60 - 123	2.50	2.28	91	0	30
1,2-Dibromoethane	106-93-4	ND	0.250	2.50	2.23	89	74 - 122	2.50	2.25	90	1	30
1,2-Dichlorobenzene	95-50-1	ND	0.250	2.50	2.21	88	76 - 125	2.50	2.11	84	5	30
1,2-Dichloroethane	107-06-2	ND	0.250	2.50	2.86	114	68 - 126	2.50	2.70	108	6	30
1,2-Dichloroethene(Total)	540-59-0	ND	0.500	5.00	5.39	108	72 - 129	5.00	5.18	104	4	30
1,2-Dichloropropane	78-87-5	ND	0.250	2.50	2.57	103	72 - 129	2.50	2.46	98	4	30
1,3,5-Trimethylbenzene	108-67-8	ND	0.250	2.50	2.29	92	74 - 136	2.50	2.20	88	4	30
1,3-Dichlorobenzene	541-73-1	ND	0.250	2.50	2.21	88	77 - 127	2.50	2.08	83	6	30
1,3-Dichloropropane	142-28-9	ND	0.250	2.50	2.26	90	77 - 121	2.50	2.29	92	1	30
1,4-Dichlorobenzene	106-46-7	ND	0.250	2.50	2.28	91	74 - 123	2.50	2.16	86	5	30
2,2-Dichloropropane	594-20-7	ND	0.250	2.50	2.86	114	74 - 129	2.50	2.72	109	5	30
2-Butanone	78-93-3	ND	0.250	2.50	2.62	105	47 - 142	2.50	2.64	106	1	30
2-Chlorotoluene	95-49-8	ND	0.250	2.50	2.29	92	75 - 132	2.50	2.19	88	4	30
2-Hexanone	591-78-6	ND	0.250	2.50	2.43	97	47 - 137	2.50	2.62	105	8	30
4-Chlorotoluene	106-43-4	ND	0.250	2.50	2.30	92	74 - 133	2.50	2.20	88	4	30
4-Isopropyltoluene	99-87-6	ND	0.250	2.50	2.35	94	71 - 136	2.50	2.21	88	6	30
4-Methyl-2-pentanone	108-10-1	ND	0.250	2.50	2.39	96	52 - 136	2.50	2.54	102	6	30
Acetone	67-64-1	ND	1.25	2.50	2.94	118	38 - 152	2.50	2.86	114	3	30
Benzene	71-43-2	ND	0.250	2.50	2.66	106	73 - 128	2.50	2.55	102	4	20
Bromobenzene	108-86-1	ND	0.250	2.50	2.24	90	73 - 124	2.50	2.18	87	3	30
Bromochloromethane	74-97-5	ND	0.250	2.50	2.70	108	73 - 127	2.50	2.63	105	3	30
Bromodichloromethane	75-27-4	ND	0.250	2.50	2.60	104	74 - 126	2.50	2.49	100	4	30
Bromoform	75-25-2	ND	0.250	2.50	2.44	98	67 - 122	2.50	2.45	98	0	30
Bromomethane	74-83-9	ND	0.250	2.50	2.35	94	48 - 139	2.50	2.21	88	6	30
Carbon disulfide	75-15-0	ND	0.250	2.50	2.68	107	68 - 133	2.50	2.45	98	9	30
Carbon tetrachloride	56-23-5	ND	0.250	2.50	2.91	116	71 - 133	2.50	2.72	109	7	30
Chlorobenzene	108-90-7	ND	0.250	2.50	2.20	88	75 - 121	2.50	2.18	87	1	20
Chloroethane	75-00-3	ND	0.250	2.50	2.32	93	57 - 144	2.50	2.18	87	6	30
Chloroform	67-66-3	ND	0.250	2.50	2.68	107	74 - 124	2.50	2.59	104	3	30
Chloromethane	74-87-3	ND	0.250	2.50	2.90	116	61 - 130	2.50	2.70	108	7	30
cis-1,2-Dichloroethene	156-59-2	ND	0.250	2.50	2.73	109	72 - 130	2.50	2.64	106	3	30
cis-1,3-Dichloropropene	10061-01-5	ND	0.250	2.50	2.74	110	72 - 129	2.50	2.61	104	5	30
Dibromochloromethane	124-48-1	ND	0.250	2.50	2.32	93	74 - 122	2.50	2.35	94	1	30
Dibromomethane	74-95-3	ND	0.250	2.50	2.57	103	72 - 125	2.50	2.50	100	3	30
Dichlorodifluoromethane	75-71-8	ND	0.250	2.50	2.72	109	59 - 138	2.50	2.49	100	9	30
Ethylbenzene	100-41-4	ND	0.250	2.50	2.14	86	74 - 130	2.50	2.11	84	1	30
Hexachlorobutadiene	87-68-3	ND	0.250	2.50	2.49	100	71 - 140	2.50	2.25	90	10	30
Isopropylbenzene (Cumene)	98-82-8	ND	0.250	2.50	2.44	98	74 - 125	2.50	2.37	95	3	30
m,p-Xylene	136777-61-2	ND	0.500	5.00	4.50	90	72 - 128	5.00	4.44	89	1	30
Methyl iodide	74-88-4	ND	0.250	2.50	2.82	113	54 - 140	2.50	2.55	102	10	30
Methylene chloride	75-09-2	ND	0.500	2.50	2.98	119	66 - 130	2.50	2.85	114	4	30
Naphthalene	91-20-3	ND	0.250	2.50	2.20	88	54 - 132	2.50	2.13	85	3	35
n-Butylbenzene	104-51-8	ND	0.250	2.50	2.22	89	68 - 144	2.50	2.05	82	8	30
n-Propylbenzene	103-65-1	ND	0.250	2.50	2.25	90	73 - 137	2.50	2.14	86	5	30
o-Xylene	95-47-6	ND	0.250	2.50	2.37	95	69 - 133	2.50	2.33	93	2	30
sec-Butylbenzene	135-98-8	ND	0.250	2.50	2.21	88	72 - 141	2.50	2.08	83	6	30
Styrene	100-42-5	ND	0.250	2.50	2.56	102	72 - 128	2.50	2.51	100	2	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	0.250	2.50	2.90	116	69 - 126	2.50	2.85	114	2	30

GC/MS Volatiles QC Summary

Analytical Batch 581708	Client ID	MB581708		LCS581708				LCSD581708				
	GCAL ID	1549990		1549991				1549992				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	03/15/2016 13:11		03/15/2016 11:20				03/15/2016 11:42				
	Matrix	Solid		Solid				Solid				
EPA 8260B		Units Result	mg/kg LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
tert-Butylbenzene	98-06-6	ND	0.250	2.50	2.34	94	72 - 136	2.50	2.21	88	6	30
Tetrachloroethene	127-18-4	ND	0.250	2.50	2.31	92	70 - 127	2.50	2.23	89	4	30
Toluene	108-88-3	ND	0.250	2.50	2.22	89	74 - 121	2.50	2.19	88	1	20
trans-1,2-Dichloroethene	156-60-5	ND	0.250	2.50	2.67	107	67 - 134	2.50	2.54	102	5	30
trans-1,3-Dichloropropene	10061-02-6	ND	0.250	2.50	2.87	115	72 - 126	2.50	2.78	111	3	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.250	2.50	2.48	99	44 - 146	2.50	2.44	98	2	30
Trichloroethene	79-01-6	ND	0.250	2.50	2.62	105	78 - 127	2.50	2.51	100	4	20
Trichlorofluoromethane	75-69-4	ND	0.250	2.50	2.47	99	64 - 141	2.50	2.36	94	5	30
Trichlorotrifluoroethane	76-13-1	ND	0.250	2.50	2.58	103	66 - 139	2.50	2.27	91	13	30
Vinyl chloride	75-01-4	ND	0.250	2.50	2.56	102	67 - 131	2.50	2.35	94	9	30
Xylene (total)	1330-20-7	ND	0.750	7.50	6.87	92	71 - 129	7.50	6.77	90	1	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	2.86	114	2.5	2.79	112	62 - 125	2.5	2.69	108	NA	NA
4-Bromofluorobenzene	460-00-4	2.58	103	2.5	2.63	105	62 - 127	2.5	2.65	106	NA	NA
Dibromofluoromethane	1868-53-7	2.65	106	2.5	2.68	107	65 - 130	2.5	2.66	106	NA	NA
Toluene d8	2037-26-5	2.43	97	2.5	2.25	90	71 - 132	2.5	2.31	92	NA	NA

Analytical Batch 581885	Client ID	MB581885		LCS581885				LCSD581885				
	GCAL ID	1550906		1550907				1550908				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	03/17/2016 19:35		03/17/2016 17:50				03/17/2016 18:11				
	Matrix	Solid		Solid				Solid				
EPA 8260B		Units Result	mg/kg LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	630-20-6	ND	0.250	2.50	2.55	102	77 - 122	2.50	2.59	104	2	30
1,1,1-Trichloroethane	71-55-6	ND	0.250	2.50	2.61	104	70 - 130	2.50	2.63	105	1	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.250	2.50	2.43	97	66 - 129	2.50	2.50	100	3	30
1,1,2-Trichloroethane	79-00-5	ND	0.250	2.50	2.51	100	74 - 120	2.50	2.53	101	1	30
1,1-Dichloroethane	75-34-3	ND	0.250	2.50	2.46	98	71 - 126	2.50	2.46	98	0	30
1,1-Dichloroethene	75-35-4	ND	0.250	2.50	2.56	102	68 - 129	2.50	2.55	102	0	20
1,1-Dichloropropene	563-58-6	ND	0.250	2.50	2.69	108	70 - 138	2.50	2.69	108	0	30
1,2,3-Trichloropropane	96-18-4	ND	0.250	2.50	2.56	102	63 - 132	2.50	2.68	107	5	30
1,2,4-Trichlorobenzene	120-82-1	ND	0.250	2.50	2.56	102	64 - 135	2.50	2.59	104	1	30
1,2,4-Trimethylbenzene	95-63-6	ND	0.250	2.50	2.74	110	75 - 130	2.50	2.79	112	2	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.250	2.50	2.67	107	60 - 123	2.50	2.72	109	2	30
1,2-Dibromoethane	106-93-4	ND	0.250	2.50	2.62	105	74 - 122	2.50	2.68	107	2	30
1,2-Dichlorobenzene	95-50-1	ND	0.250	2.50	2.46	98	76 - 125	2.50	2.50	100	2	30
1,2-Dichloroethane	107-06-2	ND	0.250	2.50	2.33	93	68 - 126	2.50	2.36	94	1	30
1,2-Dichloroethene(Total)	540-59-0	ND	0.500	5.00	4.92	98	72 - 129	5.00	4.96	99	1	30
1,2-Dichloropropane	78-87-5	ND	0.250	2.50	2.56	102	72 - 129	2.50	2.58	103	1	30
1,3,5-Trimethylbenzene	108-67-8	ND	0.250	2.50	2.72	109	74 - 136	2.50	2.69	108	1	30
1,3-Dichlorobenzene	541-73-1	ND	0.250	2.50	2.46	98	77 - 127	2.50	2.45	98	0	30
1,3-Dichloropropane	142-28-9	ND	0.250	2.50	2.54	102	77 - 121	2.50	2.57	103	1	30
1,4-Dichlorobenzene	106-46-7	ND	0.250	2.50	2.46	98	74 - 123	2.50	2.43	97	1	30
2,2-Dichloropropane	594-20-7	ND	0.250	2.50	2.69	108	74 - 129	2.50	2.69	108	0	30
2-Butanone	78-93-3	ND	0.250	2.50	2.77	111	47 - 142	2.50	2.85	114	3	30
2-Chlorotoluene	95-49-8	ND	0.250	2.50	2.52	101	75 - 132	2.50	2.52	101	0	30
2-Hexanone	591-78-6	ND	0.250	2.50	2.76	110	47 - 137	2.50	2.89	116	5	30
4-Chlorotoluene	106-43-4	ND	0.250	2.50	2.54	102	74 - 133	2.50	2.54	102	0	30
4-Isopropyltoluene	99-87-6	ND	0.250	2.50	2.84	114	71 - 136	2.50	2.87	115	1	30
4-Methyl-2-pentanone	108-10-1	ND	0.250	2.50	2.71	108	52 - 136	2.50	2.80	112	3	30
Acetone	67-64-1	ND	1.25	2.50	2.27	91	38 - 152	2.50	2.40	96	6	30
Benzene	71-43-2	ND	0.250	2.50	2.51	100	73 - 128	2.50	2.54	102	1	20
Bromobenzene	108-86-1	ND	0.250	2.50	2.41	96	73 - 124	2.50	2.48	99	3	30
Bromochloromethane	74-97-5	ND	0.250	2.50	2.50	100	73 - 127	2.50	2.49	100	0	30
Bromodichloromethane	75-27-4	ND	0.250	2.50	2.50	100	74 - 126	2.50	2.56	102	2	30

GC/MS Volatiles QC Summary

Analytical Batch	Client ID	MB581885		LCS581885				LCSD581885				
581885	GCAL ID	1550906		1550907				1550908				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	03/17/2016 19:35		03/17/2016 17:50				03/17/2016 18:11				
	Matrix	Solid		Solid				Solid				
EPA 8260B		Units Result	mg/kg LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Bromoform	75-25-2	ND	0.250	2.50	2.59	104	67 - 122	2.50	2.64	106	2	30
Bromomethane	74-83-9	ND	0.250	2.50	2.53	101	48 - 139	2.50	2.57	103	2	30
Carbon disulfide	75-15-0	ND	0.250	2.50	2.42	97	68 - 133	2.50	2.41	96	0	30
Carbon tetrachloride	56-23-5	ND	0.250	2.50	2.59	104	71 - 133	2.50	2.55	102	2	30
Chlorobenzene	108-90-7	ND	0.250	2.50	2.47	99	75 - 121	2.50	2.47	99	0	20
Chloroethane	75-00-3	ND	0.250	2.50	2.27	91	57 - 144	2.50	2.40	96	6	30
Chloroform	67-66-3	ND	0.250	2.50	2.42	97	74 - 124	2.50	2.43	97	0	30
Chloromethane	74-87-3	ND	0.250	2.50	2.37	95	61 - 130	2.50	2.35	94	1	30
cis-1,2-Dichloroethene	156-59-2	ND	0.250	2.50	2.46	98	72 - 130	2.50	2.48	99	1	30
cis-1,3-Dichloropropene	10061-01-5	ND	0.250	2.50	2.36	94	72 - 129	2.50	2.44	98	3	30
Dibromochloromethane	124-48-1	ND	0.250	2.50	2.64	106	74 - 122	2.50	2.67	107	1	30
Dibromomethane	74-95-3	ND	0.250	2.50	2.56	102	72 - 125	2.50	2.57	103	0	30
Dichlorodifluoromethane	75-71-8	ND	0.250	2.50	2.54	102	59 - 138	2.50	2.53	101	0	30
Ethylbenzene	100-41-4	ND	0.250	2.50	2.61	104	74 - 130	2.50	2.57	103	2	30
Hexachlorobutadiene	87-68-3	ND	0.250	2.50	2.55	102	71 - 140	2.50	2.52	101	1	30
Isopropylbenzene (Cumene)	98-82-8	ND	0.250	2.50	2.78	111	74 - 125	2.50	2.76	110	1	30
m,p-Xylene	136777-61-2	ND	0.500	5.00	5.42	108	72 - 128	5.00	5.35	107	1	30
Methyl iodide	74-88-4	ND	0.250	2.50	2.96	118	54 - 140	2.50	3.11	124	5	30
Methylene chloride	75-09-2	ND	0.500	2.50	2.59	104	66 - 130	2.50	2.60	104	0	30
Naphthalene	91-20-3	ND	0.250	2.50	2.57	103	54 - 132	2.50	2.66	106	3	35
n-Butylbenzene	104-51-8	ND	0.250	2.50	2.88	115	68 - 144	2.50	2.84	114	1	30
n-Propylbenzene	103-65-1	ND	0.250	2.50	2.56	102	73 - 137	2.50	2.58	103	1	30
o-Xylene	95-47-6	ND	0.250	2.50	2.74	110	69 - 133	2.50	2.76	110	1	30
sec-Butylbenzene	135-98-8	ND	0.250	2.50	2.70	108	72 - 141	2.50	2.70	108	0	30
Styrene	100-42-5	ND	0.250	2.50	2.75	110	72 - 128	2.50	2.76	110	0	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	0.250	2.50	2.60	104	69 - 126	2.50	2.66	106	2	30
tert-Butylbenzene	98-06-6	ND	0.250	2.50	2.60	104	72 - 136	2.50	2.60	104	0	30
Tetrachloroethene	127-18-4	ND	0.250	2.50	2.65	106	70 - 127	2.50	2.59	104	2	30
Toluene	108-88-3	ND	0.250	2.50	2.41	96	74 - 121	2.50	2.41	96	0	20
trans-1,2-Dichloroethene	156-60-5	ND	0.250	2.50	2.47	99	67 - 134	2.50	2.48	99	0	30
trans-1,3-Dichloropropene	10061-02-6	ND	0.250	2.50	2.37	95	72 - 126	2.50	2.43	97	3	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.250	2.50	2.59	104	44 - 146	2.50	2.71	108	5	30
Trichloroethene	79-01-6	ND	0.250	2.50	2.53	101	78 - 127	2.50	2.53	101	0	20
Trichlorofluoromethane	75-69-4	ND	0.250	2.50	2.62	105	64 - 141	2.50	2.61	104	0	30
Trichlorotrifluoroethane	76-13-1	ND	0.250	2.50	2.57	103	66 - 139	2.50	2.51	100	2	30
Vinyl chloride	75-01-4	ND	0.250	2.50	2.41	96	67 - 131	2.50	2.41	96	0	30
Xylene (total)	1330-20-7	ND	0.750	7.50	8.16	109	71 - 129	7.50	8.11	108	1	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	2.53	101	2.5	2.49	100	62 - 125	2.5	2.49	100	NA	NA
4-Bromofluorobenzene	460-00-4	2.61	104	2.5	2.56	102	62 - 127	2.5	2.55	102	NA	NA
Dibromofluoromethane	1868-53-7	2.44	98	2.5	2.48	99	65 - 130	2.5	2.48	99	NA	NA
Toluene d8	2037-26-5	2.51	100	2.5	2.47	99	71 - 132	2.5	2.5	100	NA	NA

Analytical Batch	Client ID	MB581979		LCS581979				LCSD581979				
581979	GCAL ID	1551373		1551374				1551375				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	03/18/2016 16:15		03/18/2016 14:20				03/18/2016 14:41				
	Matrix	Solid		Solid				Solid				
EPA 8260B		Units Result	mg/kg LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	630-20-6	ND	0.250	2.50	2.62	105	77 - 122	2.50	2.46	98	6	30
1,1,1-Trichloroethane	71-55-6	ND	0.250	2.50	2.61	104	70 - 130	2.50	2.41	96	8	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.250	2.50	2.55	102	66 - 129	2.50	2.52	101	1	30
1,1,2-Trichloroethane	79-00-5	ND	0.250	2.50	2.63	105	74 - 120	2.50	2.53	101	4	30
1,1-Dichloroethane	75-34-3	ND	0.250	2.50	2.42	97	71 - 126	2.50	2.27	91	6	30
1,1-Dichloroethene	75-35-4	ND	0.250	2.50	2.61	104	68 - 129	2.50	2.46	98	6	20

GC/MS Volatiles QC Summary

Analytical Batch 581979	Client ID	MB581979	LCS581979	LCSD581979
	GCAL ID	1551373	1551374	1551375
	Sample Type	MB	LCS	LCSD
	Prep Date	NA	NA	NA
	Analysis Date	03/18/2016 16:15	03/18/2016 14:20	03/18/2016 14:41
	Matrix	Solid	Solid	Solid

EPA 8260B		Units	mg/kg	Spike			Control	Spike				RPD
		Result	LOQ	Added	Result	%R	Limits%R	Added	Result	%R	RPD	Limit
1,1-Dichloropropene	563-58-6	ND	0.250	2.50	2.68	107	70 - 138	2.50	2.41	96	11	30
1,2,3-Trichloropropane	96-18-4	ND	0.250	2.50	2.57	103	63 - 132	2.50	2.58	103	0	30
1,2,4-Trichlorobenzene	120-82-1	ND	0.250	2.50	2.56	102	64 - 135	2.50	2.46	98	4	30
1,2,4-Trimethylbenzene	95-63-6	ND	0.250	2.50	2.74	110	75 - 130	2.50	2.61	104	5	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.250	2.50	2.78	111	60 - 123	2.50	2.81	112	1	30
1,2-Dibromoethane	106-93-4	ND	0.250	2.50	2.70	108	74 - 122	2.50	2.65	106	2	30
1,2-Dichlorobenzene	95-50-1	ND	0.250	2.50	2.50	100	76 - 125	2.50	2.39	96	4	30
1,2-Dichloroethane	107-06-2	ND	0.250	2.50	2.36	94	68 - 126	2.50	2.32	93	2	30
1,2-Dichloroethene(Total)	540-59-0	ND	0.500	5.00	4.84	97	72 - 129	5.00	4.53	91	7	30
1,2-Dichloropropane	78-87-5	ND	0.250	2.50	2.56	102	72 - 129	2.50	2.40	96	6	30
1,3,5-Trimethylbenzene	108-67-8	ND	0.250	2.50	2.70	108	74 - 136	2.50	2.55	102	6	30
1,3-Dichlorobenzene	541-73-1	ND	0.250	2.50	2.46	98	77 - 127	2.50	2.32	93	6	30
1,3-Dichloropropane	142-28-9	ND	0.250	2.50	2.60	104	77 - 121	2.50	2.53	101	3	30
1,4-Dichlorobenzene	106-46-7	ND	0.250	2.50	2.43	97	74 - 123	2.50	2.35	94	3	30
2,2-Dichloropropane	594-20-7	ND	0.250	2.50	2.71	108	74 - 129	2.50	2.54	102	6	30
2-Butanone	78-93-3	ND	0.250	2.50	2.76	110	47 - 142	2.50	2.73	109	1	30
2-Chlorotoluene	95-49-8	ND	0.250	2.50	2.53	101	75 - 132	2.50	2.38	95	6	30
2-Hexanone	591-78-6	ND	0.250	2.50	2.98	119	47 - 137	2.50	2.95	118	1	30
4-Chlorotoluene	106-43-4	ND	0.250	2.50	2.54	102	74 - 133	2.50	2.42	97	5	30
4-Isopropyltoluene	99-87-6	ND	0.250	2.50	2.84	114	71 - 136	2.50	2.67	107	6	30
4-Methyl-2-pentanone	108-10-1	ND	0.250	2.50	2.90	116	52 - 136	2.50	2.80	112	4	30
Acetone	67-64-1	ND	1.25	2.50	2.43	97	38 - 152	2.50	2.39	96	2	30
Benzene	71-43-2	ND	0.250	2.50	2.50	100	73 - 128	2.50	2.34	94	7	20
Bromobenzene	108-86-1	ND	0.250	2.50	2.49	100	73 - 124	2.50	2.39	96	4	30
Bromochloromethane	74-97-5	ND	0.250	2.50	2.44	98	73 - 127	2.50	2.41	96	1	30
Bromodichloromethane	75-27-4	ND	0.250	2.50	2.59	104	74 - 126	2.50	2.53	101	2	30
Bromoform	75-25-2	ND	0.250	2.50	2.65	106	67 - 122	2.50	2.64	106	0	30
Bromomethane	74-83-9	ND	0.250	2.50	2.63	105	48 - 139	2.50	2.58	103	2	30
Carbon disulfide	75-15-0	ND	0.250	2.50	2.40	96	68 - 133	2.50	2.23	89	7	30
Carbon tetrachloride	56-23-5	ND	0.250	2.50	2.55	102	71 - 133	2.50	2.38	95	7	30
Chlorobenzene	108-90-7	ND	0.250	2.50	2.49	100	75 - 121	2.50	2.36	94	5	20
Chloroethane	75-00-3	ND	0.250	2.50	2.35	94	57 - 144	2.50	2.18	87	8	30
Chloroform	67-66-3	ND	0.250	2.50	2.43	97	74 - 124	2.50	2.32	93	5	30
Chloromethane	74-87-3	ND	0.250	2.50	2.08	83	61 - 130	2.50	1.91	76	9	30
cis-1,2-Dichloroethene	156-59-2	ND	0.250	2.50	2.44	98	72 - 130	2.50	2.31	92	5	30
cis-1,3-Dichloropropene	10061-01-5	ND	0.250	2.50	2.40	96	72 - 129	2.50	2.33	93	3	30
Dibromochloromethane	124-48-1	ND	0.250	2.50	2.74	110	74 - 122	2.50	2.61	104	5	30
Dibromomethane	74-95-3	ND	0.250	2.50	2.54	102	72 - 125	2.50	2.53	101	0	30
Dichlorodifluoromethane	75-71-8	ND	0.250	2.50	2.43	97	59 - 138	2.50	2.20	88	10	30
Ethylbenzene	100-41-4	ND	0.250	2.50	2.61	104	74 - 130	2.50	2.43	97	7	30
Hexachlorobutadiene	87-68-3	ND	0.250	2.50	2.42	97	71 - 140	2.50	2.23	89	8	30
Isopropylbenzene (Cumene)	98-82-8	ND	0.250	2.50	2.81	112	74 - 125	2.50	2.55	102	10	30
m,p-Xylene	136777-61-2	ND	0.500	5.00	5.48	110	72 - 128	5.00	5.02	100	9	30
Methyl iodide	74-88-4	ND	0.250	2.50	3.02	121	54 - 140	2.50	3.07	123	2	30
Methylene chloride	75-09-2	ND	0.500	2.50	2.31	92	66 - 130	2.50	2.20	88	5	30
Naphthalene	91-20-3	ND	0.250	2.50	2.66	106	54 - 132	2.50	2.67	107	0	35
n-Butylbenzene	104-51-8	ND	0.250	2.50	2.81	112	68 - 144	2.50	2.61	104	7	30
n-Propylbenzene	103-65-1	ND	0.250	2.50	2.57	103	73 - 137	2.50	2.41	96	6	30
o-Xylene	95-47-6	ND	0.250	2.50	2.78	111	69 - 133	2.50	2.57	103	8	30
sec-Butylbenzene	135-98-8	ND	0.250	2.50	2.69	108	72 - 141	2.50	2.51	100	7	30
Styrene	100-42-5	ND	0.250	2.50	2.78	111	72 - 128	2.50	2.62	105	6	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	0.250	2.50	2.69	108	69 - 126	2.50	2.67	107	1	30
tert-Butylbenzene	98-06-6	ND	0.250	2.50	2.60	104	72 - 136	2.50	2.43	97	7	30
Tetrachloroethene	127-18-4	ND	0.250	2.50	2.60	104	70 - 127	2.50	2.40	96	8	30
Toluene	108-88-3	ND	0.250	2.50	2.43	97	74 - 121	2.50	2.24	90	8	20
trans-1,2-Dichloroethene	156-60-5	ND	0.250	2.50	2.40	96	67 - 134	2.50	2.22	89	8	30
trans-1,3-Dichloropropene	10061-02-6	ND	0.250	2.50	2.46	98	72 - 126	2.50	2.38	95	3	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.250	2.50	2.80	112	44 - 146	2.50	2.71	108	3	30

GC/MS Volatiles QC Summary

Analytical Batch 581979	Client ID	MB581979		LCS581979				LCSD581979				
	GCAL ID	1551373		1551374				1551375				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	03/18/2016 16:15		03/18/2016 14:20				03/18/2016 14:41				
	Matrix	Solid		Solid				Solid				
EPA 8260B		Units Result	mg/kg LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Trichloroethene	79-01-6	ND	0.250	2.50	2.51	100	78 - 127	2.50	2.36	94	6	20
Trichlorofluoromethane	75-69-4	ND	0.250	2.50	2.70	108	64 - 141	2.50	2.51	100	7	30
Trichlorotrifluoroethane	76-13-1	ND	0.250	2.50	2.58	103	66 - 139	2.50	2.39	96	8	30
Vinyl chloride	75-01-4	ND	0.250	2.50	2.32	93	67 - 131	2.50	2.12	85	9	30
Xylene (total)	1330-20-7	ND	0.750	7.50	8.26	110	71 - 129	7.50	7.59	101	8	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	2.55	102	2.5	2.48	99	62 - 125	2.5	2.48	99	NA	NA
4-Bromofluorobenzene	460-00-4	2.62	105	2.5	2.52	101	62 - 127	2.5	2.5	100	NA	NA
Dibromofluoromethane	1868-53-7	2.46	98	2.5	2.47	99	65 - 130	2.5	2.5	100	NA	NA
Toluene d8	2037-26-5	2.53	101	2.5	2.52	101	71 - 132	2.5	2.48	99	NA	NA

GCAL ANALYTICAL LABORATORIES, LLC

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CHAIN OF CUSTODY RECORD

Client ID: 4912 - Clearwater Environmental Resources
SDG: 216031403
PM: SAK

Report to:	Bill to:
Client: Jack White / Clearwater Env. Resources	Client: SAA.
Address: 3870 Peachtree Ind Blvd, Ste 340139, Duluth GA 30096	Address:
Contact:	Contact:
Phone: 678 491 4601	Phone:
E-mail: jack.white@clearwaterenv.net	E-mail:

P.O. Number: 1502-1-3
Project Name/Number: RAYLOC PDA
Sampled By: Perry F.

Analytical Requests & Method: VOCs - 8260B

GCAL use only:
Custody Seal used / ☐ yes ☐ no
intact / ☐ yes ☐ no
Temperature °C 2.6 °C E26
36 cpm

☐ Dissolved Analysis Requested
☐ Field filtered
☐ Lab filtered

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	No Containers	Preservative
S	3/10/16	0935		G	WD-2 @ 10'	4	1
S		0945		G	WD-8 @ 5'		2
S		0955		G	PD-2 @ 10'		3
S		1005		G	WD-11 @ 10'		4
S		1015		G	WD-4 @ 4'		5
S		1028		G	ADD-1 @ 6'		6
S		1020		G	ADD-1 @ 10'		7
S		1025		G	ADD-2 @ 5'		8
S		1030		G	ADD-2 @ 10'		9

Air Bill No: 7758 5313 0329

Turn Around Time (Business Days): ☐ 24h* ☐ 48h* ☐ 3 days* ☐ 1 week* ☑ Standard (Per Contract/Quote)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	3/10/16	1600	Jack White	3/10/16	1605
Jack White	3/11/16	0700	HUGO AVEZ	3/11/16	8:54
Brad Lachine	3/11/16	1005	FEDEX		

Note:

By submitting these samples, you agree to GCAL's terms and conditions contained in our most recent schedule of services.

Matrix[1]: W = water, S = solid, L = liquid, T = tissue

*Requires prior approval, rush charges may apply.

We cannot accept verbal changes. Please email written changes to your PM.

Fedex 3-12-16 0937 Shelby Potter 3-12-16 0937

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT

GCAL ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIVING CHECKLIST

216031403

SAMPLE DELIVERY GROUP 216031403	
Client PM SAK 4912 - Clearwater Environmental Resources	**Transport Method** FEDEX
Profile Number 259985	**Received By** McCune, Dodie N.
Line Item(s) 1 - VOC	**Receive Date(s)** 03/12/16

CHECKLIST	YES	NO	NA
Samples received with proper thermal and chemical preservation?	☑	☐	☐
Radioactivity is <1600 cmp? If no, record cmp value in notes section.	☑	☐	☐
Custody seals present and intact?	☑	☐	☐
COC relinquished and complete (including sample IDs, collect dates/times, and sampler name)?	☑	☐	☐
Short holds or RUSH samples received?	☐	☑	☐
All containers received in good condition and within hold time?	☑	☐	☐
All sample labels and containers received match the chain of custody?	☑	☐	☐
Preservation checked at receipt? Exceptions: VOC, Coliform, TOC, Oil and Grease, DOC	☐	☐	☑
Preservative added to any containers?	☐	☑	☐
VOC water containers received with headspace < 6mm?	☐	☐	☑
Received filtered sample volume for dissolved analysis?	☐	☐	☑
Trip blank present in all coolers containing VOC waters?	☐	☐	☑
Samples collected in containers provided by GCAL?	☑	☐	☐

COOLERS

Airbill	Thermometer ID: E26	Temp(°C)
775853130329		2.6

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

Revision 1.5

Page 1 of 1

APPENDIX B
FEBRUARY 2016
LABORATORY REPORT

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC
7979 Innovation Park Dr.
Baton Rouge, LA 70820

Report Date 02/23/2016

GCAL Report 216021623

Project Rayloc

Deliver To	***Additional Recipients***
Jack Wintle Clearwater Env. Resources Peachtree Industrial blvd Duluth, GA 30096 678-491-4601	NONE

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations that may be Utilized in this Report

ND	Indicates the result was Not Detected at the specified reporting limit
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
DL	Detection Limit
DL	Diluted analysis – when appended to Client Sample ID
LOD	Limit of Detection
LOQ	Limit of Quantitation
RE	Re-analysis
00:01	Reported as a time equivalent to 12:00 AM

Reporting Flags that may be Utilized in this Report

J or I	Indicates the result is between the MDL and LOQ
J	DOD flag on analyte in the parent sample for MS/MSD outside acceptance criteria
U	Indicates the compound was analyzed for but not detected
B or V	Indicates the analyte was detected in the associated Method Blank
Q	Indicates a non-compliant QC Result (See Q Flag Application Report)
*****	Indicates a non-compliant or not applicable QC recovery or RPD – see narrative
E	The result is estimated because it exceeded the instrument calibration range
E	Metals - % diference for the serial dilution is > 10%
P	**RPD between primary and confirmation result is greater than 40**

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with The NELAC Institute (TNI) Standard 2009 and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

_____

Authorized Signature
GCAL Report 216021623

Certifications

10/02/2015

Certification	Certification Number
DOD ELAP	L14-243
Alabama	01955
Arkansas	12-060-0
Colorado	01955
Delaware	01955
Florida	E87854
Georgia	01955
Hawaii	01955
Idaho	01955
Illinois	200048
Indiana	01955
Kansas	E-10354
Kentucky	95
Louisiana	01955
Maryland	01955
Massachusetts	01955
Michigan	01955
Mississippi	01955
Missouri	01955
Montana	N/A
Nebraska	01955
New Mexico	01955
North Carolina	618
North Dakota	R-195
Oklahoma	9403
South Carolina	73006001
South Dakota	01955
Tennessee	01955
Texas	T104704178
Vermont	01955
Virginia	460215
USDA Soil Permit	P330-10-00117

Case Narrative

Client: Clearwater Environmental Resources **Report:** 216021623

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the Report Sample Summary page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

VOLATILES MASS SPECTROMETRY

In the EPA 8260B analysis, samples 21602162302 (MW-12 @ 60), 21602162304 (MW-17 @ 30), 21602162306 (MW-20 @ 60), 21602162307 (MW-21 @ 60), 21602162308 (MW-22 @ 60), 21602162309 (MW-23 @ 60), 21602162310 (MW-24 @ 30) and 21602162311 (PT-3 @ 60) had to be diluted due to the presence of non-target background and/or to bracket the concentration of target compounds within the calibration range of the instrument. The dilution is reflected in elevated detection limits.

Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21602162301	MW-7 @ 30	Water	02/10/2016 15:21	02/16/2016 10:15
21602162302	MW-12 @ 60	Water	02/10/2016 13:43	02/16/2016 10:15
21602162303	MW-15 @ 30	Water	02/10/2016 11:36	02/16/2016 10:15
21602162304	MW-17 @ 30	Water	02/10/2016 10:11	02/16/2016 10:15
21602162305	MW-19 @ 30	Water	02/10/2016 10:49	02/16/2016 10:15
21602162306	MW-20 @ 60	Water	02/12/2016 09:36	02/16/2016 10:15
21602162307	MW-21 @ 60	Water	02/12/2016 12:09	02/16/2016 10:15
21602162308	MW-22 @ 60	Water	02/12/2016 11:20	02/16/2016 10:15
21602162309	MW-23 @ 60	Water	02/12/2016 10:32	02/16/2016 10:15
21602162310	MW-24 @ 30	Water	02/10/2016 14:32	02/16/2016 10:15
21602162311	PT-3 @ 60	Water	02/10/2016 08:45	02/16/2016 10:15
21602162312	TRIP BLANK	Water	02/10/2016 00:01	02/16/2016 10:15

Summary of Compounds Detected

MW-12 @ 60

Collect Date 02/10/2016 13:43 **GCAL ID** 21602162302
Receive Date 02/16/2016 10:15 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	31.2	20.0	ug/L
156-59-2	cis-1,2-Dichloroethene	29.8	10.0	ug/L
127-18-4	Tetrachloroethene	867	100	ug/L

MW-17 @ 30

Collect Date 02/10/2016 10:11 **GCAL ID** 21602162304
Receive Date 02/16/2016 10:15 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	395	20.0	ug/L
156-59-2	cis-1,2-Dichloroethene	392	10.0	ug/L
127-18-4	Tetrachloroethene	978	100	ug/L
79-01-6	Trichloroethene	179	10.0	ug/L

MW-19 @ 30

Collect Date 02/10/2016 10:49 **GCAL ID** 21602162305
Receive Date 02/16/2016 10:15 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	33.7	10.0	ug/L
156-59-2	cis-1,2-Dichloroethene	33.7	5.00	ug/L
75-01-4	Vinyl chloride	2.84	2.00	ug/L

MW-20 @ 60

Collect Date 02/12/2016 09:36 **GCAL ID** 21602162306
Receive Date 02/16/2016 10:15 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	1200	500	ug/L
156-59-2	cis-1,2-Dichloroethene	1200	250	ug/L
127-18-4	Tetrachloroethene	2360	250	ug/L
79-01-6	Trichloroethene	330	25.0	ug/L

Summary of Compounds Detected

MW-21 @ 60

Collect Date 02/12/2016 12:09 **GCAL ID** 21602162307
Receive Date 02/16/2016 10:15 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	2700	500	ug/L
79-01-6	Trichloroethene	53.2	50.0	ug/L

MW-22 @ 60

Collect Date 02/12/2016 11:20 **GCAL ID** 21602162308
Receive Date 02/16/2016 10:15 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	4440	1000	ug/L
156-59-2	cis-1,2-Dichloroethene	4440	500	ug/L
127-18-4	Tetrachloroethene	395	50.0	ug/L
79-01-6	Trichloroethene	306	50.0	ug/L
75-01-4	Vinyl chloride	28.7	20.0	ug/L

MW-23 @ 60

Collect Date 02/12/2016 10:32 **GCAL ID** 21602162309
Receive Date 02/16/2016 10:15 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	1570	500	ug/L
156-59-2	cis-1,2-Dichloroethene	1570	250	ug/L
127-18-4	Tetrachloroethene	1170	250	ug/L
79-01-6	Trichloroethene	306	25.0	ug/L

MW-24 @ 30

Collect Date 02/10/2016 14:32 **GCAL ID** 21602162310
Receive Date 02/16/2016 10:15 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	512	100	ug/L
156-59-2	cis-1,2-Dichloroethene	512	50.0	ug/L
127-18-4	Tetrachloroethene	347	50.0	ug/L
79-01-6	Trichloroethene	104	5.00	ug/L

Summary of Compounds Detected

PT-3 @ 60

Collect Date 02/10/2016 08:45 **GCAL ID** 21602162311
Receive Date 02/16/2016 10:15 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	2280	200	ug/L
156-59-2	cis-1,2-Dichloroethene	2240	100	ug/L
127-18-4	Tetrachloroethene	8100	1000	ug/L
79-01-6	Trichloroethene	741	100	ug/L

TRIP BLANK

Collect Date 02/10/2016 00:01 **GCAL ID** 21602162312
Receive Date 02/16/2016 10:15 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
75-09-2	Methylene chloride	9.96	5.00	ug/L

Sample Results

MW-7 @ 30	**Collect Date**	02/10/2016 15:21	**GCAL ID**	21602162301
	Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	02/17/2016 12:27	LBH	579689

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	ND	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	ND	5.00	ug/L
75-34-3	1,1-Dichloroethane	ND	5.00	ug/L
75-35-4	1,1-Dichloroethene	ND	5.00	ug/L
563-58-6	1,1-Dichloropropene	ND	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	ND	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	ND	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	ND	5.00	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.00	ug/L
106-93-4	1,2-Dibromoethane	ND	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	ND	5.00	ug/L
107-06-2	1,2-Dichloroethane	ND	5.00	ug/L
540-59-0	1,2-Dichloroethene(Total)	ND	10.0	ug/L
78-87-5	1,2-Dichloropropane	ND	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	ND	5.00	ug/L
541-73-1	1,3-Dichlorobenzene	ND	5.00	ug/L
142-28-9	1,3-Dichloropropane	ND	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	ND	5.00	ug/L
594-20-7	2,2-Dichloropropane	ND	5.00	ug/L
78-93-3	2-Butanone	ND	5.00	ug/L
95-49-8	2-Chlorotoluene	ND	5.00	ug/L
591-78-6	2-Hexanone	ND	5.00	ug/L
106-43-4	4-Chlorotoluene	ND	5.00	ug/L
99-87-6	4-Isopropyltoluene	ND	5.00	ug/L
108-10-1	4-Methyl-2-pentanone	ND	5.00	ug/L
67-64-1	Acetone	ND	5.00	ug/L
71-43-2	Benzene	ND	5.00	ug/L
108-86-1	Bromobenzene	ND	5.00	ug/L
74-97-5	Bromochloromethane	ND	5.00	ug/L
75-27-4	Bromodichloromethane	ND	5.00	ug/L
75-25-2	Bromoform	ND	5.00	ug/L
74-83-9	Bromomethane	ND	5.00	ug/L
75-15-0	Carbon disulfide	ND	5.00	ug/L
56-23-5	Carbon tetrachloride	ND	5.00	ug/L
108-90-7	Chlorobenzene	ND	5.00	ug/L
75-00-3	Chloroethane	ND	5.00	ug/L
67-66-3	Chloroform	ND	5.00	ug/L
74-87-3	Chloromethane	ND	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	ND	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	ND	5.00	ug/L
124-48-1	Dibromochloromethane	ND	5.00	ug/L
74-95-3	Dibromomethane	ND	5.00	ug/L
75-71-8	Dichlorodifluoromethane	ND	5.00	ug/L
100-41-4	Ethylbenzene	ND	5.00	ug/L
87-68-3	Hexachlorobutadiene	ND	5.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	ND	5.00	ug/L

Sample Results

MW-7 @ 30

Collect Date	02/10/2016 15:21	**GCAL ID**	21602162301
Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	02/17/2016 12:27	LBH	579689

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	10.0	ug/L
74-88-4	Methyl iodide	ND	5.00	ug/L
75-09-2	Methylene chloride	ND	5.00	ug/L
91-20-3	Naphthalene	ND	5.00	ug/L
104-51-8	n-Butylbenzene	ND	5.00	ug/L
103-65-1	n-Propylbenzene	ND	5.00	ug/L
95-47-6	o-Xylene	ND	5.00	ug/L
135-98-8	sec-Butylbenzene	ND	5.00	ug/L
100-42-5	Styrene	ND	5.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	5.00	ug/L
98-06-6	tert-Butylbenzene	ND	5.00	ug/L
127-18-4	Tetrachloroethene	ND	5.00	ug/L
108-88-3	Toluene	ND	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	5.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	ND	5.00	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.00	ug/L
79-01-6	Trichloroethene	ND	5.00	ug/L
75-69-4	Trichlorofluoromethane	ND	5.00	ug/L
76-13-1	Trichlorotrifluoroethane	ND	5.00	ug/L
75-01-4	Vinyl chloride	ND	2.00	ug/L
1330-20-7	Xylene (total)	ND	15.0	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.7	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	50	52	ug/L	104	77 - 127
2037-26-5	Toluene d8	50	51.6	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.2	ug/L	100	71 - 127

MW-12 @ 60

Collect Date	02/10/2016 13:43	**GCAL ID**	21602162302
Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	02/17/2016 17:40	LBH	579689

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	10.0	ug/L
71-55-6	1,1,1-Trichloroethane	ND	10.0	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	ND	10.0	ug/L
79-00-5	1,1,2-Trichloroethane	ND	10.0	ug/L
75-34-3	1,1-Dichloroethane	ND	10.0	ug/L
75-35-4	1,1-Dichloroethene	ND	10.0	ug/L

Sample Results

MW-12 @ 60	**Collect Date**	02/10/2016 13:43	**GCAL ID**	21602162302
	Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	02/17/2016 17:40	LBH	579689

CAS#	Parameter	Result	LOQ	Units
563-58-6	1,1-Dichloropropene	ND	10.0	ug/L
96-18-4	1,2,3-Trichloropropane	ND	10.0	ug/L
120-82-1	1,2,4-Trichlorobenzene	ND	10.0	ug/L
95-63-6	1,2,4-Trimethylbenzene	ND	10.0	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	ND	10.0	ug/L
106-93-4	1,2-Dibromoethane	ND	10.0	ug/L
95-50-1	1,2-Dichlorobenzene	ND	10.0	ug/L
107-06-2	1,2-Dichloroethane	ND	10.0	ug/L
540-59-0	**1,2-Dichloroethene(Total)**	**31.2**	**20.0**	**ug/L**
78-87-5	1,2-Dichloropropane	ND	10.0	ug/L
108-67-8	1,3,5-Trimethylbenzene	ND	10.0	ug/L
541-73-1	1,3-Dichlorobenzene	ND	10.0	ug/L
142-28-9	1,3-Dichloropropane	ND	10.0	ug/L
106-46-7	1,4-Dichlorobenzene	ND	10.0	ug/L
594-20-7	2,2-Dichloropropane	ND	10.0	ug/L
78-93-3	2-Butanone	ND	10.0	ug/L
95-49-8	2-Chlorotoluene	ND	10.0	ug/L
591-78-6	2-Hexanone	ND	10.0	ug/L
106-43-4	4-Chlorotoluene	ND	10.0	ug/L
99-87-6	4-Isopropyltoluene	ND	10.0	ug/L
108-10-1	4-Methyl-2-pentanone	ND	10.0	ug/L
67-64-1	Acetone	ND	10.0	ug/L
71-43-2	Benzene	ND	10.0	ug/L
108-86-1	Bromobenzene	ND	10.0	ug/L
74-97-5	Bromochloromethane	ND	10.0	ug/L
75-27-4	Bromodichloromethane	ND	10.0	ug/L
75-25-2	Bromoform	ND	10.0	ug/L
74-83-9	Bromomethane	ND	10.0	ug/L
75-15-0	Carbon disulfide	ND	10.0	ug/L
56-23-5	Carbon tetrachloride	ND	10.0	ug/L
108-90-7	Chlorobenzene	ND	10.0	ug/L
75-00-3	Chloroethane	ND	10.0	ug/L
67-66-3	Chloroform	ND	10.0	ug/L
74-87-3	Chloromethane	ND	10.0	ug/L
156-59-2	**cis-1,2-Dichloroethene**	**29.8**	**10.0**	**ug/L**
10061-01-5	cis-1,3-Dichloropropene	ND	10.0	ug/L
124-48-1	Dibromochloromethane	ND	10.0	ug/L
74-95-3	Dibromomethane	ND	10.0	ug/L
75-71-8	Dichlorodifluoromethane	ND	10.0	ug/L
100-41-4	Ethylbenzene	ND	10.0	ug/L
87-68-3	Hexachlorobutadiene	ND	10.0	ug/L
98-82-8	Isopropylbenzene (Cumene)	ND	10.0	ug/L
136777-61-2	m,p-Xylene	ND	20.0	ug/L
74-88-4	Methyl iodide	ND	10.0	ug/L
75-09-2	Methylene chloride	ND	10.0	ug/L
91-20-3	Naphthalene	ND	10.0	ug/L
104-51-8	n-Butylbenzene	ND	10.0	ug/L
103-65-1	n-Propylbenzene	ND	10.0	ug/L

Sample Results

MW-12 @ 60

Collect Date	02/10/2016 13:43	**GCAL ID**	21602162302
Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	02/17/2016 17:40	LBH	579689

CAS#	Parameter	Result	LOQ	Units
95-47-6	o-Xylene	ND	10.0	ug/L
135-98-8	sec-Butylbenzene	ND	10.0	ug/L
100-42-5	Styrene	ND	10.0	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	10.0	ug/L
98-06-6	tert-Butylbenzene	ND	10.0	ug/L
108-88-3	Toluene	ND	10.0	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	10.0	ug/L
10061-02-6	trans-1,3-Dichloropropene	ND	10.0	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	ND	10.0	ug/L
79-01-6	Trichloroethene	ND	10.0	ug/L
75-69-4	Trichlorofluoromethane	ND	10.0	ug/L
76-13-1	Trichlorotrifluoroethane	ND	10.0	ug/L
75-01-4	Vinyl chloride	ND	4.00	ug/L
1330-20-7	Xylene (total)	ND	30.0	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	100	94.5	ug/L	95	78 - 130
1868-53-7	Dibromofluoromethane	100	108	ug/L	108	77 - 127
2037-26-5	Toluene d8	100	102	ug/L	102	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	102	ug/L	102	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	20	02/17/2016 15:05	LBH	579689

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**867**	**100**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1000	939	ug/L	94	78 - 130
1868-53-7	Dibromofluoromethane	1000	1080	ug/L	108	77 - 127
2037-26-5	Toluene d8	1000	994	ug/L	99	76 - 134
17060-07-0	1,2-Dichloroethane-d4	1000	1050	ug/L	105	71 - 127

Sample Results

MW-15 @ 30	**Collect Date**	02/10/2016 11:36	**GCAL ID**	21602162303
	Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	02/17/2016 12:49	LBH	579689

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	ND	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	ND	5.00	ug/L
75-34-3	1,1-Dichloroethane	ND	5.00	ug/L
75-35-4	1,1-Dichloroethene	ND	5.00	ug/L
563-58-6	1,1-Dichloropropene	ND	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	ND	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	ND	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	ND	5.00	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.00	ug/L
106-93-4	1,2-Dibromoethane	ND	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	ND	5.00	ug/L
107-06-2	1,2-Dichloroethane	ND	5.00	ug/L
540-59-0	1,2-Dichloroethene(Total)	ND	10.0	ug/L
78-87-5	1,2-Dichloropropane	ND	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	ND	5.00	ug/L
541-73-1	1,3-Dichlorobenzene	ND	5.00	ug/L
142-28-9	1,3-Dichloropropane	ND	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	ND	5.00	ug/L
594-20-7	2,2-Dichloropropane	ND	5.00	ug/L
78-93-3	2-Butanone	ND	5.00	ug/L
95-49-8	2-Chlorotoluene	ND	5.00	ug/L
591-78-6	2-Hexanone	ND	5.00	ug/L
106-43-4	4-Chlorotoluene	ND	5.00	ug/L
99-87-6	4-Isopropyltoluene	ND	5.00	ug/L
108-10-1	4-Methyl-2-pentanone	ND	5.00	ug/L
67-64-1	Acetone	ND	5.00	ug/L
71-43-2	Benzene	ND	5.00	ug/L
108-86-1	Bromobenzene	ND	5.00	ug/L
74-97-5	Bromochloromethane	ND	5.00	ug/L
75-27-4	Bromodichloromethane	ND	5.00	ug/L
75-25-2	Bromoform	ND	5.00	ug/L
74-83-9	Bromomethane	ND	5.00	ug/L
75-15-0	Carbon disulfide	ND	5.00	ug/L
56-23-5	Carbon tetrachloride	ND	5.00	ug/L
108-90-7	Chlorobenzene	ND	5.00	ug/L
75-00-3	Chloroethane	ND	5.00	ug/L
67-66-3	Chloroform	ND	5.00	ug/L
74-87-3	Chloromethane	ND	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	ND	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	ND	5.00	ug/L
124-48-1	Dibromochloromethane	ND	5.00	ug/L
74-95-3	Dibromomethane	ND	5.00	ug/L
75-71-8	Dichlorodifluoromethane	ND	5.00	ug/L
100-41-4	Ethylbenzene	ND	5.00	ug/L
87-68-3	Hexachlorobutadiene	ND	5.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	ND	5.00	ug/L

Sample Results

MW-15 @ 30

Collect Date	02/10/2016 11:36	**GCAL ID**	21602162303
Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	02/17/2016 12:49	LBH	579689

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	10.0	ug/L
74-88-4	Methyl iodide	ND	5.00	ug/L
75-09-2	Methylene chloride	ND	5.00	ug/L
91-20-3	Naphthalene	ND	5.00	ug/L
104-51-8	n-Butylbenzene	ND	5.00	ug/L
103-65-1	n-Propylbenzene	ND	5.00	ug/L
95-47-6	o-Xylene	ND	5.00	ug/L
135-98-8	sec-Butylbenzene	ND	5.00	ug/L
100-42-5	Styrene	ND	5.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	5.00	ug/L
98-06-6	tert-Butylbenzene	ND	5.00	ug/L
127-18-4	Tetrachloroethene	ND	5.00	ug/L
108-88-3	Toluene	ND	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	5.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	ND	5.00	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.00	ug/L
79-01-6	Trichloroethene	ND	5.00	ug/L
75-69-4	Trichlorofluoromethane	ND	5.00	ug/L
76-13-1	Trichlorotrifluoroethane	ND	5.00	ug/L
75-01-4	Vinyl chloride	ND	2.00	ug/L
1330-20-7	Xylene (total)	ND	15.0	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.2	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	52.6	ug/L	105	77 - 127
2037-26-5	Toluene d8	50	51.1	ug/L	102	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.7	ug/L	99	71 - 127

MW-17 @ 30

Collect Date	02/10/2016 10:11	**GCAL ID**	21602162304
Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	02/17/2016 18:02	LBH	579689

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	10.0	ug/L
71-55-6	1,1,1-Trichloroethane	ND	10.0	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	ND	10.0	ug/L
79-00-5	1,1,2-Trichloroethane	ND	10.0	ug/L
75-34-3	1,1-Dichloroethane	ND	10.0	ug/L
75-35-4	1,1-Dichloroethene	ND	10.0	ug/L

Sample Results

MW-17 @ 30	**Collect Date**	02/10/2016 10:11	**GCAL ID**	21602162304
	Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	02/17/2016 18:02	LBH	579689

CAS#	Parameter	Result	LOQ	Units
563-58-6	1,1-Dichloropropene	ND	10.0	ug/L
96-18-4	1,2,3-Trichloropropane	ND	10.0	ug/L
120-82-1	1,2,4-Trichlorobenzene	ND	10.0	ug/L
95-63-6	1,2,4-Trimethylbenzene	ND	10.0	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	ND	10.0	ug/L
106-93-4	1,2-Dibromoethane	ND	10.0	ug/L
95-50-1	1,2-Dichlorobenzene	ND	10.0	ug/L
107-06-2	1,2-Dichloroethane	ND	10.0	ug/L
540-59-0	**1,2-Dichloroethene(Total)**	**395**	**20.0**	**ug/L**
78-87-5	1,2-Dichloropropane	ND	10.0	ug/L
108-67-8	1,3,5-Trimethylbenzene	ND	10.0	ug/L
541-73-1	1,3-Dichlorobenzene	ND	10.0	ug/L
142-28-9	1,3-Dichloropropane	ND	10.0	ug/L
106-46-7	1,4-Dichlorobenzene	ND	10.0	ug/L
594-20-7	2,2-Dichloropropane	ND	10.0	ug/L
78-93-3	2-Butanone	ND	10.0	ug/L
95-49-8	2-Chlorotoluene	ND	10.0	ug/L
591-78-6	2-Hexanone	ND	10.0	ug/L
106-43-4	4-Chlorotoluene	ND	10.0	ug/L
99-87-6	4-Isopropyltoluene	ND	10.0	ug/L
108-10-1	4-Methyl-2-pentanone	ND	10.0	ug/L
67-64-1	Acetone	ND	10.0	ug/L
71-43-2	Benzene	ND	10.0	ug/L
108-86-1	Bromobenzene	ND	10.0	ug/L
74-97-5	Bromochloromethane	ND	10.0	ug/L
75-27-4	Bromodichloromethane	ND	10.0	ug/L
75-25-2	Bromoform	ND	10.0	ug/L
74-83-9	Bromomethane	ND	10.0	ug/L
75-15-0	Carbon disulfide	ND	10.0	ug/L
56-23-5	Carbon tetrachloride	ND	10.0	ug/L
108-90-7	Chlorobenzene	ND	10.0	ug/L
75-00-3	Chloroethane	ND	10.0	ug/L
67-66-3	Chloroform	ND	10.0	ug/L
74-87-3	Chloromethane	ND	10.0	ug/L
156-59-2	**cis-1,2-Dichloroethene**	**392**	**10.0**	**ug/L**
10061-01-5	cis-1,3-Dichloropropene	ND	10.0	ug/L
124-48-1	Dibromochloromethane	ND	10.0	ug/L
74-95-3	Dibromomethane	ND	10.0	ug/L
75-71-8	Dichlorodifluoromethane	ND	10.0	ug/L
100-41-4	Ethylbenzene	ND	10.0	ug/L
87-68-3	Hexachlorobutadiene	ND	10.0	ug/L
98-82-8	Isopropylbenzene (Cumene)	ND	10.0	ug/L
136777-61-2	m,p-Xylene	ND	20.0	ug/L
74-88-4	Methyl iodide	ND	10.0	ug/L
75-09-2	Methylene chloride	ND	10.0	ug/L
91-20-3	Naphthalene	ND	10.0	ug/L
104-51-8	n-Butylbenzene	ND	10.0	ug/L
103-65-1	n-Propylbenzene	ND	10.0	ug/L

Sample Results

MW-17 @ 30	**Collect Date**	02/10/2016 10:11	**GCAL ID**	21602162304
	Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	02/17/2016 18:02	LBH	579689

CAS#	Parameter	Result	LOQ	Units
95-47-6	o-Xylene	ND	10.0	ug/L
135-98-8	sec-Butylbenzene	ND	10.0	ug/L
100-42-5	Styrene	ND	10.0	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	10.0	ug/L
98-06-6	tert-Butylbenzene	ND	10.0	ug/L
108-88-3	Toluene	ND	10.0	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	10.0	ug/L
10061-02-6	trans-1,3-Dichloropropene	ND	10.0	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	ND	10.0	ug/L
79-01-6	**Trichloroethene**	**179**	**10.0**	**ug/L**
75-69-4	Trichlorofluoromethane	ND	10.0	ug/L
76-13-1	Trichlorotrifluoroethane	ND	10.0	ug/L
75-01-4	Vinyl chloride	ND	4.00	ug/L
1330-20-7	Xylene (total)	ND	30.0	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	100	96	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	100	105	ug/L	105	77 - 127
2037-26-5	Toluene d8	100	102	ug/L	102	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	100	ug/L	100	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	20	02/17/2016 15:27	LBH	579689

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**978**	**100**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1000	975	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	1000	1070	ug/L	107	77 - 127
2037-26-5	Toluene d8	1000	1010	ug/L	101	76 - 134
17060-07-0	1,2-Dichloroethane-d4	1000	1040	ug/L	104	71 - 127

Sample Results

MW-19 @ 30	**Collect Date**	02/10/2016 10:49	**GCAL ID**	21602162305
	Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	02/17/2016 13:11	LBH	579689

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	ND	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	ND	5.00	ug/L
75-34-3	1,1-Dichloroethane	ND	5.00	ug/L
75-35-4	1,1-Dichloroethene	ND	5.00	ug/L
563-58-6	1,1-Dichloropropene	ND	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	ND	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	ND	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	ND	5.00	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.00	ug/L
106-93-4	1,2-Dibromoethane	ND	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	ND	5.00	ug/L
107-06-2	1,2-Dichloroethane	ND	5.00	ug/L
540-59-0	**1,2-Dichloroethene(Total)**	**33.7**	**10.0**	**ug/L**
78-87-5	1,2-Dichloropropane	ND	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	ND	5.00	ug/L
541-73-1	1,3-Dichlorobenzene	ND	5.00	ug/L
142-28-9	1,3-Dichloropropane	ND	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	ND	5.00	ug/L
594-20-7	2,2-Dichloropropane	ND	5.00	ug/L
78-93-3	2-Butanone	ND	5.00	ug/L
95-49-8	2-Chlorotoluene	ND	5.00	ug/L
591-78-6	2-Hexanone	ND	5.00	ug/L
106-43-4	4-Chlorotoluene	ND	5.00	ug/L
99-87-6	4-Isopropyltoluene	ND	5.00	ug/L
108-10-1	4-Methyl-2-pentanone	ND	5.00	ug/L
67-64-1	Acetone	ND	5.00	ug/L
71-43-2	Benzene	ND	5.00	ug/L
108-86-1	Bromobenzene	ND	5.00	ug/L
74-97-5	Bromochloromethane	ND	5.00	ug/L
75-27-4	Bromodichloromethane	ND	5.00	ug/L
75-25-2	Bromoform	ND	5.00	ug/L
74-83-9	Bromomethane	ND	5.00	ug/L
75-15-0	Carbon disulfide	ND	5.00	ug/L
56-23-5	Carbon tetrachloride	ND	5.00	ug/L
108-90-7	Chlorobenzene	ND	5.00	ug/L
75-00-3	Chloroethane	ND	5.00	ug/L
67-66-3	Chloroform	ND	5.00	ug/L
74-87-3	Chloromethane	ND	5.00	ug/L
156-59-2	**cis-1,2-Dichloroethene**	**33.7**	**5.00**	**ug/L**
10061-01-5	cis-1,3-Dichloropropene	ND	5.00	ug/L
124-48-1	Dibromochloromethane	ND	5.00	ug/L
74-95-3	Dibromomethane	ND	5.00	ug/L
75-71-8	Dichlorodifluoromethane	ND	5.00	ug/L
100-41-4	Ethylbenzene	ND	5.00	ug/L
87-68-3	Hexachlorobutadiene	ND	5.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	ND	5.00	ug/L

Sample Results

MW-19 @ 30

Collect Date	02/10/2016 10:49	**GCAL ID**	21602162305
Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	02/17/2016 13:11	LBH	579689

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	10.0	ug/L
74-88-4	Methyl iodide	ND	5.00	ug/L
75-09-2	Methylene chloride	ND	5.00	ug/L
91-20-3	Naphthalene	ND	5.00	ug/L
104-51-8	n-Butylbenzene	ND	5.00	ug/L
103-65-1	n-Propylbenzene	ND	5.00	ug/L
95-47-6	o-Xylene	ND	5.00	ug/L
135-98-8	sec-Butylbenzene	ND	5.00	ug/L
100-42-5	Styrene	ND	5.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	5.00	ug/L
98-06-6	tert-Butylbenzene	ND	5.00	ug/L
127-18-4	Tetrachloroethene	ND	5.00	ug/L
108-88-3	Toluene	ND	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	5.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	ND	5.00	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.00	ug/L
79-01-6	Trichloroethene	ND	5.00	ug/L
75-69-4	Trichlorofluoromethane	ND	5.00	ug/L
76-13-1	Trichlorotrifluoroethane	ND	5.00	ug/L
75-01-4	**Vinyl chloride**	**2.84**	**2.00**	**ug/L**
1330-20-7	Xylene (total)	ND	15.0	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.8	ug/L	100	78 - 130
1868-53-7	Dibromofluoromethane	50	51.8	ug/L	104	77 - 127
2037-26-5	Toluene d8	50	51.5	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.4	ug/L	101	71 - 127

MW-20 @ 60

Collect Date	02/12/2016 09:36	**GCAL ID**	21602162306
Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	02/17/2016 18:25	LBH	579689

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	25.0	ug/L
71-55-6	1,1,1-Trichloroethane	ND	25.0	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	ND	25.0	ug/L
79-00-5	1,1,2-Trichloroethane	ND	25.0	ug/L
75-34-3	1,1-Dichloroethane	ND	25.0	ug/L
75-35-4	1,1-Dichloroethene	ND	25.0	ug/L

Sample Results

MW-20 @ 60

Collect Date	02/12/2016 09:36	**GCAL ID**	21602162306
Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	02/17/2016 18:25	LBH	579689

CAS#	Parameter	Result	LOQ	Units
563-58-6	1,1-Dichloropropene	ND	25.0	ug/L
96-18-4	1,2,3-Trichloropropane	ND	25.0	ug/L
120-82-1	1,2,4-Trichlorobenzene	ND	25.0	ug/L
95-63-6	1,2,4-Trimethylbenzene	ND	25.0	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	ND	25.0	ug/L
106-93-4	1,2-Dibromoethane	ND	25.0	ug/L
95-50-1	1,2-Dichlorobenzene	ND	25.0	ug/L
107-06-2	1,2-Dichloroethane	ND	25.0	ug/L
78-87-5	1,2-Dichloropropane	ND	25.0	ug/L
108-67-8	1,3,5-Trimethylbenzene	ND	25.0	ug/L
541-73-1	1,3-Dichlorobenzene	ND	25.0	ug/L
142-28-9	1,3-Dichloropropane	ND	25.0	ug/L
106-46-7	1,4-Dichlorobenzene	ND	25.0	ug/L
594-20-7	2,2-Dichloropropane	ND	25.0	ug/L
78-93-3	2-Butanone	ND	25.0	ug/L
95-49-8	2-Chlorotoluene	ND	25.0	ug/L
591-78-6	2-Hexanone	ND	25.0	ug/L
106-43-4	4-Chlorotoluene	ND	25.0	ug/L
99-87-6	4-Isopropyltoluene	ND	25.0	ug/L
108-10-1	4-Methyl-2-pentanone	ND	25.0	ug/L
67-64-1	Acetone	ND	25.0	ug/L
71-43-2	Benzene	ND	25.0	ug/L
108-86-1	Bromobenzene	ND	25.0	ug/L
74-97-5	Bromochloromethane	ND	25.0	ug/L
75-27-4	Bromodichloromethane	ND	25.0	ug/L
75-25-2	Bromoform	ND	25.0	ug/L
74-83-9	Bromomethane	ND	25.0	ug/L
75-15-0	Carbon disulfide	ND	25.0	ug/L
56-23-5	Carbon tetrachloride	ND	25.0	ug/L
108-90-7	Chlorobenzene	ND	25.0	ug/L
75-00-3	Chloroethane	ND	25.0	ug/L
67-66-3	Chloroform	ND	25.0	ug/L
74-87-3	Chloromethane	ND	25.0	ug/L
10061-01-5	cis-1,3-Dichloropropene	ND	25.0	ug/L
124-48-1	Dibromochloromethane	ND	25.0	ug/L
74-95-3	Dibromomethane	ND	25.0	ug/L
75-71-8	Dichlorodifluoromethane	ND	25.0	ug/L
100-41-4	Ethylbenzene	ND	25.0	ug/L
87-68-3	Hexachlorobutadiene	ND	25.0	ug/L
98-82-8	Isopropylbenzene (Cumene)	ND	25.0	ug/L
136777-61-2	m,p-Xylene	ND	50.0	ug/L
74-88-4	Methyl iodide	ND	25.0	ug/L
75-09-2	Methylene chloride	ND	25.0	ug/L
91-20-3	Naphthalene	ND	25.0	ug/L
104-51-8	n-Butylbenzene	ND	25.0	ug/L
103-65-1	n-Propylbenzene	ND	25.0	ug/L
95-47-6	o-Xylene	ND	25.0	ug/L
135-98-8	sec-Butylbenzene	ND	25.0	ug/L

Sample Results

MW-20 @ 60	**Collect Date**	02/12/2016 09:36	**GCAL ID**	21602162306
	Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	02/17/2016 18:25	LBH	579689

CAS#	Parameter	Result	LOQ	Units
100-42-5	Styrene	ND	25.0	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	25.0	ug/L
98-06-6	tert-Butylbenzene	ND	25.0	ug/L
108-88-3	Toluene	ND	25.0	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	25.0	ug/L
10061-02-6	trans-1,3-Dichloropropene	ND	25.0	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	ND	25.0	ug/L
79-01-6	**Trichloroethene**	**330**	**25.0**	**ug/L**
75-69-4	Trichlorofluoromethane	ND	25.0	ug/L
76-13-1	Trichlorotrifluoroethane	ND	25.0	ug/L
75-01-4	Vinyl chloride	ND	10.0	ug/L
1330-20-7	Xylene (total)	ND	75.0	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	250	237	ug/L	95	78 - 130
1868-53-7	Dibromofluoromethane	250	264	ug/L	106	77 - 127
2037-26-5	Toluene d8	250	252	ug/L	101	76 - 134
17060-07-0	1,2-Dichloroethane-d4	250	251	ug/L	100	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50	02/17/2016 15:49	LBH	579689

CAS#	Parameter	Result	LOQ	Units
540-59-0	**1,2-Dichloroethene(Total)**	**1200**	**500**	**ug/L**
156-59-2	**cis-1,2-Dichloroethene**	**1200**	**250**	**ug/L**
127-18-4	**Tetrachloroethene**	**2360**	**250**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2500	2400	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	2500	2640	ug/L	106	77 - 127
2037-26-5	Toluene d8	2500	2600	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	2500	2550	ug/L	102	71 - 127

Sample Results

MW-21 @ 60	**Collect Date**	02/12/2016 12:09	**GCAL ID**	21602162307
	Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	10	02/21/2016 22:49	JCK	580018

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	50.0	ug/L
71-55-6	1,1,1-Trichloroethane	ND	50.0	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	ND	50.0	ug/L
79-00-5	1,1,2-Trichloroethane	ND	50.0	ug/L
75-34-3	1,1-Dichloroethane	ND	50.0	ug/L
75-35-4	1,1-Dichloroethene	ND	50.0	ug/L
563-58-6	1,1-Dichloropropene	ND	50.0	ug/L
96-18-4	1,2,3-Trichloropropane	ND	50.0	ug/L
120-82-1	1,2,4-Trichlorobenzene	ND	50.0	ug/L
95-63-6	1,2,4-Trimethylbenzene	ND	50.0	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	ND	50.0	ug/L
106-93-4	1,2-Dibromoethane	ND	50.0	ug/L
95-50-1	1,2-Dichlorobenzene	ND	50.0	ug/L
107-06-2	1,2-Dichloroethane	ND	50.0	ug/L
540-59-0	1,2-Dichloroethene(Total)	ND	100	ug/L
78-87-5	1,2-Dichloropropane	ND	50.0	ug/L
108-67-8	1,3,5-Trimethylbenzene	ND	50.0	ug/L
541-73-1	1,3-Dichlorobenzene	ND	50.0	ug/L
142-28-9	1,3-Dichloropropane	ND	50.0	ug/L
106-46-7	1,4-Dichlorobenzene	ND	50.0	ug/L
594-20-7	2,2-Dichloropropane	ND	50.0	ug/L
78-93-3	2-Butanone	ND	50.0	ug/L
95-49-8	2-Chlorotoluene	ND	50.0	ug/L
591-78-6	2-Hexanone	ND	50.0	ug/L
106-43-4	4-Chlorotoluene	ND	50.0	ug/L
99-87-6	4-Isopropyltoluene	ND	50.0	ug/L
108-10-1	4-Methyl-2-pentanone	ND	50.0	ug/L
67-64-1	Acetone	ND	50.0	ug/L
71-43-2	Benzene	ND	50.0	ug/L
108-86-1	Bromobenzene	ND	50.0	ug/L
74-97-5	Bromochloromethane	ND	50.0	ug/L
75-27-4	Bromodichloromethane	ND	50.0	ug/L
75-25-2	Bromoform	ND	50.0	ug/L
74-83-9	Bromomethane	ND	50.0	ug/L
75-15-0	Carbon disulfide	ND	50.0	ug/L
56-23-5	Carbon tetrachloride	ND	50.0	ug/L
108-90-7	Chlorobenzene	ND	50.0	ug/L
75-00-3	Chloroethane	ND	50.0	ug/L
67-66-3	Chloroform	ND	50.0	ug/L
74-87-3	Chloromethane	ND	50.0	ug/L
156-59-2	cis-1,2-Dichloroethene	ND	50.0	ug/L
10061-01-5	cis-1,3-Dichloropropene	ND	50.0	ug/L
124-48-1	Dibromochloromethane	ND	50.0	ug/L
74-95-3	Dibromomethane	ND	50.0	ug/L
75-71-8	Dichlorodifluoromethane	ND	50.0	ug/L
100-41-4	Ethylbenzene	ND	50.0	ug/L
87-68-3	Hexachlorobutadiene	ND	50.0	ug/L
98-82-8	Isopropylbenzene (Cumene)	ND	50.0	ug/L

Sample Results

MW-21 @ 60	**Collect Date**	02/12/2016 12:09	**GCAL ID**	21602162307
	Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	10	02/21/2016 22:49	JCK	580018

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	100	ug/L
74-88-4	Methyl iodide	ND	50.0	ug/L
75-09-2	Methylene chloride	ND	50.0	ug/L
91-20-3	Naphthalene	ND	50.0	ug/L
104-51-8	n-Butylbenzene	ND	50.0	ug/L
103-65-1	n-Propylbenzene	ND	50.0	ug/L
95-47-6	o-Xylene	ND	50.0	ug/L
135-98-8	sec-Butylbenzene	ND	50.0	ug/L
100-42-5	Styrene	ND	50.0	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	50.0	ug/L
98-06-6	tert-Butylbenzene	ND	50.0	ug/L
108-88-3	Toluene	ND	50.0	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	50.0	ug/L
10061-02-6	trans-1,3-Dichloropropene	ND	50.0	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	ND	50.0	ug/L
79-01-6	**Trichloroethene**	**53.2**	**50.0**	**ug/L**
75-69-4	Trichlorofluoromethane	ND	50.0	ug/L
76-13-1	Trichlorotrifluoroethane	ND	50.0	ug/L
75-01-4	Vinyl chloride	ND	20.0	ug/L
1330-20-7	Xylene (total)	ND	150	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	500	448	ug/L	90	78 - 130
1868-53-7	Dibromofluoromethane	500	542	ug/L	108	77 - 127
2037-26-5	Toluene d8	500	514	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	500	555	ug/L	111	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	02/21/2016 22:29	JCK	580018

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**2700**	**500**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	5000	4520	ug/L	90	78 - 130
1868-53-7	Dibromofluoromethane	5000	5390	ug/L	108	77 - 127
2037-26-5	Toluene d8	5000	5150	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	5000	5450	ug/L	109	71 - 127

Sample Results

MW-22 @ 60	**Collect Date**	02/12/2016 11:20	**GCAL ID**	21602162308
	Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	10	02/17/2016 20:16	JCK	579689

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	50.0	ug/L
71-55-6	1,1,1-Trichloroethane	ND	50.0	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	ND	50.0	ug/L
79-00-5	1,1,2-Trichloroethane	ND	50.0	ug/L
75-34-3	1,1-Dichloroethane	ND	50.0	ug/L
75-35-4	1,1-Dichloroethene	ND	50.0	ug/L
563-58-6	1,1-Dichloropropene	ND	50.0	ug/L
96-18-4	1,2,3-Trichloropropane	ND	50.0	ug/L
120-82-1	1,2,4-Trichlorobenzene	ND	50.0	ug/L
95-63-6	1,2,4-Trimethylbenzene	ND	50.0	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	ND	50.0	ug/L
106-93-4	1,2-Dibromoethane	ND	50.0	ug/L
95-50-1	1,2-Dichlorobenzene	ND	50.0	ug/L
107-06-2	1,2-Dichloroethane	ND	50.0	ug/L
78-87-5	1,2-Dichloropropane	ND	50.0	ug/L
108-67-8	1,3,5-Trimethylbenzene	ND	50.0	ug/L
541-73-1	1,3-Dichlorobenzene	ND	50.0	ug/L
142-28-9	1,3-Dichloropropane	ND	50.0	ug/L
106-46-7	1,4-Dichlorobenzene	ND	50.0	ug/L
594-20-7	2,2-Dichloropropane	ND	50.0	ug/L
78-93-3	2-Butanone	ND	50.0	ug/L
95-49-8	2-Chlorotoluene	ND	50.0	ug/L
591-78-6	2-Hexanone	ND	50.0	ug/L
106-43-4	4-Chlorotoluene	ND	50.0	ug/L
99-87-6	4-Isopropyltoluene	ND	50.0	ug/L
108-10-1	4-Methyl-2-pentanone	ND	50.0	ug/L
67-64-1	Acetone	ND	50.0	ug/L
71-43-2	Benzene	ND	50.0	ug/L
108-86-1	Bromobenzene	ND	50.0	ug/L
74-97-5	Bromochloromethane	ND	50.0	ug/L
75-27-4	Bromodichloromethane	ND	50.0	ug/L
75-25-2	Bromoform	ND	50.0	ug/L
74-83-9	Bromomethane	ND	50.0	ug/L
75-15-0	Carbon disulfide	ND	50.0	ug/L
56-23-5	Carbon tetrachloride	ND	50.0	ug/L
108-90-7	Chlorobenzene	ND	50.0	ug/L
75-00-3	Chloroethane	ND	50.0	ug/L
67-66-3	Chloroform	ND	50.0	ug/L
74-87-3	Chloromethane	ND	50.0	ug/L
10061-01-5	cis-1,3-Dichloropropene	ND	50.0	ug/L
124-48-1	Dibromochloromethane	ND	50.0	ug/L
74-95-3	Dibromomethane	ND	50.0	ug/L
75-71-8	Dichlorodifluoromethane	ND	50.0	ug/L
100-41-4	Ethylbenzene	ND	50.0	ug/L
87-68-3	Hexachlorobutadiene	ND	50.0	ug/L
98-82-8	Isopropylbenzene (Cumene)	ND	50.0	ug/L
136777-61-2	m,p-Xylene	ND	100	ug/L
74-88-4	Methyl iodide	ND	50.0	ug/L

Sample Results

MW-22 @ 60	**Collect Date**	02/12/2016 11:20	**GCAL ID**	21602162308
	Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	10	02/17/2016 20:16	JCK	579689

CAS#	Parameter	Result	LOQ	Units
75-09-2	Methylene chloride	ND	50.0	ug/L
91-20-3	Naphthalene	ND	50.0	ug/L
104-51-8	n-Butylbenzene	ND	50.0	ug/L
103-65-1	n-Propylbenzene	ND	50.0	ug/L
95-47-6	o-Xylene	ND	50.0	ug/L
135-98-8	sec-Butylbenzene	ND	50.0	ug/L
100-42-5	Styrene	ND	50.0	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	50.0	ug/L
98-06-6	tert-Butylbenzene	ND	50.0	ug/L
127-18-4	**Tetrachloroethene**	**395**	**50.0**	**ug/L**
108-88-3	Toluene	ND	50.0	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	50.0	ug/L
10061-02-6	trans-1,3-Dichloropropene	ND	50.0	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	ND	50.0	ug/L
79-01-6	**Trichloroethene**	**306**	**50.0**	**ug/L**
75-69-4	Trichlorofluoromethane	ND	50.0	ug/L
76-13-1	Trichlorotrifluoroethane	ND	50.0	ug/L
75-01-4	**Vinyl chloride**	**28.7**	**20.0**	**ug/L**
1330-20-7	Xylene (total)	ND	150	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	500	482	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	500	525	ug/L	105	77 - 127
2037-26-5	Toluene d8	500	519	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	500	525	ug/L	105	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	02/17/2016 16:34	LBH	579689

CAS#	Parameter	Result	LOQ	Units
540-59-0	**1,2-Dichloroethene(Total)**	**4440**	**1000**	**ug/L**
156-59-2	**cis-1,2-Dichloroethene**	**4440**	**500**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	5000	4730	ug/L	95	78 - 130
1868-53-7	Dibromofluoromethane	5000	5230	ug/L	105	77 - 127
2037-26-5	Toluene d8	5000	5280	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	5000	5100	ug/L	102	71 - 127

Sample Results

MW-23 @ 60	**Collect Date**	02/12/2016 10:32	**GCAL ID**	21602162309
	Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	02/17/2016 19:31	JCK	579689

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	25.0	ug/L
71-55-6	1,1,1-Trichloroethane	ND	25.0	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	ND	25.0	ug/L
79-00-5	1,1,2-Trichloroethane	ND	25.0	ug/L
75-34-3	1,1-Dichloroethane	ND	25.0	ug/L
75-35-4	1,1-Dichloroethene	ND	25.0	ug/L
563-58-6	1,1-Dichloropropene	ND	25.0	ug/L
96-18-4	1,2,3-Trichloropropane	ND	25.0	ug/L
120-82-1	1,2,4-Trichlorobenzene	ND	25.0	ug/L
95-63-6	1,2,4-Trimethylbenzene	ND	25.0	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	ND	25.0	ug/L
106-93-4	1,2-Dibromoethane	ND	25.0	ug/L
95-50-1	1,2-Dichlorobenzene	ND	25.0	ug/L
107-06-2	1,2-Dichloroethane	ND	25.0	ug/L
78-87-5	1,2-Dichloropropane	ND	25.0	ug/L
108-67-8	1,3,5-Trimethylbenzene	ND	25.0	ug/L
541-73-1	1,3-Dichlorobenzene	ND	25.0	ug/L
142-28-9	1,3-Dichloropropane	ND	25.0	ug/L
106-46-7	1,4-Dichlorobenzene	ND	25.0	ug/L
594-20-7	2,2-Dichloropropane	ND	25.0	ug/L
78-93-3	2-Butanone	ND	25.0	ug/L
95-49-8	2-Chlorotoluene	ND	25.0	ug/L
591-78-6	2-Hexanone	ND	25.0	ug/L
106-43-4	4-Chlorotoluene	ND	25.0	ug/L
99-87-6	4-Isopropyltoluene	ND	25.0	ug/L
108-10-1	4-Methyl-2-pentanone	ND	25.0	ug/L
67-64-1	Acetone	ND	25.0	ug/L
71-43-2	Benzene	ND	25.0	ug/L
108-86-1	Bromobenzene	ND	25.0	ug/L
74-97-5	Bromochloromethane	ND	25.0	ug/L
75-27-4	Bromodichloromethane	ND	25.0	ug/L
75-25-2	Bromoform	ND	25.0	ug/L
74-83-9	Bromomethane	ND	25.0	ug/L
75-15-0	Carbon disulfide	ND	25.0	ug/L
56-23-5	Carbon tetrachloride	ND	25.0	ug/L
108-90-7	Chlorobenzene	ND	25.0	ug/L
75-00-3	Chloroethane	ND	25.0	ug/L
67-66-3	Chloroform	ND	25.0	ug/L
74-87-3	Chloromethane	ND	25.0	ug/L
10061-01-5	cis-1,3-Dichloropropene	ND	25.0	ug/L
124-48-1	Dibromochloromethane	ND	25.0	ug/L
74-95-3	Dibromomethane	ND	25.0	ug/L
75-71-8	Dichlorodifluoromethane	ND	25.0	ug/L
100-41-4	Ethylbenzene	ND	25.0	ug/L
87-68-3	Hexachlorobutadiene	ND	25.0	ug/L
98-82-8	Isopropylbenzene (Cumene)	ND	25.0	ug/L
136777-61-2	m,p-Xylene	ND	50.0	ug/L
74-88-4	Methyl iodide	ND	25.0	ug/L

Sample Results

MW-23 @ 60	**Collect Date**	02/12/2016 10:32	**GCAL ID**	21602162309
	Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	02/17/2016 19:31	JCK	579689

CAS#	Parameter	Result	LOQ	Units
75-09-2	Methylene chloride	ND	25.0	ug/L
91-20-3	Naphthalene	ND	25.0	ug/L
104-51-8	n-Butylbenzene	ND	25.0	ug/L
103-65-1	n-Propylbenzene	ND	25.0	ug/L
95-47-6	o-Xylene	ND	25.0	ug/L
135-98-8	sec-Butylbenzene	ND	25.0	ug/L
100-42-5	Styrene	ND	25.0	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	25.0	ug/L
98-06-6	tert-Butylbenzene	ND	25.0	ug/L
108-88-3	Toluene	ND	25.0	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	25.0	ug/L
10061-02-6	trans-1,3-Dichloropropene	ND	25.0	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	ND	25.0	ug/L
79-01-6	**Trichloroethene**	**306**	**25.0**	**ug/L**
75-69-4	Trichlorofluoromethane	ND	25.0	ug/L
76-13-1	Trichlorotrifluoroethane	ND	25.0	ug/L
75-01-4	Vinyl chloride	ND	10.0	ug/L
1330-20-7	Xylene (total)	ND	75.0	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	250	237	ug/L	95	78 - 130
1868-53-7	Dibromofluoromethane	250	260	ug/L	104	77 - 127
2037-26-5	Toluene d8	250	250	ug/L	100	76 - 134
17060-07-0	1,2-Dichloroethane-d4	250	255	ug/L	102	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50	02/17/2016 16:56	LBH	579689

CAS#	Parameter	Result	LOQ	Units
540-59-0	**1,2-Dichloroethene(Total)**	**1570**	**500**	**ug/L**
156-59-2	**cis-1,2-Dichloroethene**	**1570**	**250**	**ug/L**
127-18-4	**Tetrachloroethene**	**1170**	**250**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2500	2330	ug/L	93	78 - 130
1868-53-7	Dibromofluoromethane	2500	2630	ug/L	105	77 - 127
2037-26-5	Toluene d8	2500	2570	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	2500	2550	ug/L	102	71 - 127

Sample Results

MW-24 @ 30	**Collect Date**	02/10/2016 14:32	**GCAL ID**	21602162310
	Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	02/17/2016 14:20	LBH	579689

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	ND	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	ND	5.00	ug/L
75-34-3	1,1-Dichloroethane	ND	5.00	ug/L
75-35-4	1,1-Dichloroethene	ND	5.00	ug/L
563-58-6	1,1-Dichloropropene	ND	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	ND	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	ND	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	ND	5.00	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.00	ug/L
106-93-4	1,2-Dibromoethane	ND	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	ND	5.00	ug/L
107-06-2	1,2-Dichloroethane	ND	5.00	ug/L
78-87-5	1,2-Dichloropropane	ND	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	ND	5.00	ug/L
541-73-1	1,3-Dichlorobenzene	ND	5.00	ug/L
142-28-9	1,3-Dichloropropane	ND	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	ND	5.00	ug/L
594-20-7	2,2-Dichloropropane	ND	5.00	ug/L
78-93-3	2-Butanone	ND	5.00	ug/L
95-49-8	2-Chlorotoluene	ND	5.00	ug/L
591-78-6	2-Hexanone	ND	5.00	ug/L
106-43-4	4-Chlorotoluene	ND	5.00	ug/L
99-87-6	4-Isopropyltoluene	ND	5.00	ug/L
108-10-1	4-Methyl-2-pentanone	ND	5.00	ug/L
67-64-1	Acetone	ND	5.00	ug/L
71-43-2	Benzene	ND	5.00	ug/L
108-86-1	Bromobenzene	ND	5.00	ug/L
74-97-5	Bromochloromethane	ND	5.00	ug/L
75-27-4	Bromodichloromethane	ND	5.00	ug/L
75-25-2	Bromoform	ND	5.00	ug/L
74-83-9	Bromomethane	ND	5.00	ug/L
75-15-0	Carbon disulfide	ND	5.00	ug/L
56-23-5	Carbon tetrachloride	ND	5.00	ug/L
108-90-7	Chlorobenzene	ND	5.00	ug/L
75-00-3	Chloroethane	ND	5.00	ug/L
67-66-3	Chloroform	ND	5.00	ug/L
74-87-3	Chloromethane	ND	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	ND	5.00	ug/L
124-48-1	Dibromochloromethane	ND	5.00	ug/L
74-95-3	Dibromomethane	ND	5.00	ug/L
75-71-8	Dichlorodifluoromethane	ND	5.00	ug/L
100-41-4	Ethylbenzene	ND	5.00	ug/L
87-68-3	Hexachlorobutadiene	ND	5.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	ND	5.00	ug/L
136777-61-2	m,p-Xylene	ND	10.0	ug/L
74-88-4	Methyl iodide	ND	5.00	ug/L

Sample Results

MW-24 @ 30	**Collect Date**	02/10/2016 14:32	**GCAL ID**	21602162310
	Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	02/17/2016 14:20	LBH	579689

CAS#	Parameter	Result	LOQ	Units
75-09-2	Methylene chloride	ND	5.00	ug/L
91-20-3	Naphthalene	ND	5.00	ug/L
104-51-8	n-Butylbenzene	ND	5.00	ug/L
103-65-1	n-Propylbenzene	ND	5.00	ug/L
95-47-6	o-Xylene	ND	5.00	ug/L
135-98-8	sec-Butylbenzene	ND	5.00	ug/L
100-42-5	Styrene	ND	5.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	5.00	ug/L
98-06-6	tert-Butylbenzene	ND	5.00	ug/L
108-88-3	Toluene	ND	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	5.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	ND	5.00	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.00	ug/L
79-01-6	**Trichloroethene**	**104**	**5.00**	**ug/L**
75-69-4	Trichlorofluoromethane	ND	5.00	ug/L
76-13-1	Trichlorotrifluoroethane	ND	5.00	ug/L
75-01-4	Vinyl chloride	ND	2.00	ug/L
1330-20-7	Xylene (total)	ND	15.0	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47	ug/L	94	78 - 130
1868-53-7	Dibromofluoromethane	50	52.5	ug/L	105	77 - 127
2037-26-5	Toluene d8	50	52.1	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.9	ug/L	102	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	10	02/17/2016 13:58	LBH	579689

CAS#	Parameter	Result	LOQ	Units
540-59-0	**1,2-Dichloroethene(Total)**	**512**	**100**	**ug/L**
156-59-2	**cis-1,2-Dichloroethene**	**512**	**50.0**	**ug/L**
127-18-4	**Tetrachloroethene**	**347**	**50.0**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	500	476	ug/L	95	78 - 130
1868-53-7	Dibromofluoromethane	500	525	ug/L	105	77 - 127
2037-26-5	Toluene d8	500	499	ug/L	100	76 - 134
17060-07-0	1,2-Dichloroethane-d4	500	517	ug/L	103	71 - 127

Sample Results

PT-3 @ 60	**Collect Date**	02/10/2016 08:45	**GCAL ID**	21602162311
	Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	20	02/17/2016 19:09	JCK	579689

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	100	ug/L
71-55-6	1,1,1-Trichloroethane	ND	100	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ug/L
79-00-5	1,1,2-Trichloroethane	ND	100	ug/L
75-34-3	1,1-Dichloroethane	ND	100	ug/L
75-35-4	1,1-Dichloroethene	ND	100	ug/L
563-58-6	1,1-Dichloropropene	ND	100	ug/L
96-18-4	1,2,3-Trichloropropane	ND	100	ug/L
120-82-1	1,2,4-Trichlorobenzene	ND	100	ug/L
95-63-6	1,2,4-Trimethylbenzene	ND	100	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	ug/L
106-93-4	1,2-Dibromoethane	ND	100	ug/L
95-50-1	1,2-Dichlorobenzene	ND	100	ug/L
107-06-2	1,2-Dichloroethane	ND	100	ug/L
540-59-0	**1,2-Dichloroethene(Total)**	**2280**	**200**	**ug/L**
78-87-5	1,2-Dichloropropane	ND	100	ug/L
108-67-8	1,3,5-Trimethylbenzene	ND	100	ug/L
541-73-1	1,3-Dichlorobenzene	ND	100	ug/L
142-28-9	1,3-Dichloropropane	ND	100	ug/L
106-46-7	1,4-Dichlorobenzene	ND	100	ug/L
594-20-7	2,2-Dichloropropane	ND	100	ug/L
78-93-3	2-Butanone	ND	100	ug/L
95-49-8	2-Chlorotoluene	ND	100	ug/L
591-78-6	2-Hexanone	ND	100	ug/L
106-43-4	4-Chlorotoluene	ND	100	ug/L
99-87-6	4-Isopropyltoluene	ND	100	ug/L
108-10-1	4-Methyl-2-pentanone	ND	100	ug/L
67-64-1	Acetone	ND	100	ug/L
71-43-2	Benzene	ND	100	ug/L
108-86-1	Bromobenzene	ND	100	ug/L
74-97-5	Bromochloromethane	ND	100	ug/L
75-27-4	Bromodichloromethane	ND	100	ug/L
75-25-2	Bromoform	ND	100	ug/L
74-83-9	Bromomethane	ND	100	ug/L
75-15-0	Carbon disulfide	ND	100	ug/L
56-23-5	Carbon tetrachloride	ND	100	ug/L
108-90-7	Chlorobenzene	ND	100	ug/L
75-00-3	Chloroethane	ND	100	ug/L
67-66-3	Chloroform	ND	100	ug/L
74-87-3	Chloromethane	ND	100	ug/L
156-59-2	**cis-1,2-Dichloroethene**	**2240**	**100**	**ug/L**
10061-01-5	cis-1,3-Dichloropropene	ND	100	ug/L
124-48-1	Dibromochloromethane	ND	100	ug/L
74-95-3	Dibromomethane	ND	100	ug/L
75-71-8	Dichlorodifluoromethane	ND	100	ug/L
100-41-4	Ethylbenzene	ND	100	ug/L
87-68-3	Hexachlorobutadiene	ND	100	ug/L
98-82-8	Isopropylbenzene (Cumene)	ND	100	ug/L

Sample Results

PT-3 @ 60	**Collect Date**	02/10/2016 08:45	**GCAL ID**	21602162311
	Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	20	02/17/2016 19:09	JCK	579689

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	200	ug/L
74-88-4	Methyl iodide	ND	100	ug/L
75-09-2	Methylene chloride	ND	100	ug/L
91-20-3	Naphthalene	ND	100	ug/L
104-51-8	n-Butylbenzene	ND	100	ug/L
103-65-1	n-Propylbenzene	ND	100	ug/L
95-47-6	o-Xylene	ND	100	ug/L
135-98-8	sec-Butylbenzene	ND	100	ug/L
100-42-5	Styrene	ND	100	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	100	ug/L
98-06-6	tert-Butylbenzene	ND	100	ug/L
108-88-3	Toluene	ND	100	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	100	ug/L
10061-02-6	trans-1,3-Dichloropropene	ND	100	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	ND	100	ug/L
79-01-6	**Trichloroethene**	**741**	**100**	**ug/L**
75-69-4	Trichlorofluoromethane	ND	100	ug/L
76-13-1	Trichlorotrifluoroethane	ND	100	ug/L
75-01-4	Vinyl chloride	ND	40.0	ug/L
1330-20-7	Xylene (total)	ND	300	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1000	946	ug/L	95	78 - 130
1868-53-7	Dibromofluoromethane	1000	1050	ug/L	105	77 - 127
2037-26-5	Toluene d8	1000	1020	ug/L	102	76 - 134
17060-07-0	1,2-Dichloroethane-d4	1000	1040	ug/L	104	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	200	02/17/2016 17:18	LBH	579689

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**8100**	**1000**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	10000	9570	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	10000	10800	ug/L	108	77 - 127
2037-26-5	Toluene d8	10000	10200	ug/L	102	76 - 134
17060-07-0	1,2-Dichloroethane-d4	10000	10400	ug/L	104	71 - 127

Sample Results

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Collect Date	02/10/2016 00:01	**GCAL ID**	21602162312
Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	02/17/2016 13:33	LBH	579689

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	ND	5.00	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	ND	5.00	ug/L
75-34-3	1,1-Dichloroethane	ND	5.00	ug/L
75-35-4	1,1-Dichloroethene	ND	5.00	ug/L
563-58-6	1,1-Dichloropropene	ND	5.00	ug/L
96-18-4	1,2,3-Trichloropropane	ND	5.00	ug/L
120-82-1	1,2,4-Trichlorobenzene	ND	5.00	ug/L
95-63-6	1,2,4-Trimethylbenzene	ND	5.00	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.00	ug/L
106-93-4	1,2-Dibromoethane	ND	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	ND	5.00	ug/L
107-06-2	1,2-Dichloroethane	ND	5.00	ug/L
540-59-0	1,2-Dichloroethene(Total)	ND	10.0	ug/L
78-87-5	1,2-Dichloropropane	ND	5.00	ug/L
108-67-8	1,3,5-Trimethylbenzene	ND	5.00	ug/L
541-73-1	1,3-Dichlorobenzene	ND	5.00	ug/L
142-28-9	1,3-Dichloropropane	ND	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	ND	5.00	ug/L
594-20-7	2,2-Dichloropropane	ND	5.00	ug/L
78-93-3	2-Butanone	ND	5.00	ug/L
95-49-8	2-Chlorotoluene	ND	5.00	ug/L
591-78-6	2-Hexanone	ND	5.00	ug/L
106-43-4	4-Chlorotoluene	ND	5.00	ug/L
99-87-6	4-Isopropyltoluene	ND	5.00	ug/L
108-10-1	4-Methyl-2-pentanone	ND	5.00	ug/L
67-64-1	Acetone	ND	5.00	ug/L
71-43-2	Benzene	ND	5.00	ug/L
108-86-1	Bromobenzene	ND	5.00	ug/L
74-97-5	Bromochloromethane	ND	5.00	ug/L
75-27-4	Bromodichloromethane	ND	5.00	ug/L
75-25-2	Bromoform	ND	5.00	ug/L
74-83-9	Bromomethane	ND	5.00	ug/L
75-15-0	Carbon disulfide	ND	5.00	ug/L
56-23-5	Carbon tetrachloride	ND	5.00	ug/L
108-90-7	Chlorobenzene	ND	5.00	ug/L
75-00-3	Chloroethane	ND	5.00	ug/L
67-66-3	Chloroform	ND	5.00	ug/L
74-87-3	Chloromethane	ND	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	ND	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	ND	5.00	ug/L
124-48-1	Dibromochloromethane	ND	5.00	ug/L
74-95-3	Dibromomethane	ND	5.00	ug/L
75-71-8	Dichlorodifluoromethane	ND	5.00	ug/L
100-41-4	Ethylbenzene	ND	5.00	ug/L
87-68-3	Hexachlorobutadiene	ND	5.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	ND	5.00	ug/L

Sample Results

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Collect Date	02/10/2016 00:01	**GCAL ID**	21602162312
Receive Date	02/16/2016 10:15	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	02/17/2016 13:33	LBH	579689

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	10.0	ug/L
74-88-4	Methyl iodide	ND	5.00	ug/L
75-09-2	**Methylene chloride**	**9.96**	**5.00**	**ug/L**
91-20-3	Naphthalene	ND	5.00	ug/L
104-51-8	n-Butylbenzene	ND	5.00	ug/L
103-65-1	n-Propylbenzene	ND	5.00	ug/L
95-47-6	o-Xylene	ND	5.00	ug/L
135-98-8	sec-Butylbenzene	ND	5.00	ug/L
100-42-5	Styrene	ND	5.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	5.00	ug/L
98-06-6	tert-Butylbenzene	ND	5.00	ug/L
127-18-4	Tetrachloroethene	ND	5.00	ug/L
108-88-3	Toluene	ND	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	5.00	ug/L
10061-02-6	trans-1,3-Dichloropropene	ND	5.00	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.00	ug/L
79-01-6	Trichloroethene	ND	5.00	ug/L
75-69-4	Trichlorofluoromethane	ND	5.00	ug/L
76-13-1	Trichlorotrifluoroethane	ND	5.00	ug/L
75-01-4	Vinyl chloride	ND	2.00	ug/L
1330-20-7	Xylene (total)	ND	15.0	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.1	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	53	ug/L	106	77 - 127
2037-26-5	Toluene d8	50	51.5	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.5	ug/L	101	71 - 127

GC/MS Volatiles QC Summary

Analytical Batch 579689	Client ID	MB579689		LCS579689				LCSD579689				
	GCAL ID	1541716		1541717				1541718				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	02/17/2016 11:20		02/17/2016 09:51				02/17/2016 10:14				
	Matrix	Water		Water				Water				
EPA 8260B		Units Result	ug/L LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	630-20-6	ND	5.00	50.0	49.4	99	75 - 124	50.0	49.5	99	0	30
1,1,1-Trichloroethane	71-55-6	ND	5.00	50.0	48.9	98	76 - 126	50.0	47.7	95	2	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	5.00	50.0	42.2	84	70 - 122	50.0	46.6	93	10	30
1,1,2-Trichloroethane	79-00-5	ND	5.00	50.0	46.8	94	72 - 121	50.0	48.1	96	3	30
1,1-Dichloroethane	75-34-3	ND	5.00	50.0	54.4	109	74 - 127	50.0	47.6	95	13	30
1,1-Dichloroethene	75-35-4	ND	5.00	50.0	59.6	119	69 - 129	50.0	58.5	117	2	20
1,1-Dichloropropene	563-58-6	ND	5.00	50.0	47.0	94	72 - 131	50.0	44.9	90	5	30
1,2,3-Trichloropropane	96-18-4	ND	5.00	50.0	44.5	89	70 - 120	50.0	48.3	97	8	30
1,2,4-Trichlorobenzene	120-82-1	ND	5.00	50.0	50.3	101	61 - 135	50.0	50.6	101	1	30
1,2,4-Trimethylbenzene	95-63-6	ND	5.00	50.0	48.9	98	74 - 125	50.0	49.5	99	1	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	5.00	50.0	39.8	80	57 - 121	50.0	44.7	89	12	30
1,2-Dibromoethane	106-93-4	ND	5.00	50.0	48.1	96	70 - 124	50.0	49.6	99	3	30
1,2-Dichlorobenzene	95-50-1	ND	5.00	50.0	46.6	93	71 - 126	50.0	48.5	97	4	30
1,2-Dichloroethane	107-06-2	ND	5.00	50.0	48.7	97	71 - 129	50.0	48.3	97	1	30
1,2-Dichloroethene(Total)	540-59-0	ND	10.0	100	106	106	74 - 128	100	105	105	1	30
1,2-Dichloropropane	78-87-5	ND	5.00	50.0	48.9	98	72 - 128	50.0	49.1	98	0	30
1,3,5-Trimethylbenzene	108-67-8	ND	5.00	50.0	46.3	93	71 - 132	50.0	47.5	95	3	30
1,3-Dichlorobenzene	541-73-1	ND	5.00	50.0	47.7	95	74 - 126	50.0	48.5	97	2	30
1,3-Dichloropropane	142-28-9	ND	5.00	50.0	45.8	92	74 - 122	50.0	47.0	94	3	30
1,4-Dichlorobenzene	106-46-7	ND	5.00	50.0	48.2	96	72 - 122	50.0	48.4	97	0	30
2,2-Dichloropropane	594-20-7	ND	5.00	50.0	47.1	94	77 - 124	50.0	46.1	92	2	30
2-Butanone	78-93-3	ND	5.00	50.0	45.3	91	58 - 137	50.0	48.4	97	7	30
2-Chlorotoluene	95-49-8	ND	5.00	50.0	44.5	89	72 - 127	50.0	45.8	92	3	30
2-Hexanone	591-78-6	ND	5.00	50.0	39.2	78	50 - 135	50.0	44.3	89	12	30
4-Chlorotoluene	106-43-4	ND	5.00	50.0	47.6	95	75 - 126	50.0	48.4	97	2	30
4-Isopropyltoluene	99-87-6	ND	5.00	50.0	51.0	102	71 - 129	50.0	50.4	101	1	30
4-Methyl-2-pentanone	108-10-1	ND	5.00	50.0	40.2	80	57 - 132	50.0	42.7	85	6	30
Acetone	67-64-1	ND	5.00	50.0	54.3	109	44 - 156	50.0	60.6	121	11	30
Benzene	71-43-2	ND	5.00	50.0	50.1	100	70 - 129	50.0	48.8	98	3	20
Bromobenzene	108-86-1	ND	5.00	50.0	45.2	90	71 - 120	50.0	46.5	93	3	30
Bromochloromethane	74-97-5	ND	5.00	50.0	50.3	101	76 - 130	50.0	50.1	100	0	30
Bromodichloromethane	75-27-4	ND	5.00	50.0	49.5	99	74 - 125	50.0	49.3	99	0	30
Bromoform	75-25-2	ND	5.00	50.0	50.4	101	64 - 122	50.0	52.2	104	4	30
Bromomethane	74-83-9	ND	5.00	50.0	53.1	106	47 - 138	50.0	56.6	113	6	30
Carbon disulfide	75-15-0	ND	5.00	50.0	59.9	120	69 - 136	50.0	58.3	117	3	30
Carbon tetrachloride	56-23-5	ND	5.00	50.0	52.0	104	76 - 128	50.0	49.7	99	5	30
Chlorobenzene	108-90-7	ND	5.00	50.0	49.3	99	74 - 123	50.0	49.1	98	0	20
Chloroethane	75-00-3	ND	5.00	50.0	69.3	139	62 - 141	50.0	59.3	119	16	30
Chloroform	67-66-3	ND	5.00	50.0	48.3	97	75 - 122	50.0	48.1	96	0	30
Chloromethane	74-87-3	ND	5.00	50.0	46.3	93	59 - 132	50.0	51.2	102	10	30
cis-1,2-Dichloroethene	156-59-2	ND	5.00	50.0	48.0	96	73 - 130	50.0	47.7	95	1	30
cis-1,3-Dichloropropene	10061-01-5	ND	5.00	50.0	48.6	97	71 - 132	50.0	48.7	97	0	30
Dibromochloromethane	124-48-1	ND	5.00	50.0	46.2	92	71 - 123	50.0	47.5	95	3	30
Dibromomethane	74-95-3	ND	5.00	50.0	49.9	100	72 - 129	50.0	49.9	100	0	30
Dichlorodifluoromethane	75-71-8	ND	5.00	50.0	51.4	103	58 - 140	50.0	55.1	110	7	30
Ethylbenzene	100-41-4	ND	5.00	50.0	50.1	100	74 - 126	50.0	48.3	97	4	30
Hexachlorobutadiene	87-68-3	ND	5.00	50.0	47.7	95	61 - 144	50.0	47.6	95	0	30
Isopropylbenzene (Cumene)	98-82-8	ND	5.00	50.0	52.4	105	71 - 125	50.0	51.3	103	2	30
m,p-Xylene	136777-61-2	ND	10.0	100	102	102	74 - 126	100	101	101	1	30
Methyl iodide	74-88-4	ND	5.00	50.0	58.9	118	57 - 141	50.0	58.7	117	0	30
Methylene chloride	75-09-2	ND	5.00	50.0	61.2	122	68 - 132	50.0	61.6	123	1	30
Naphthalene	91-20-3	ND	5.00	50.0	53.2	106	57 - 138	50.0	56.5	113	6	35
n-Butylbenzene	104-51-8	ND	5.00	50.0	52.6	105	69 - 134	50.0	50.7	101	4	30
n-Propylbenzene	103-65-1	ND	5.00	50.0	49.2	98	75 - 129	50.0	50.0	100	2	30
o-Xylene	95-47-6	ND	5.00	50.0	49.3	99	73 - 130	50.0	49.7	99	1	30
sec-Butylbenzene	135-98-8	ND	5.00	50.0	50.6	101	70 - 136	50.0	50.2	100	1	30
Styrene	100-42-5	ND	5.00	50.0	52.7	105	71 - 127	50.0	52.0	104	1	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	5.00	50.0	52.3	105	71 - 125	50.0	53.7	107	3	30

GC/MS Volatiles QC Summary

Analytical Batch 579689	Client ID	MB579689	LCS579689	LCSD579689
	GCAL ID	1541716	1541717	1541718
	Sample Type	MB	LCS	LCSD
	Prep Date	NA	NA	NA
	Analysis Date	02/17/2016 11:20	02/17/2016 09:51	02/17/2016 10:14
	Matrix	Water	Water	Water

EPA 8260B		Units Result	ug/L LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
tert-Butylbenzene	98-06-6	ND	5.00	50.0	45.9	92	72 - 126	50.0	46.9	94	2	30
Tetrachloroethene	127-18-4	ND	5.00	50.0	48.9	98	68 - 128	50.0	47.6	95	3	30
Toluene	108-88-3	ND	5.00	50.0	47.9	96	72 - 120	50.0	48.0	96	0	20
trans-1,2-Dichloroethene	156-60-5	ND	5.00	50.0	58.2	116	69 - 132	50.0	57.4	115	1	30
trans-1,3-Dichloropropene	10061-02-6	ND	5.00	50.0	51.5	103	71 - 131	50.0	51.9	104	1	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	5.00	50.0	41.6	83	56 - 132	50.0	45.1	90	8	30
Trichloroethene	79-01-6	ND	5.00	50.0	51.4	103	76 - 129	50.0	48.8	98	5	20
Trichlorofluoromethane	75-69-4	ND	5.00	50.0	55.3	111	72 - 136	50.0	56.4	113	2	30
Trichlorotrifluoroethane	76-13-1	ND	5.00	50.0	59.0	118	72 - 136	50.0	57.1	114	3	30
Vinyl chloride	75-01-4	ND	2.00	50.0	53.9	108	68 - 132	50.0	59.3	119	10	30
Xylene (total)	1330-20-7	ND	15.0	150	151	101	74 - 127	150	151	101	0	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	50.4	101	50	50.4	101	71 - 127	50	49.5	99	NA	NA
4-Bromofluorobenzene	460-00-4	48.4	97	50	52.6	105	78 - 130	50	51.7	103	NA	NA
Dibromofluoromethane	1868-53-7	52	104	50	50.3	101	77 - 127	50	51.3	103	NA	NA
Toluene d8	2037-26-5	52.5	105	50	47.4	95	76 - 134	50	47.9	96	NA	NA

Analytical Batch 580018	Client ID	MB580018	LCS580018	LCSD580018
	GCAL ID	1543094	1543095	1543096
	Sample Type	MB	LCS	LCSD
	Prep Date	NA	NA	NA
	Analysis Date	02/21/2016 19:38	02/21/2016 18:05	02/21/2016 18:33
	Matrix	Water	Water	Water

EPA 8260B		Units Result	ug/L LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	630-20-6	ND	5.00	50.0	45.0	90	75 - 124	50.0	45.3	91	1	30
1,1,1-Trichloroethane	71-55-6	ND	5.00	50.0	48.2	96	76 - 126	50.0	47.3	95	2	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	5.00	50.0	51.6	103	70 - 122	50.0	53.3	107	3	30
1,1,2-Trichloroethane	79-00-5	ND	5.00	50.0	45.9	92	72 - 121	50.0	46.1	92	0	30
1,1-Dichloroethane	75-34-3	ND	5.00	50.0	49.6	99	74 - 127	50.0	49.0	98	1	30
1,1-Dichloroethene	75-35-4	ND	5.00	50.0	41.3	83	69 - 129	50.0	42.1	84	2	20
1,1-Dichloropropene	563-58-6	ND	5.00	50.0	52.0	104	72 - 131	50.0	51.0	102	2	30
1,2,3-Trichloropropane	96-18-4	ND	5.00	50.0	50.0	100	70 - 120	50.0	51.4	103	3	30
1,2,4-Trichlorobenzene	120-82-1	ND	5.00	50.0	43.4	87	61 - 135	50.0	43.3	87	0	30
1,2,4-Trimethylbenzene	95-63-6	ND	5.00	50.0	48.1	96	74 - 125	50.0	48.0	96	0	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	5.00	50.0	45.4	91	57 - 121	50.0	47.8	96	5	30
1,2-Dibromoethane	106-93-4	ND	5.00	50.0	47.4	95	70 - 124	50.0	48.8	98	3	30
1,2-Dichlorobenzene	95-50-1	ND	5.00	50.0	48.6	97	71 - 126	50.0	49.4	99	2	30
1,2-Dichloroethane	107-06-2	ND	5.00	50.0	48.6	97	71 - 129	50.0	48.4	97	0	30
1,2-Dichloroethene(Total)	540-59-0	ND	10.0	100	95.9	96	74 - 128	100	97.3	97	1	30
1,2-Dichloropropane	78-87-5	ND	5.00	50.0	50.2	100	72 - 128	50.0	49.3	99	2	30
1,3,5-Trimethylbenzene	108-67-8	ND	5.00	50.0	53.8	108	71 - 132	50.0	53.6	107	0	30
1,3-Dichlorobenzene	541-73-1	ND	5.00	50.0	48.6	97	74 - 126	50.0	48.3	97	1	30
1,3-Dichloropropane	142-28-9	ND	5.00	50.0	50.6	101	74 - 122	50.0	49.6	99	2	30
1,4-Dichlorobenzene	106-46-7	ND	5.00	50.0	48.5	97	72 - 122	50.0	47.6	95	2	30
2,2-Dichloropropane	594-20-7	ND	5.00	50.0	50.7	101	77 - 124	50.0	50.3	101	1	30
2-Butanone	78-93-3	ND	5.00	50.0	56.6	113	58 - 137	50.0	61.5	123	8	30
2-Chlorotoluene	95-49-8	ND	5.00	50.0	50.5	101	72 - 127	50.0	50.6	101	0	30
2-Hexanone	591-78-6	ND	5.00	50.0	46.9	94	50 - 135	50.0	50.8	102	8	30
4-Chlorotoluene	106-43-4	ND	5.00	50.0	51.8	104	75 - 126	50.0	51.4	103	1	30
4-Isopropyltoluene	99-87-6	ND	5.00	50.0	47.4	95	71 - 129	50.0	46.8	94	1	30
4-Methyl-2-pentanone	108-10-1	ND	5.00	50.0	50.8	102	57 - 132	50.0	55.9	112	10	30
Acetone	67-64-1	ND	5.00	50.0	58.9	118	44 - 156	50.0	62.6	125	6	30
Benzene	71-43-2	ND	5.00	50.0	51.4	103	70 - 129	50.0	50.1	100	3	20
Bromobenzene	108-86-1	ND	5.00	50.0	47.3	95	71 - 120	50.0	48.9	98	3	30
Bromochloromethane	74-97-5	ND	5.00	50.0	53.1	106	76 - 130	50.0	50.5	101	5	30
Bromodichloromethane	75-27-4	ND	5.00	50.0	49.3	99	74 - 125	50.0	49.0	98	1	30

GC/MS Volatiles QC Summary

Analytical Batch 580018	Client ID	MB580018	LCS580018	LCSD580018
	GCAL ID	1543094	1543095	1543096
	Sample Type	MB	LCS	LCSD
	Prep Date	NA	NA	NA
	Analysis Date	02/21/2016 19:38	02/21/2016 18:05	02/21/2016 18:33
	Matrix	Water	Water	Water

EPA 8260B		Units Result	ug/L LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Bromoform	75-25-2	ND	5.00	50.0	44.1	88	64 - 122	50.0	44.7	89	1	30
Bromomethane	74-83-9	ND	5.00	50.0	46.6	93	47 - 138	50.0	47.4	95	2	30
Carbon disulfide	75-15-0	ND	5.00	50.0	46.2	92	69 - 136	50.0	45.3	91	2	30
Carbon tetrachloride	56-23-5	ND	5.00	50.0	47.0	94	76 - 128	50.0	45.8	92	3	30
Chlorobenzene	108-90-7	ND	5.00	50.0	46.2	92	74 - 123	50.0	45.5	91	2	20
Chloroethane	75-00-3	ND	5.00	50.0	49.2	98	62 - 141	50.0	48.4	97	2	30
Chloroform	67-66-3	ND	5.00	50.0	48.2	96	75 - 122	50.0	47.1	94	2	30
Chloromethane	74-87-3	ND	5.00	50.0	53.2	106	59 - 132	50.0	54.7	109	3	30
cis-1,2-Dichloroethene	156-59-2	ND	5.00	50.0	50.0	100	73 - 130	50.0	51.0	102	2	30
cis-1,3-Dichloropropene	10061-01-5	ND	5.00	50.0	46.6	93	71 - 132	50.0	46.5	93	0	30
Dibromochloromethane	124-48-1	ND	5.00	50.0	45.8	92	71 - 123	50.0	46.9	94	2	30
Dibromomethane	74-95-3	ND	5.00	50.0	49.6	99	72 - 129	50.0	49.3	99	1	30
Dichlorodifluoromethane	75-71-8	ND	5.00	50.0	45.4	91	58 - 140	50.0	46.0	92	1	30
Ethylbenzene	100-41-4	ND	5.00	50.0	49.2	98	74 - 126	50.0	49.1	98	0	30
Hexachlorobutadiene	87-68-3	ND	5.00	50.0	46.9	94	61 - 144	50.0	45.0	90	4	30
Isopropylbenzene (Cumene)	98-82-8	ND	5.00	50.0	53.0	106	71 - 125	50.0	53.2	106	0	30
m,p-Xylene	136777-61-2	ND	10.0	100	103	103	74 - 126	100	101	101	2	30
Methyl iodide	74-88-4	ND	5.00	50.0	48.1	96	57 - 141	50.0	51.1	102	6	30
Methylene chloride	75-09-2	ND	5.00	50.0	50.6	101	68 - 132	50.0	50.3	101	1	30
Naphthalene	91-20-3	ND	5.00	50.0	42.2	84	57 - 138	50.0	44.3	89	5	35
n-Butylbenzene	104-51-8	ND	5.00	50.0	46.5	93	69 - 134	50.0	46.0	92	1	30
n-Propylbenzene	103-65-1	ND	5.00	50.0	52.1	104	75 - 129	50.0	52.0	104	0	30
o-Xylene	95-47-6	ND	5.00	50.0	52.0	104	73 - 130	50.0	52.7	105	1	30
sec-Butylbenzene	135-98-8	ND	5.00	50.0	53.8	108	70 - 136	50.0	53.5	107	1	30
Styrene	100-42-5	ND	5.00	50.0	47.8	96	71 - 127	50.0	47.8	96	0	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	5.00	50.0	47.8	96	71 - 125	50.0	50.2	100	5	30
tert-Butylbenzene	98-06-6	ND	5.00	50.0	53.5	107	72 - 126	50.0	53.0	106	1	30
Tetrachloroethene	127-18-4	ND	5.00	50.0	45.5	91	68 - 128	50.0	45.6	91	0	30
Toluene	108-88-3	ND	5.00	50.0	46.8	94	72 - 120	50.0	46.6	93	0	20
trans-1,2-Dichloroethene	156-60-5	ND	5.00	50.0	46.0	92	69 - 132	50.0	46.3	93	1	30
trans-1,3-Dichloropropene	10061-02-6	ND	5.00	50.0	48.5	97	71 - 131	50.0	48.0	96	1	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	5.00	50.0	51.4	103	56 - 132	50.0	53.9	108	5	30
Trichloroethene	79-01-6	ND	5.00	50.0	47.8	96	76 - 129	50.0	46.5	93	3	20
Trichlorofluoromethane	75-69-4	ND	5.00	50.0	43.5	87	72 - 136	50.0	43.0	86	1	30
Trichlorotrifluoroethane	76-13-1	ND	5.00	50.0	42.4	85	72 - 136	50.0	40.3	81	5	30
Vinyl chloride	75-01-4	ND	2.00	50.0	46.3	93	68 - 132	50.0	47.4	95	2	30
Xylene (total)	1330-20-7	ND	15.0	150	155	103	74 - 127	150	154	103	1	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	55.5	111	50	52.4	105	71 - 127	50	51.4	103	NA	NA
4-Bromofluorobenzene	460-00-4	44.7	89	50	48.5	97	78 - 130	50	48.5	97	NA	NA
Dibromofluoromethane	1868-53-7	54.8	110	50	50.7	101	77 - 127	50	50.1	100	NA	NA
Toluene d8	2037-26-5	51.7	103	50	48.8	98	76 - 134	50	49.1	98	NA	NA

GCAL ANALYTICAL LABORATORIES, LLC

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CHAIN OF CUSTODY RECORD

Client ID: 4912 - Clearwater Environmental Resources
SDG: 216021623
PM: SAK

Report to:	Bill to:
Client: Clearwater Env. Res	Client: SAME
Address: 3870 PIB Suite 340139	Address:
Contact: Jack Wintle	Contact:
Phone: 678 491-4601	Phone:
E-mail: jack.wintle@clearwaterenv.net	E-mail:

Analytical Requests & Method: VOCs

GCAL use only:
Custody Seal used ☑ yes ☐ no
intact ☑ yes ☐ no
Temperature °C 2.5°C EZG
3:14pm

☐ Dissolved Analysis Requested
☐ Field filtered
☐ Lab filtered

P.O. Number: 1502-1-3
Project Name/Number: Bayloc
Sampled By: Jack Wintle

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	No Containers	3/HCl	Preservative
W	2/10	1521		✓	MW-7@30'	3	✓	1
	2/10	1343			MW-12@60'		✓	2
	2/10	1136			MW-15@30'		✓	3
	2/10	1011			MW-17@30'		✓	4
	2/10	1049			MW-19@30'		✓	5
	2/12	936			MW-20@60'		✓	6
	2/12	1209			MW-21@60'		✓	7
	2/12	1120			MW-22@60'		✓	8
	2/12	1032			MW-23@60'		✓	9
	2/10	1432			MW-24@30'		✓	10
↓	2/10	845		↓	PT-3@60'	↓	✓	11
↓					TRIP BLANK	↓	✓	12

Air Bill No: 7756 4685 3001

Turn Around Time (Business Days): ☐ 24h* ☐ 48h* ☐ 3 days* ☐ 1 week* ☑ Standard (Per Contract/Quote) 2/23/16

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Jack Wintle	2/15/16	0000	Mohd Awez	2/15/16	9:10
Mohd Awez	2/15/16		FedEx	2/15/16	
Fedex	2-16-16	1015	Shalu Jeffers	2-16-16	1015

Note:

By submitting these samples, you agree to GCAL's terms and conditions contained in our most recent schedule of services.

Matrix[1]: W = water, S = solid, L = liquid, T = tissue

*Requires prior approval, rush charges may apply.

We cannot accept verbal changes. Please email written changes to your PM.

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT

GCAL ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIVING CHECKLIST

216021623

SAMPLE DELIVERY GROUP 216021623

Client PM SAK 4912 - Clearwater Environmental Resources	**Transport Method** FEDEX
Profile Number 259985	**Received By** McCune, Dodie N.
Line Item(s) 1 - VOC	**Receive Date(s)** 02/16/16

CHECKLIST	YES	NO	NA
Samples received with proper thermal and chemical preservation?	☑	☐	☐
Radioactivity is <1600 cmp? If no, record cmp value in notes section.	☑	☐	☐
Custody seals present and intact?	☑	☐	☐
COC relinquished and complete (including sample IDs, collect dates/times, and sampler name)?	☑	☐	☐
Short holds or RUSH samples received?	☐	☑	☐
All containers received in good condition and within hold time?	☑	☐	☐
All sample labels and containers received match the chain of custody?	☑	☐	☐
Preservation checked at receipt? Exceptions: VOC, Coliform, TOC, Oil and Grease, DOC	☐	☐	☑
Preservative added to any containers?	☐	☑	☐
VOC water containers received with headspace < 6mm?	☑	☐	☐
Received filtered sample volume for dissolved analysis?	☐	☐	☑
Trip blank present in all coolers containing VOC waters?	☑	☐	☐
Samples collected in containers provided by GCAL?	☑	☐	☐

COOLERS

Airbill	Thermometer ID: E26	Temp(°C)
775646853001		2.5

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

Revision 1.5

Page 1 of 1

APPENDIX C
FEBRUARY 2016 GROUNDWATER SAMPLING LOGS

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: Creek
WELL NO: MW-7	SAMPLE ID: MW-7@30	DATE: 2/10/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 35	STATIC DEPTH TO WATER (ft): ~~24.57~~ ~~25.40~~ 24.57	WELL CAPACITY (gal/ft):

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH - DEPTH TO WATER) X WELL CAPACITY = 0.658 10

PURGE METHOD: LF/LP	PURGE INITIATED AT: 1500	PURGE ENDED AT: 1519	TOTAL VOL PURGED (gal):

TIME	VOLUME PURGED (gal)	CUML. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP (°c)	COND. (mS/cm)	DO (mg/L)	ORP (millivolts)	TURB. (NTUs)
1507	0.25	0.25	—	24.57	5.45	12.29	.230	2.79	160.1	NR
1510	< 1/2	~~1/2~~ ~1/4	—	24.57	5.45	13.03	.246	1.86	158.1	NR
1513	< 1/2	< 1/2 ~1/4	—	24.57	5.45	13.76	.254	1.47	158.7	NR
1516	< 1/2	~1/4	—	24.57	5.46	14.11	.258	1.27	158.4	NR
1519	< 1/2	1/2	—	24.57	5.44	14.46	.264	1.02	158.4	NR

WELL CAPACITY (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06;2"=0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

Pump Type: RED Monpump **Tubing Type:** PE

SAMPLING DATA

SAMPLED BY (PRINT):		SAMPLER(S) SIGNATURE(S):
SAMPLING METHOD(S): LP/LP	SAMPLING INITIATED AT: 1521	SAMPLING ENDED AT: 1530
FIELD DECON: Y (N)	FIELD FILTERED: Y (N)	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD
NO.	MAT'L CODE	VOLUME	PRESERVATIVE USED	

Groundwater Parameter Tolerances (if possible):	Turbidity: <10 NTUs Temperature: +/- 5 °F pH: +/- 0.2 Units ORP: +/- 20 millivolts	DO: +/- 0.2 mg/l or +/- 10% Specific Conductance: +/- 3% Drawdown: no more than 25% of screened interval above pump intake

MATERIAL CODES: AG=AMBER GLASS; CG=CLEAR GLASS; PE=POLYETHYLENE; O=OTHER (SPECIFY)

REMARKS:

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: Rail road
WELL NO: MW-12	SAMPLE ID: MW-12 C60'	DATE: 7/10/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 16'	STATIC DEPTH TO WATER (ft): 13.47 ~~14.65~~	WELL CAPACITY (gal/ft):

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH - DEPTH TO WATER) X WELL CAPACITY = 0.658

PURGE METHOD:	PURGE INITIATED AT: 1318	PURGE ENDED AT: 1342	TOTAL VOL PURGED (gal):

TIME	VOLUME PURGED (gal)	CUML. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP (°c)	COND. (mS/cm)	DO (mg/L)	ORP (millivolts)	TURB. (NTUs)	
1325	1/4	1/4	–	19.78	5.01	13.94	0.070	6.34	160.2	NR	
1328	<1/8	~1/4	–	19.78	5.00	14.68	.074	5.48	158.8	NR	
1331	<1/8	~1/4	–	19.78	4.99	14.96	.074	4.90	158.4	NR	
1338	<1/8	~1/4 ~~1/2~~	–	19.78	4.97	15.07	.075	4.39	160.3	NR	
1342	<1/8	1/2	–	19.78	4.97	14.99	.074	4.39	161.4	NR	

WELL CAPACITY (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06;2"=0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

Pump Type: QED Micro purge	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT):	SAMPLER(S) SIGNATURE(S):	
SAMPLING METHOD(S): LF/LP	SAMPLING INITIATED AT: 1343	SAMPLING ENDED AT: 1352
FIELD DECON: Y (N)	FIELD FILTERED: (Y) N	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	
NO.	MAT'L CODE	VOLUME	PRESERVATIVE USED	INTENDED ANALYSIS AND/OR METHOD

Groundwater Parameter Tolerances (if possible):	Turbidity: <10 NTUs Temperature: +/- 5 °F pH: +/- 0.2 Units ORP: +/- 20 millivolts	DO: +/- 0.2 mg/l or +/- 10% Specific Conductance: +/- 3% Drawdown: no more than 25% of screened interval above pump intake

MATERIAL CODES: AG=AMBER GLASS; CG=CLEAR GLASS; PE=POLYETHYLENE; O=OTHER (SPECIFY)

REMARKS:

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: Creek
WELL NO: MW-15	SAMPLE ID: MW-15 @ 30'	DATE: 2/10/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 40'	STATIC DEPTH TO WATER (ft): 6.22	WELL CAPACITY (gal/ft):

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH - DEPTH TO WATER) X WELL CAPACITY = 0.658

PURGE METHOD: LF/LP	PURGE INITIATED AT: 1104	PURGE ENDED AT: 1136	TOTAL VOL PURGED (gal):

TIME	VOLUME PURGED (gal)	CUML. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP (°c)	COND. (mS/cm)	DO (mg/L)	ORP (millivolts)	TURB. (NTUs)	
1121	0.25	~0.25	–	6.50	5.31	8.60	0.041	6.14	125.4	NR	
1124	< 1/2	~ 1/4	–	6.50	5.25	9.37	.041	3.88	133.0	NR	
1127	< 1/2	~ 1/4	–	6.50	5.22	9.76	.042	3.25	139.9	NR	
1130	< 1/2	~ 1/4	–	6.50	5.20	10.78	.042	2.80	142.6	NR	
1133	< 1/2	1/2	–	6.50	5.07	12.48	.041	2.36	147.2	NR	
1136	< 1/2	~ 1/2	–	6.50	5.04	12.81	.041	2.12	149.1	NR	

Sample @ 11:36

WELL CAPACITY (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06;2"=0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

Pump Type: QED Bladder	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT):	SAMPLER(S) SIGNATURE(S):	
SAMPLING METHOD(S): LF/LP	SAMPLING INITIATED AT: 1136	SAMPLING ENDED AT: 1143
FIELD DECON: Y (N)	FIELD FILTERED: Y (N)	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD
NO.	MAT'L CODE	VOLUME	PRESERVATIVE USED	

Groundwater Parameter Tolerances (if possible):	Turbidity: <10 NTUs Temperature: +/- 5 °F pH: +/- 0.2 Units ORP: +/- 20 millivolts	DO: +/- 0.2 mg/l or +/- 10% Specific Conductance: +/- 3% Drawdown: no more than 25% of screened interval above pump intake

MATERIAL CODES: AG=AMBER GLASS; CG=CLEAR GLASS; PE=POLYETHYLENE; O=OTHER (SPECIFY)

REMARKS:

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC	SITE LOCATION: MW-17 (Creek)	
WELL NO: MW-17	SAMPLE ID: MW-17@30'	DATE: ~~9~~ 12 2/10/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 31'	STATIC DEPTH TO WATER (ft): 7.99	WELL CAPACITY (gal/ft):

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH - DEPTH TO WATER) X WELL CAPACITY = 0.658

PURGE METHOD: LF/LP	PURGE INITIATED AT: 0950	PURGE ENDED AT: 1010	TOTAL VOL PURGED (gal):

TIME	VOLUME PURGED (gal)	CUML. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP (°c)	COND. (mS/cm)	DO (mg/L)	ORP (millivolts)	TURB. (NTUs)	
0958	1/4	1/4	—	8.04	6.29	13.52	.118	4.34	60.2	NR	
1001	<1/8	~1/4	—	8.04	6.21	13.43	.116	2.67	64.1	NR	
1004	<1/8	~1/4	—	8.04	6.19	12.71	.115	2.21	68.8	NR	
1007	<1/8	~1/4	—	8.04	6.18	11.64	.113	2.23	71.9	NR	
1010	<1/8	~1/4	—	8.04	6.16	12.77	.112	1.89	75.5	NR	
			1011 - SAMPLE								

WELL CAPACITY (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06;2"=0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

Pump Type: QED Micropurge	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT):	SAMPLER(S) SIGNATURE(S):	
SAMPLING METHOD(S): LF/LP	SAMPLING INITIATED AT: 1011	SAMPLING ENDED AT: 1018
FIELD DECON: Y (N)	FIELD FILTERED: Y (N)	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD
NO.	MAT'L CODE	VOLUME	PRESERVATIVE USED	

Groundwater Parameter Tolerances (if possible):	Turbidity: <10 NTUs Temperature: +/- 5 °F pH: +/- 0.2 Units ORP: +/- 20 millivolts	DO: +/- 0.2 mg/l or +/- 10% Specific Conductance: +/- 3% Drawdown: no more than 25% of screened interval above pump intake

MATERIAL CODES: AG=AMBER GLASS; CG=CLEAR GLASS; PE=POLYETHYLENE; O=OTHER (SPECIFY)

REMARKS:

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: Creek
WELL NO: ~~MW-15~~ PE MW-19	SAMPLE ID: ~~MW-15 @ 30'~~ PE MW-19 @ 30'	DATE: 2/10/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): ~~40'~~ PE 35'	STATIC DEPTH TO WATER (ft): 7.66	WELL CAPACITY (gal/ft):

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH - DEPTH TO WATER) X WELL CAPACITY = 0.658

PURGE METHOD: LF/LP	PURGE INITIATED AT: 1030	PURGE ENDED AT: 1048	TOTAL VOL PURGED (gal):

TIME	VOLUME PURGED (gal)	CUML. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP (°c)	COND. (mS/cm)	DO (mg/L)	ORP (millivolts)	TURB. (NTUs)
1039	1/4	1/4	–	7.66	6.23	12.66	.191	3.17	-24.4	NR
1042	<1/8	~1/4	–	7.66	6.23	12.79	.191	1.76	-22.6	NR
1045	<1/8	~1/4	–	7.66	6.23	12.88	.192	1.46	-22.0	NR
1048	<1/8	~1/4	–	7.66	6.22	13.02	.193	1.14	-21.2	NR
			1049	SAMPLE						

WELL CAPACITY (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06;2"=0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

Pump Type: QED Micropurge **Tubing Type:** PE

SAMPLING DATA

SAMPLED BY (PRINT):	SAMPLER(S) SIGNATURE(S):	
SAMPLING METHOD(S): LF/LP	SAMPLING INITIATED AT: 1049	SAMPLING ENDED AT: 1056
FIELD DECON: Y (N)	FIELD FILTERED: Y (N)	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	
NO.	MAT'L CODE	VOLUME	PRESERVATIVE USED	INTENDED ANALYSIS AND/OR METHOD

Groundwater Parameter Tolerances (if possible):	Turbidity: <10 NTUs Temperature: +/- 5 °F pH: +/- 0.2 Units ORP: +/- 20 millivolts	DO: +/- 0.2 mg/l or +/- 10% Specific Conductance: +/- 3% Drawdown: no more than 25% of screened interval above pump intake

MATERIAL CODES: AG=AMBER GLASS; CG=CLEAR GLASS; PE=POLYETHYLENE; O=OTHER (SPECIFY)

REMARKS:

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: FCHA	
WELL NO: MW-20	SAMPLE ID: MW-20 @ 60'		DATE: 7/12/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft):	STATIC DEPTH TO WATER (ft): 14.78	WELL CAPACITY (gal/ft):

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH - DEPTH TO WATER) X WELL CAPACITY = 0.658

PURGE METHOD: LF/LP	PURGE INITIATED AT: 0902	PURGE ENDED AT: 0934	TOTAL VOL PURGED (gal): ~1/2

TIME	VOLUME PURGED (gal)	CUML. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP (°c)	COND. (mS/cm)	DO (mg/L)	ORP (millivolts)	TURB. (NTUs)
0920	1/4	~1/4	-	14.93	5.61	10.96	.050	6.61	173.7	112
0925	<1/2	~1/4	-	14.93	5.64	11.46	.053	5.20	168.5	135
0928	<1/2	~1/4	-	14.93	5.71	12.61	.054	4.93	166.1	85
0931	<1/2	~1/4	-	14.93	5.73	12.93	.055	4.65	163.6	107
0934	<1/2	~1/2	-	14.93	5.73	13.11	.056	4.46	163.1	183
				SAMPLE		0936				

WELL CAPACITY (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2"=0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

Pump Type: QED Micropurge **Tubing Type:** PE

SAMPLING DATA

SAMPLED BY (PRINT):		SAMPLER(S) SIGNATURE(S):	
SAMPLING METHOD(S): LF/LP	SAMPLING INITIATED AT: 0936		SAMPLING ENDED AT: 0944
FIELD DECON: Y (N)	FIELD FILTERED: Y (N)		DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD
NO.	MAT'L CODE	VOLUME	PRESERVATIVE USED	

Groundwater Parameter Tolerances (if possible):	Turbidity: <10 NTUs Temperature: +/- 5 °F pH: +/- 0.2 Units ORP: +/- 20 millivolts	DO: +/- 0.2 mg/l or +/- 10% Specific Conductance: +/- 3% Drawdown: no more than 25% of screened interval above pump intake

MATERIAL CODES: AG=AMBER GLASS; CG=CLEAR GLASS; PE=POLYETHYLENE; O=OTHER (SPECIFY)

REMARKS:

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC	SITE LOCATION: Source Area	
WELL NO: MW-21	SAMPLE ID: MW-21 C 60	DATE: 2/12/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft):	STATIC DEPTH TO WATER (ft): 42.70	WELL CAPACITY (gal/ft):

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH - DEPTH TO WATER) X WELL CAPACITY = 0.658

PURGE METHOD: LF/LP	PURGE INITIATED AT: 1141	PURGE ENDED AT: 1207	TOTAL VOL PURGED (gal): N/A

TIME	VOLUME PURGED (gal)	CUML. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP (°c)	COND. (mS/cm)	DO (mg/L)	ORP (millivolts)	TURB. (NTUs)
1158	1/4	1/4	—	42.20	6.11	12.72	.079	10.78	159.2	17.5
1201	1 1/2	~1/4	—	43.14	6.07	14.08	.079	7.47	158.6	10.45
1204	1 1/2	~1/4	—	43.14	6.06	14.27	.080	6.94	158.1	8.84
1207	1 1/2	~1/4	—	43.14	6.05	14.08	.079	6.92	158.0	8.21
			1209	SAMPLE						

WELL CAPACITY (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06;2"=0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

Pump Type: QED Micro purge	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT):	SAMPLER(S) SIGNATURE(S):	
SAMPLING METHOD(S): LF/LP	SAMPLING INITIATED AT: 1209	SAMPLING ENDED AT: 1228
FIELD DECON: Y (N)	FIELD FILTERED: Y (N)	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD
NO.	MAT'L CODE	VOLUME	PRESERVATIVE USED	

Groundwater Parameter Tolerances (if possible):	Turbidity: <10 NTUs Temperature: +/- 5 °F pH: +/- 0.2 Units ORP: +/- 20 millivolts	DO: +/- 0.2 mg/l or +/- 10% Specific Conductance: +/- 3% Drawdown: no more than 25% of screened interval above pump intake

MATERIAL CODES: AG=AMBER GLASS; CG=CLEAR GLASS; PE=POLYETHYLENE; O=OTHER (SPECIFY)

REMARKS:

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: Source Area	
WELL NO: MW-73	SAMPLE ID: MW-73 @ 60'		DATE: 7/17/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 64'	STATIC DEPTH TO WATER (ft): 44.49	WELL CAPACITY (gal/ft):

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH - DEPTH TO WATER) X WELL CAPACITY = 0.658

PURGE METHOD: LF/LP	PURGE INITIATED AT: 1014	PURGE ENDED AT: 1031	TOTAL VOL PURGED (gal): ~1/2

TIME	VOLUME PURGED (gal)	CUML. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP (°c)	COND. (mS/cm)	DO (mg/L)	ORP (millivolts)	TURB. (NTUs)
1021	0.25	0.25	–	44.66	5.17	16.62	.562	3.26	190.7	127
1024	< 1½	~ 1/4	–	44.66	5.14	16.90	.582	2.08	190.2	148
1028	< 1½	~ 1/4	–	44.66	5.07	17.11	.592	1.59	190.3	156
1031	< 1½	~ 1/4	–	44.66	5.08	12.06	.593	1.44	190.5	151

SAMPLE - 1033

WELL CAPACITY (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06;2"=0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

Pump Type: QED Microperge	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT):	SAMPLER(S) SIGNATURE(S):	
SAMPLING METHOD(S): LF/LP	SAMPLING INITIATED AT: ~~1033~~ 1032	SAMPLING ENDED AT: 1038
FIELD DECON: Y (N)	FIELD FILTERED: Y (N)	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD
NO.	MAT'L CODE	VOLUME	PRESERVATIVE USED	

Groundwater Parameter Tolerances (if possible):	Turbidity: <10 NTUs Temperature: +/- 5 °F pH: +/- 0.2 Units ORP: +/- 20 millivolts	DO: +/- 0.2 mg/l or +/- 10% Specific Conductance: +/- 3% Drawdown: no more than 25% of screened interval above pump intake

MATERIAL CODES: AG=AMBER GLASS; CG=CLEAR GLASS; PE=POLYETHYLENE; O=OTHER (SPECIFY)

REMARKS:

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: Source Area	
WELL NO: MW-77	SAMPLE ID: MW-77 @ 60'		DATE: 7/17/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 70'	STATIC DEPTH TO WATER (ft): 41.14 ~~23.14~~ RE	WELL CAPACITY (gal/ft):

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH - DEPTH TO WATER) X WELL CAPACITY = 0.658

PURGE METHOD: LF/LP	PURGE INITIATED AT: 1050	PURGE ENDED AT: 1118	TOTAL VOL PURGED (gal): ~1/2

TIME	VOLUME PURGED (gal)	CUML. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP (°c)	COND. (mS/cm)	DO (mg/L)	ORP (millivolts)	TURB. (NTUs)
1105	0.25	0.25	-	41.14	5.72	15.80	.208	3.22	163.5	72
1110	< 1/8	~1/4	-	41.14	5.72	16.42	.208	2.55	163.4	48
1114	< 1/8	~1/4	-	41.14	5.71	16.47	.210	2.02	163.0	107.7
1118	< 1/8	~1/4	-	41.14	5.71	17.35	.211	1.77	163.0	78.2
				1120 - SAMPLE						

WELL CAPACITY (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06;2"=0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

Pump Type: QED Micropurge **Tubing Type:** PE

SAMPLING DATA

SAMPLED BY (PRINT):		SAMPLER(S) SIGNATURE(S):	
SAMPLING METHOD(S): LF/LP	SAMPLING INITIATED AT: 1120		SAMPLING ENDED AT: 1130
FIELD DECON: Y (N)	FIELD FILTERED: Y (N)		DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD
NO.	MAT'L CODE	VOLUME	PRESERVATIVE USED	

Groundwater Parameter Tolerances (if possible):	Turbidity: <10 NTUs Temperature: +/- 5 °F pH: +/- 0.2 Units ORP: +/- 20 millivolts	DO: +/- 0.2 mg/l or +/- 10% Specific Conductance: +/- 3% Drawdown: no more than 25% of screened interval above pump intake

MATERIAL CODES: AG=AMBER GLASS; CG=CLEAR GLASS; PE=POLYETHYLENE; O=OTHER (SPECIFY)

REMARKS:

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: Railroad
WELL NO: MW-24	SAMPLE ID: MW-24 P30	DATE: 7/7/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft):	STATIC DEPTH TO WATER (ft): 18.39	WELL CAPACITY (gal/ft):

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH - DEPTH TO WATER) X WELL CAPACITY = 0.658

PURGE METHOD: LF/LP	PURGE INITIATED AT: 1400	PURGE ENDED AT: 1431	TOTAL VOL PURGED (gal):

TIME	VOLUME PURGED (gal)	CUML. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP (°c)	COND. (mS/cm)	DO (mg/L)	ORP (millivolts)	TURB. (NTUs)
1417	1/4	1/4	—	18.39	5.15	11.26	0.155	5.48	164.7	NR
1421	1/4	~1/4	—	18.39	5.18	11.48	.166	4.47	165.8	NR
1424	<1/8	~1/4	—	18.39	5.18	11.55	.167	4.44	165.3	NR
1428	<1/8	~1/4	—	18.39	5.17	11.56	.171	4.03	165.8	NR
1431	<1/8	1/2	—	18.39	5.17	12.14	.172	4.12	165.7	NR

WELL CAPACITY (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06;2"=0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

Pump Type: QED Micropurge	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT):	SAMPLER(S) SIGNATURE(S):

SAMPLING METHOD(S): LF/LP	SAMPLING INITIATED AT: 1432	SAMPLING ENDED AT: 1438
FIELD DECON: Y (N)	FIELD FILTERED: Y (N)	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD
NO.	MAT'L CODE	VOLUME	PRESERVATIVE USED	

Groundwater Parameter Tolerances (if possible):	Turbidity: <10 NTUs Temperature: +/- 5 °F pH: +/- 0.2 Units ORP: +/- 20 millivolts	DO: +/- 0.2 mg/l or +/- 10% Specific Conductance: +/- 3% Drawdown: no more than 25% of screened interval above pump intake

MATERIAL CODES: AG=AMBER GLASS; CG=CLEAR GLASS; PE=POLYETHYLENE; O=OTHER (SPECIFY)

REMARKS:

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: FCHA
WELL NO: PT-3	SAMPLE ID: PT-3 @ 60'	DATE: 2/12/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft):	STATIC DEPTH TO WATER (ft): 15.25	WELL CAPACITY (gal/ft):

1 WELL VOLUME (gal) = (TOTAL WELL DEPTH - DEPTH TO WATER) X WELL CAPACITY = 0.658

PURGE METHOD: LF/LP	PURGE INITIATED AT: 0805	PURGE ENDED AT: 0844	TOTAL VOL PURGED (gal): 1 1/2

TIME	VOLUME PURGED (gal)	CUML. VOLUME PURGED (gal)	PURGE RATE (gpm)	DEPTH TO WATER (ft)	pH	TEMP (°c)	COND. (mS/cm)	DO (mg/L)	ORP (millivolts)	TURB. (NTUs)	
0829	1/4	1/4	—	15.25	5.75	13.13	.182	3.43	163.8	23	
0833	<1/2	~1/4	—	15.25	5.73	13.51	.183	2.35	162.9	11	
0838	<1/2	~1/4	—	15.25	5.71	14.16	.185	1.62	163.6	64.8	
0841	<1/2	~1/4	—	15.25	5.70	14.30	.186	1.53	163.7	65.7	
0844	<1/2	~1/4	—	15.25	5.69	14.62	.187	1.28	162.9	68.4	
				SAME - 0845							

WELL CAPACITY (gal/ft): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06;2"=0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

Pump Type: QED Micropurge	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT):	SAMPLER(S) SIGNATURE(S):	
SAMPLING METHOD(S): LF/LP	SAMPLING INITIATED AT: 0845	SAMPLING ENDED AT: 0854
FIELD DECON: Y (N)	FIELD FILTERED: Y (N)	DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION	INTENDED ANALYSIS AND/OR METHOD
NO.	MAT'L CODE	VOLUME	PRESERVATIVE USED	

Groundwater Parameter Tolerances (if possible):	Turbidity: <10 NTUs Temperature: +/- 5 °F pH: +/- 0.2 Units ORP: +/- 20 millivolts	DO: +/- 0.2 mg/l or +/- 10% Specific Conductance: +/- 3% Drawdown: no more than 25% of screened interval above pump intake

MATERIAL CODES: AG=AMBER GLASS; CG=CLEAR GLASS; PE=POLYETHYLENE; O=OTHER (SPECIFY)

REMARKS:

APPENDIX D
X_2 REMEDIAL SYSTEM REPORT

Exhibit 1. Rayloc VRP PCE Trends

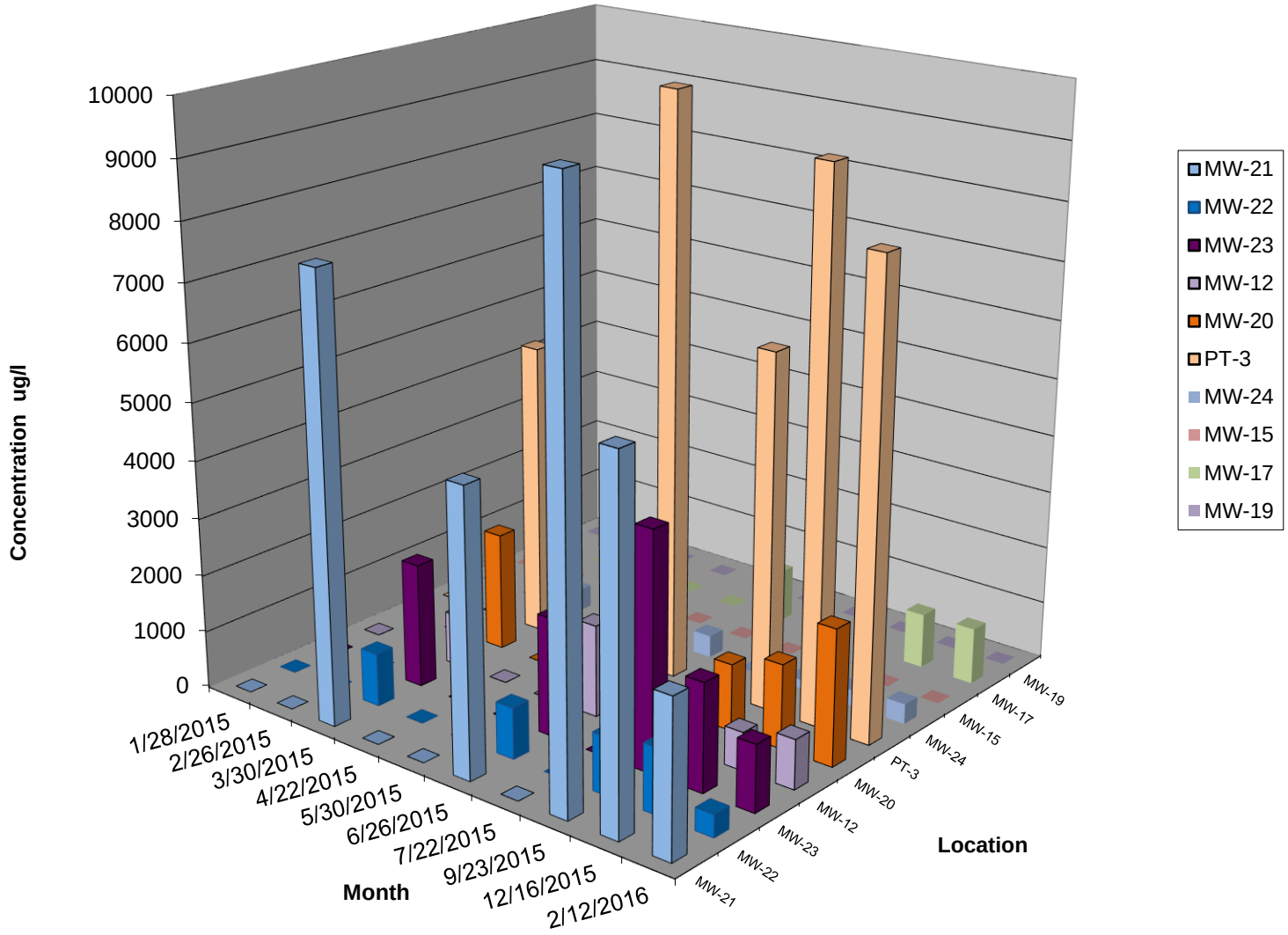


Exhibit 2. Rayloc VRP Cis 1,2 Dichloroethene Trends

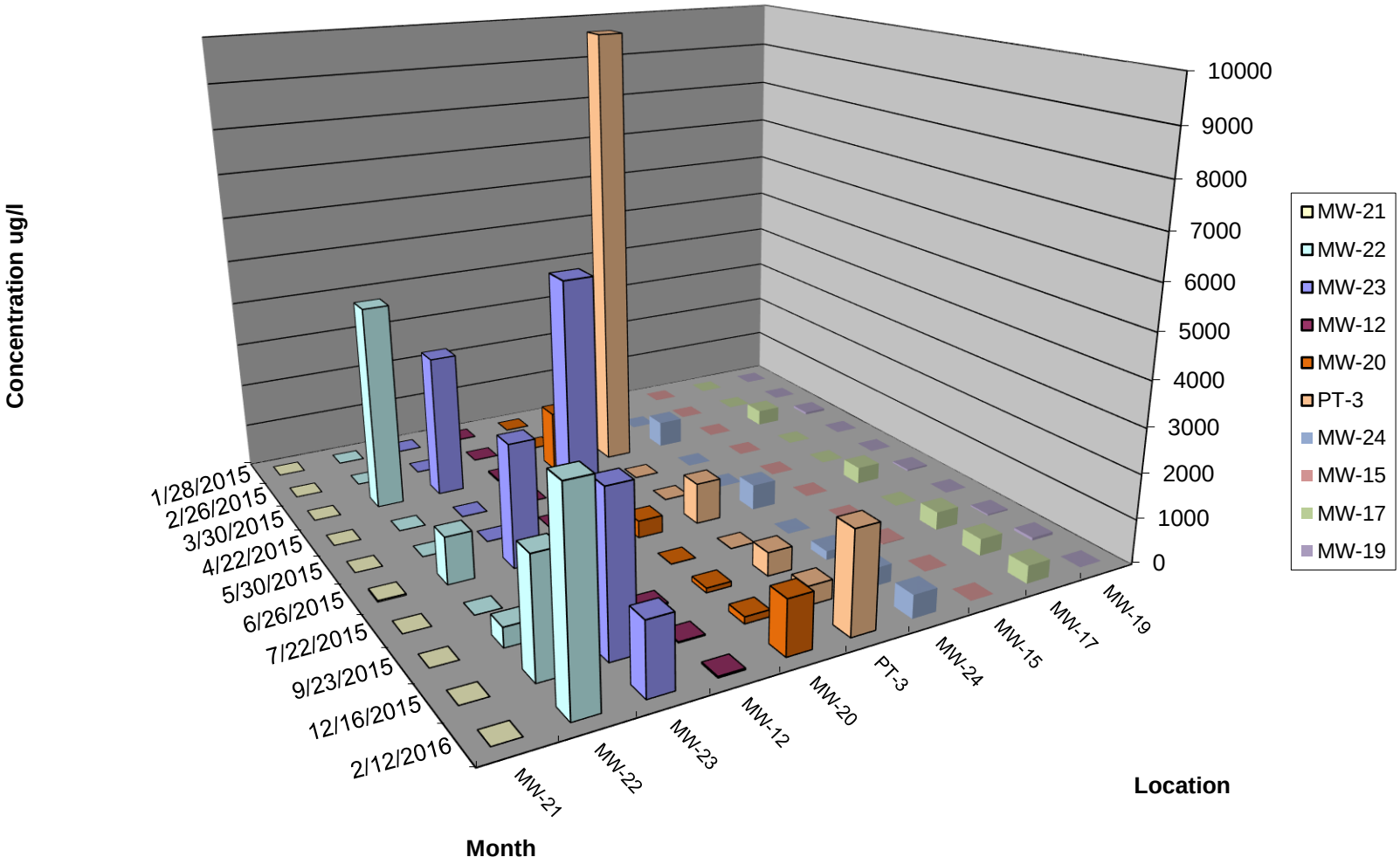


Exhibit 3. Rayloc VRP TCE Trends

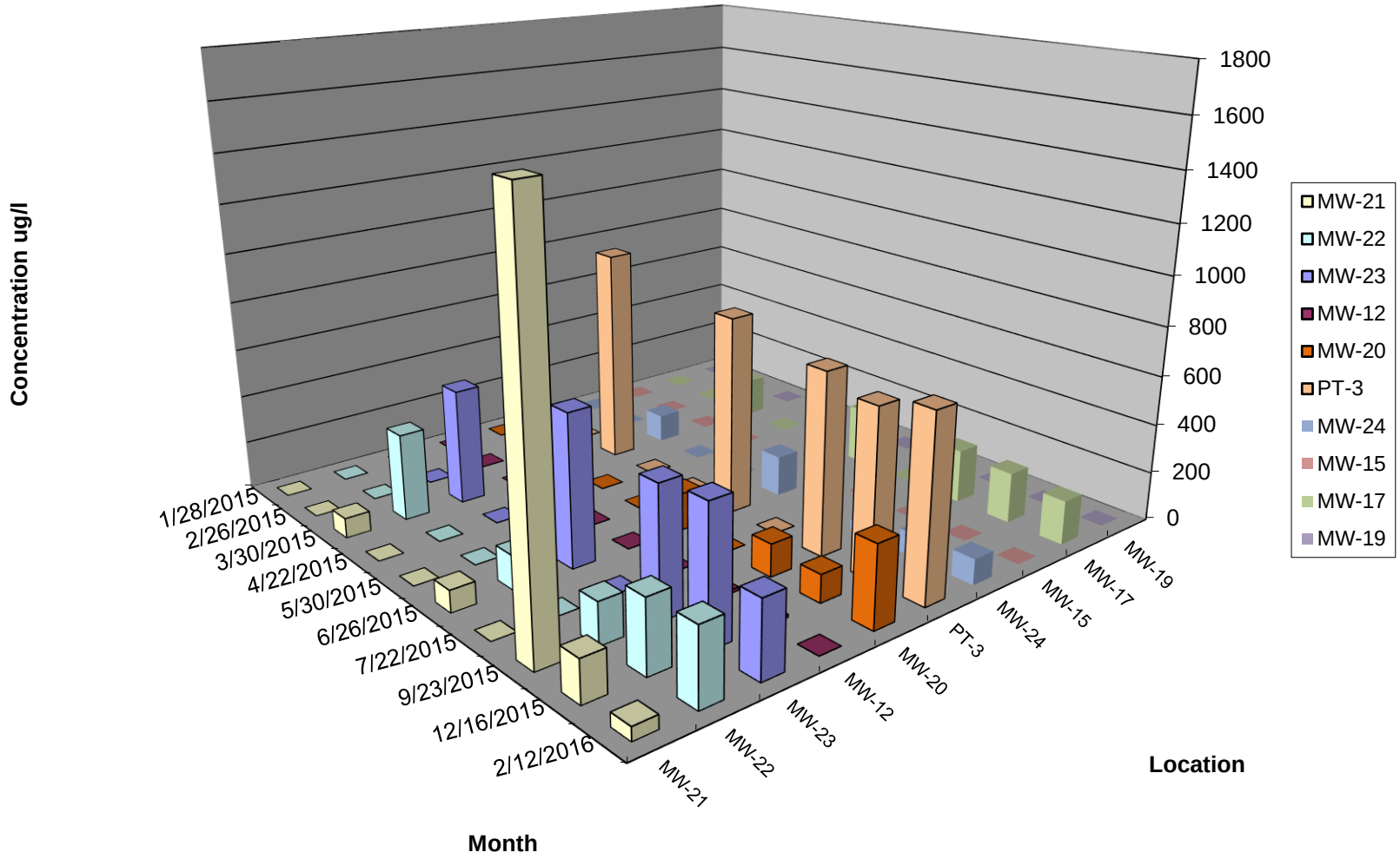


Exhibit 4. Rayloc VRP Dissolved Oxygen Trends

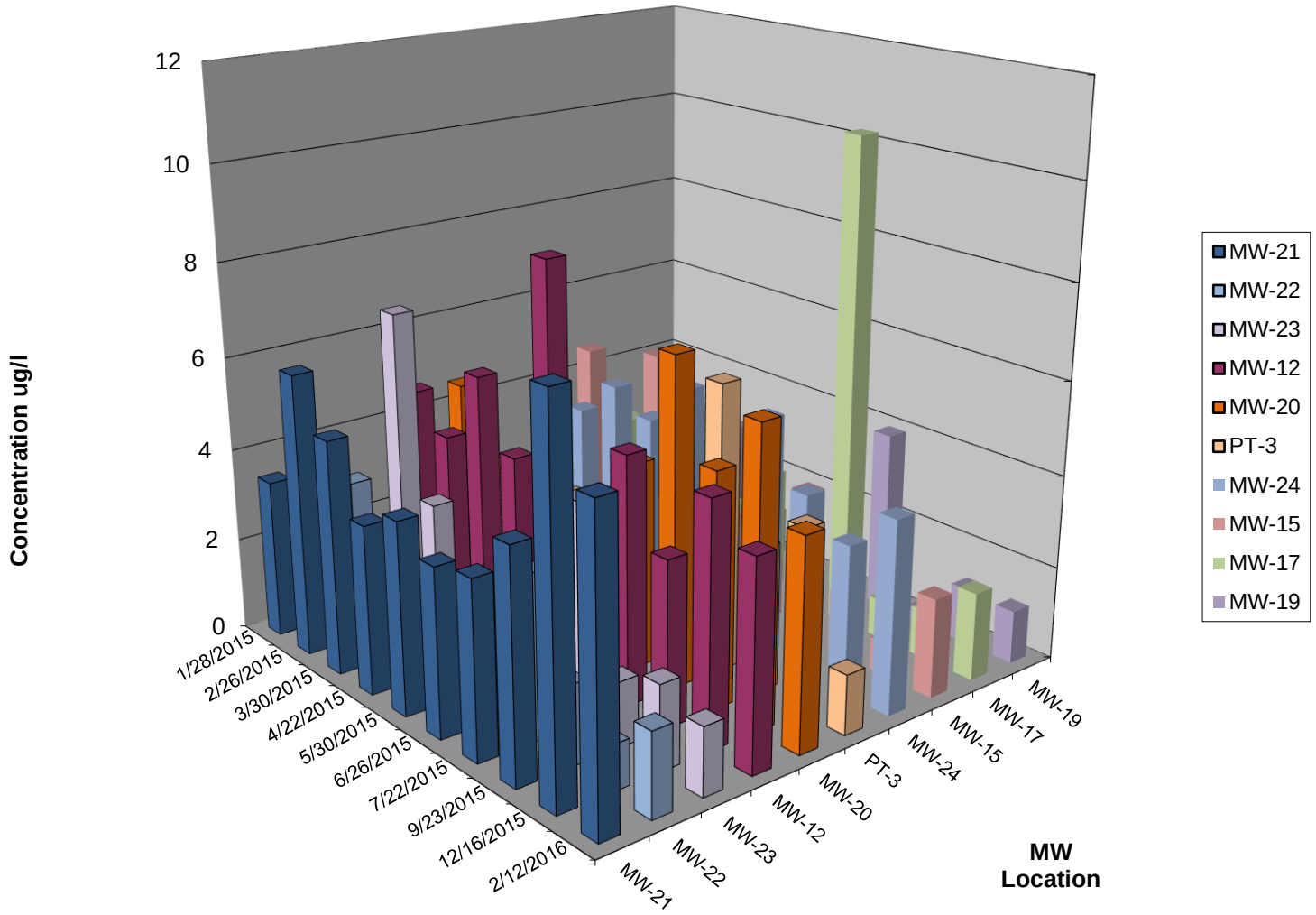


Exhibit 5. Rayloc VRP ORP Trends

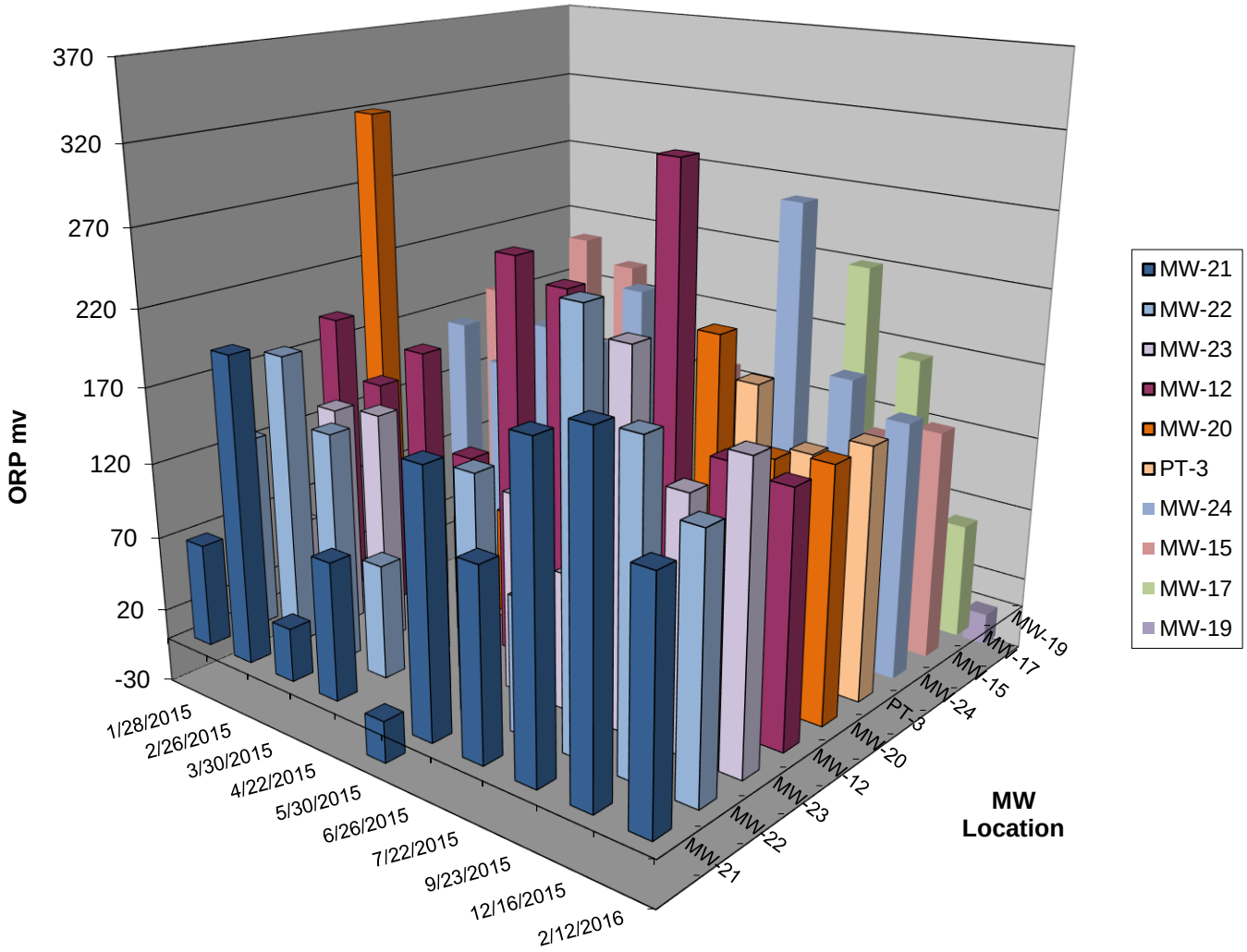


Exhibit 6. Rayloc VRP MW-21 Trends

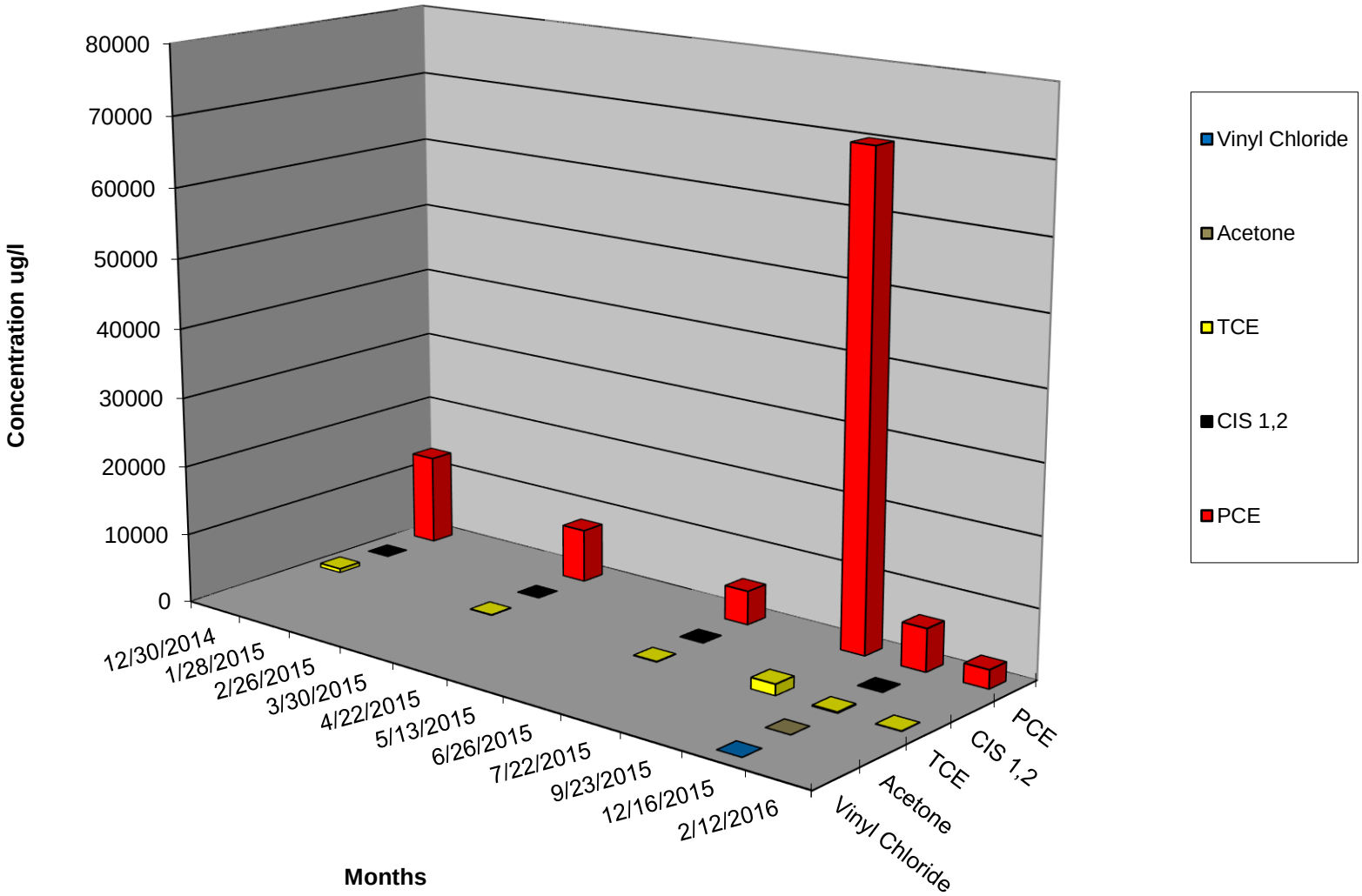


Exhibit 7. Rayloc VRP MW-22 Trends

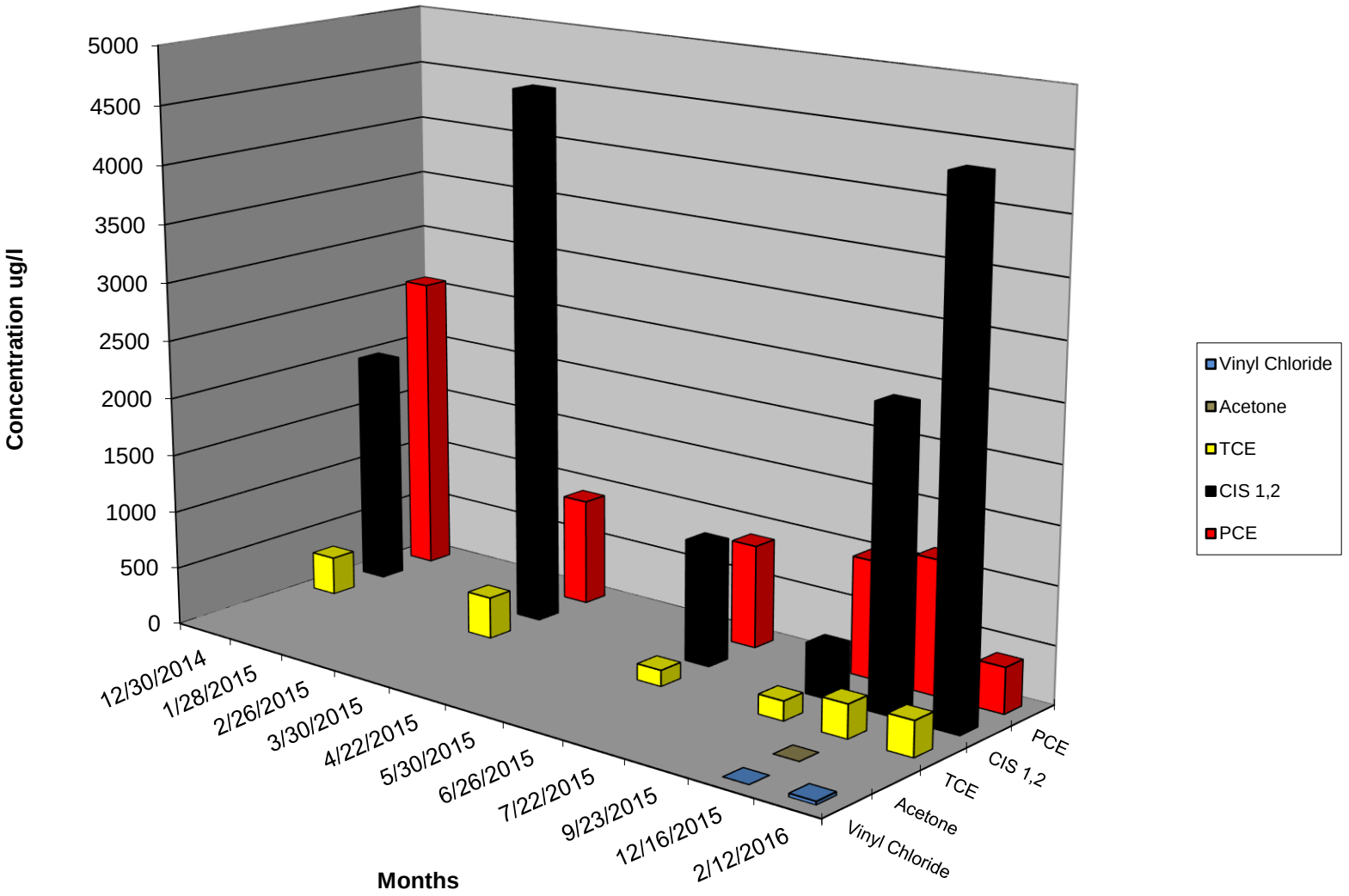


Exhibit 8. Rayloc VRP MW-23 Trends

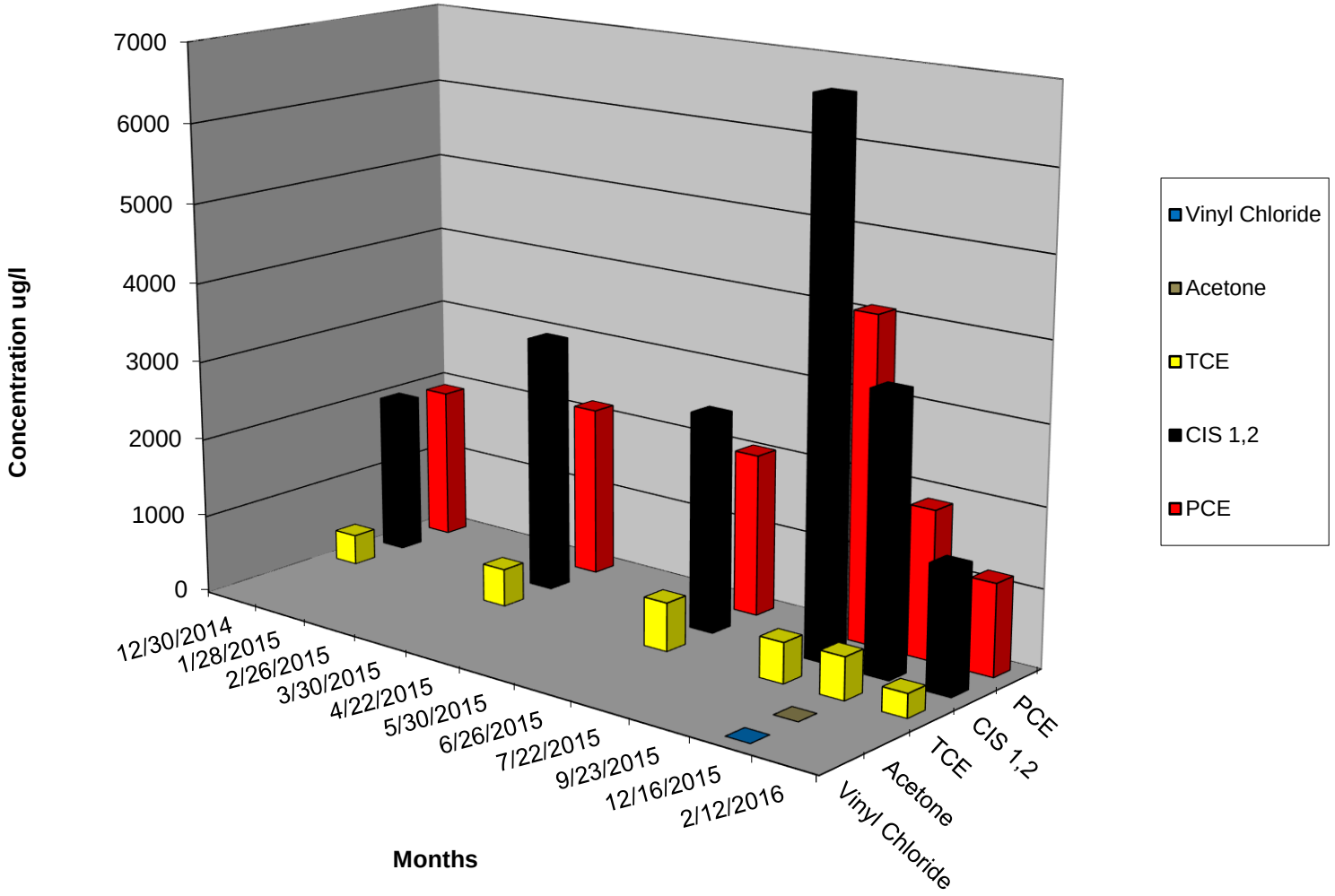


Exhibit 9. Rayloc VRP W-12 Trends

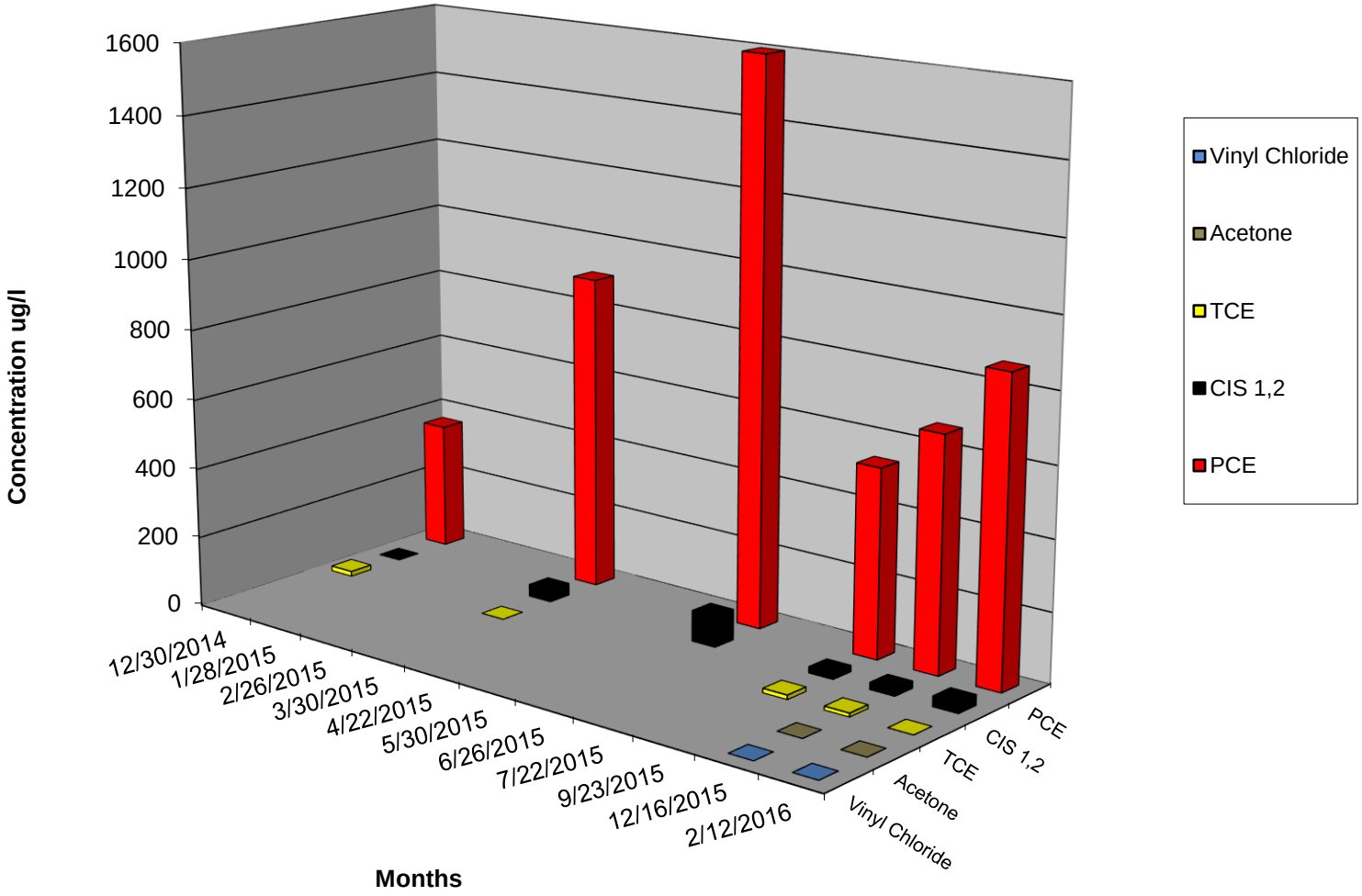


Exhibit 10. Rayloc VRP MW-20 Trends

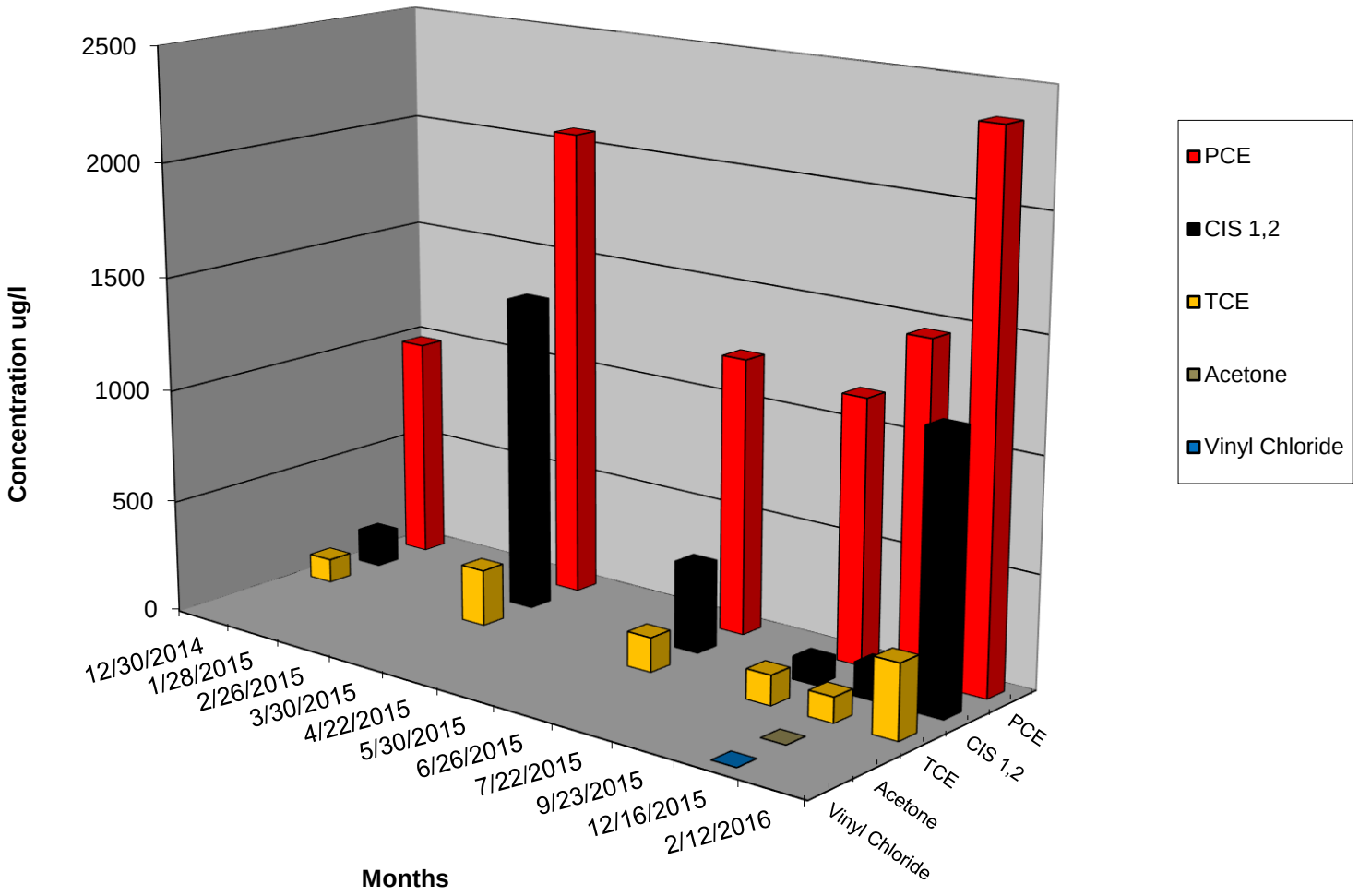


Exhibit 11. Rayloc VRP PT-3 60' Trends

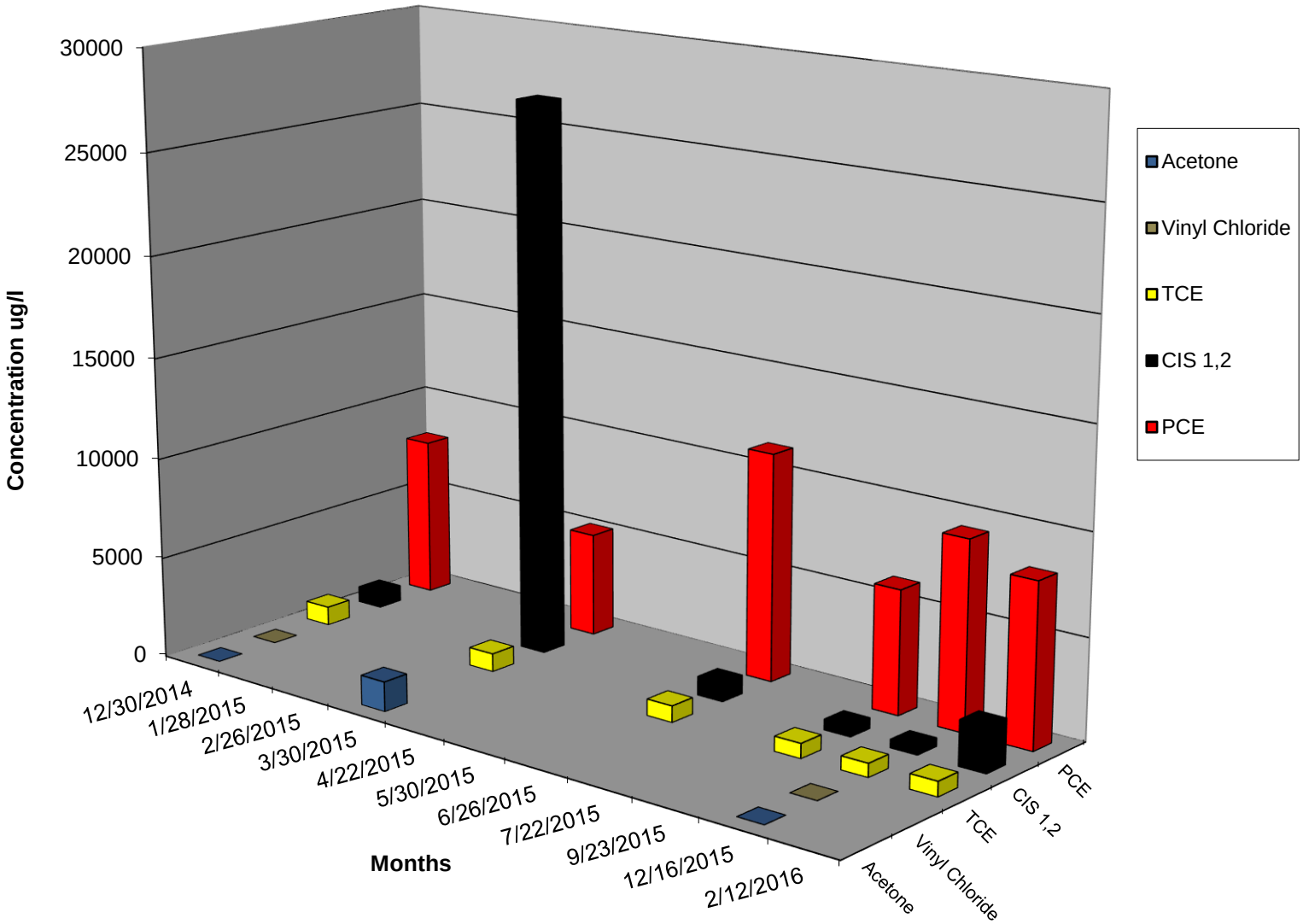


Exhibit 12. Rayloc VRP MW-24 Trends

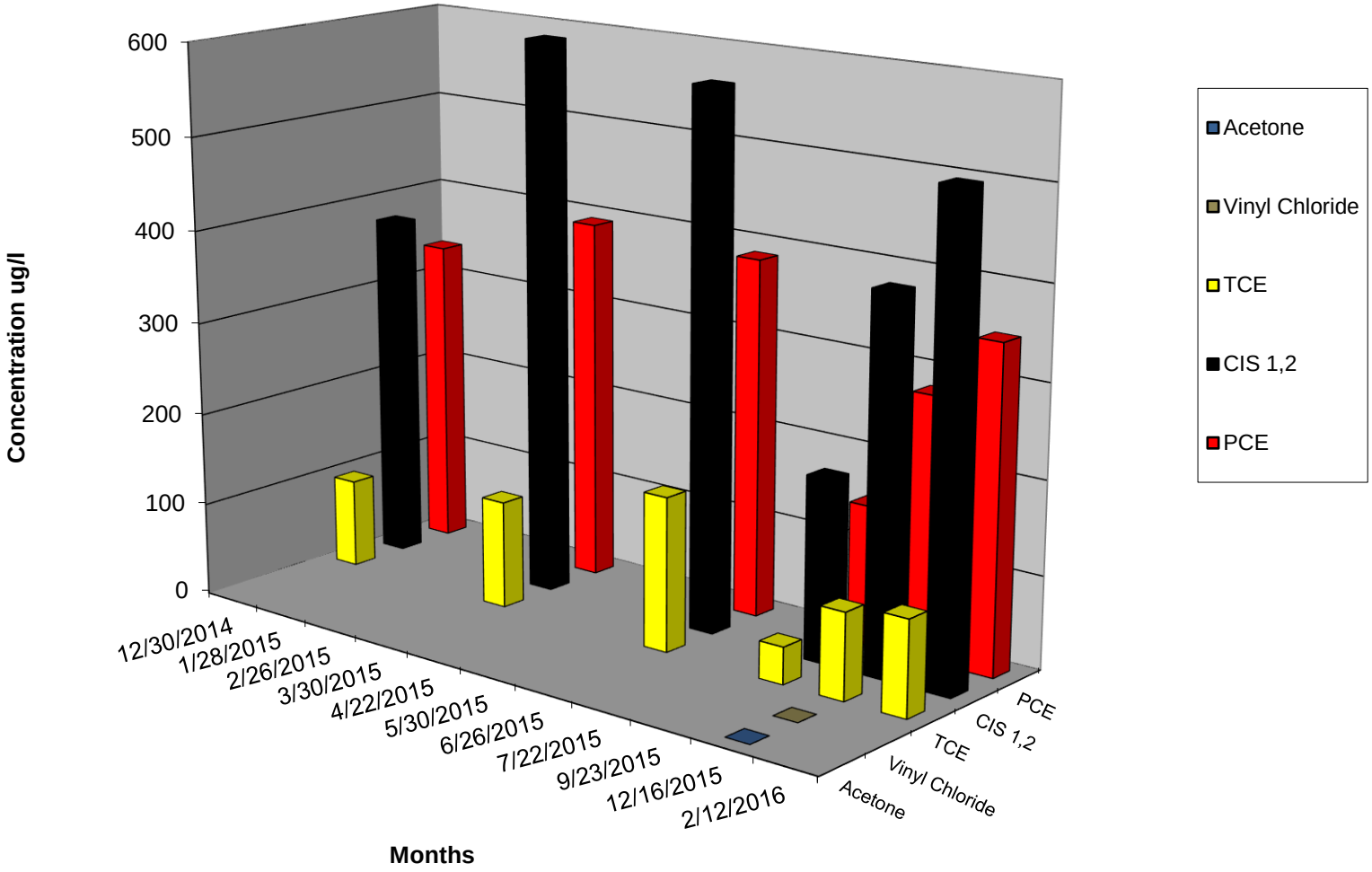


Exhibit 13. Rayloc VRP MW-15 Trends

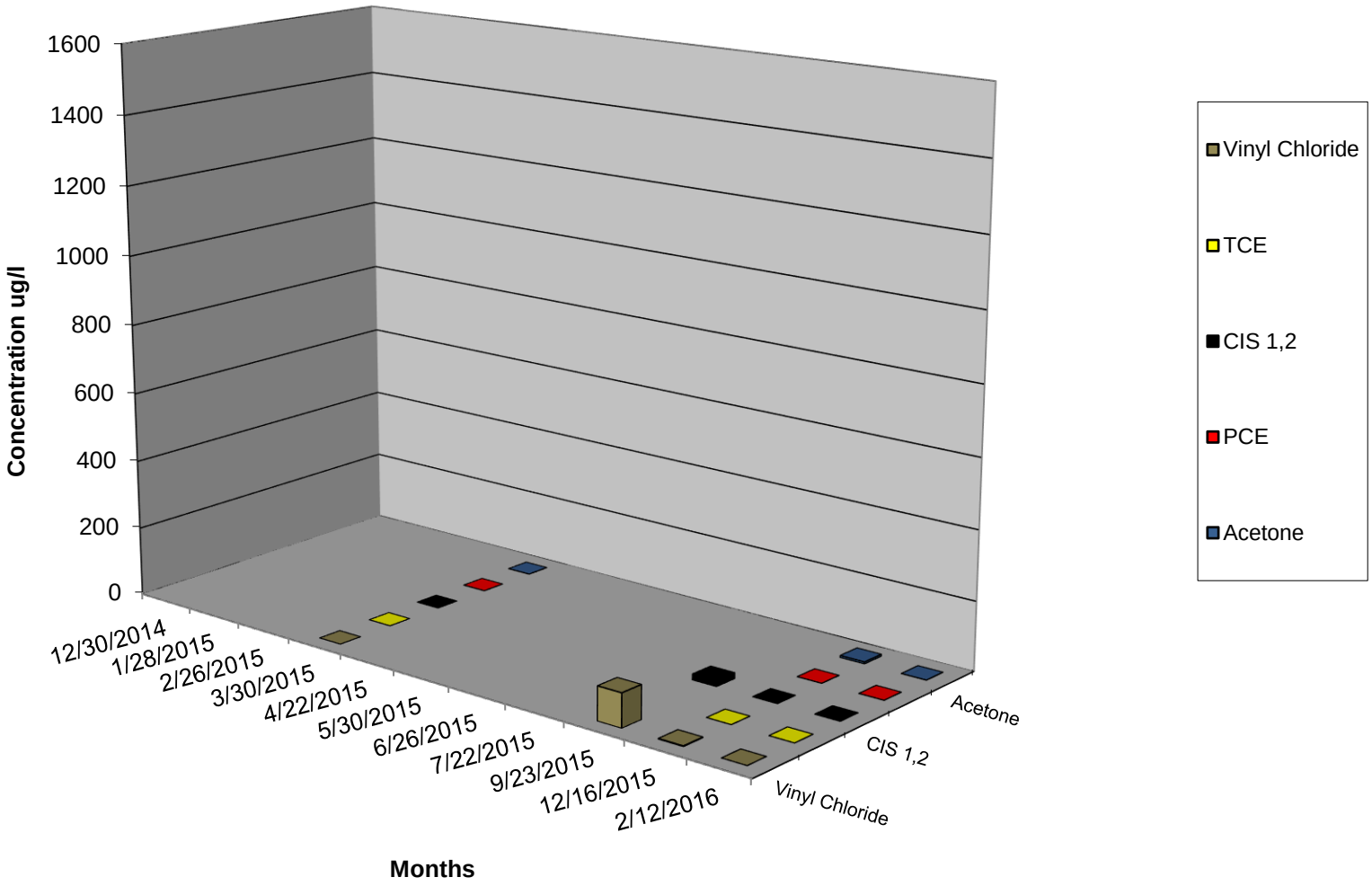


Exhibit 14. Rayloc VRP MW-17 Trends

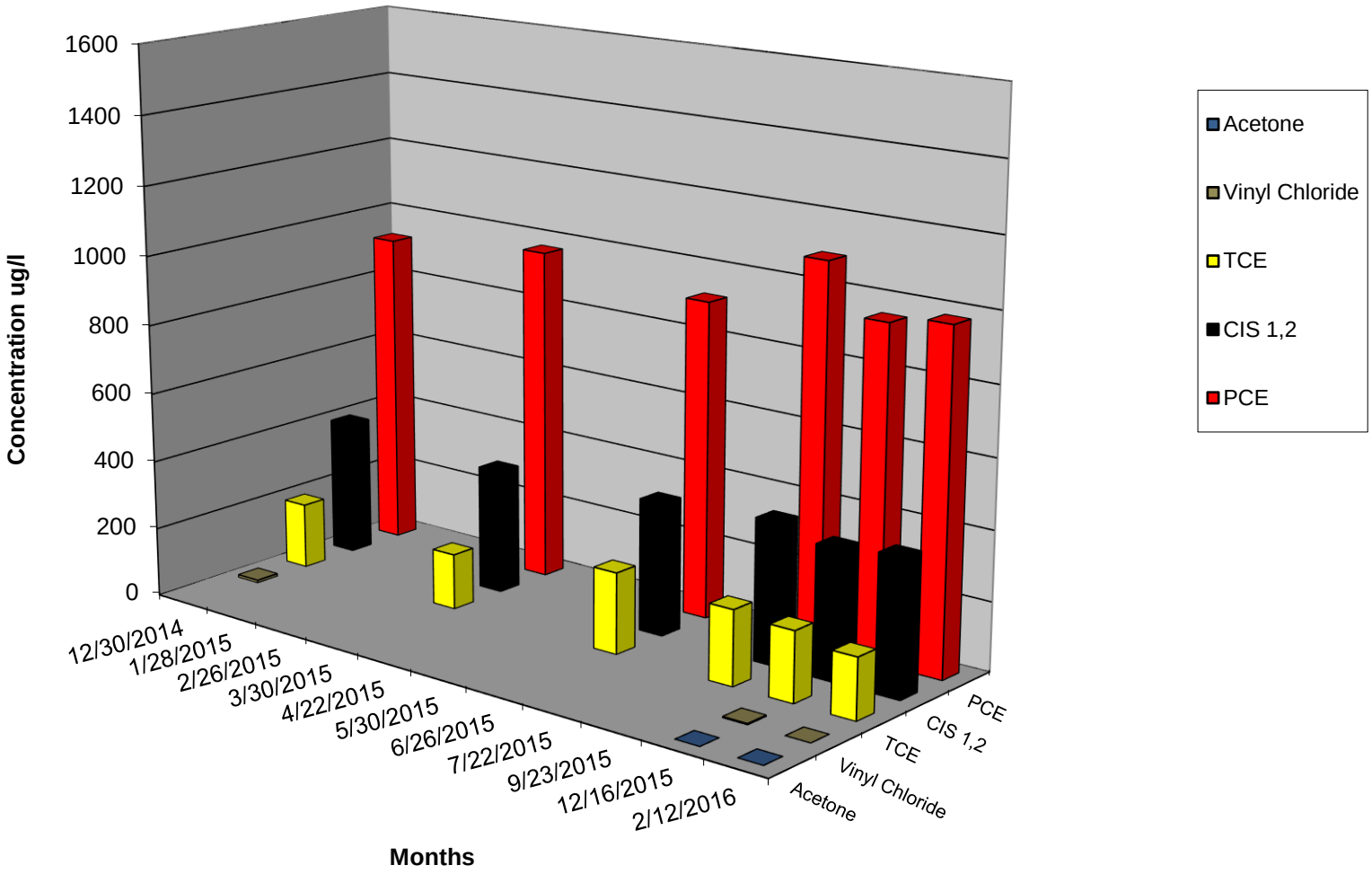
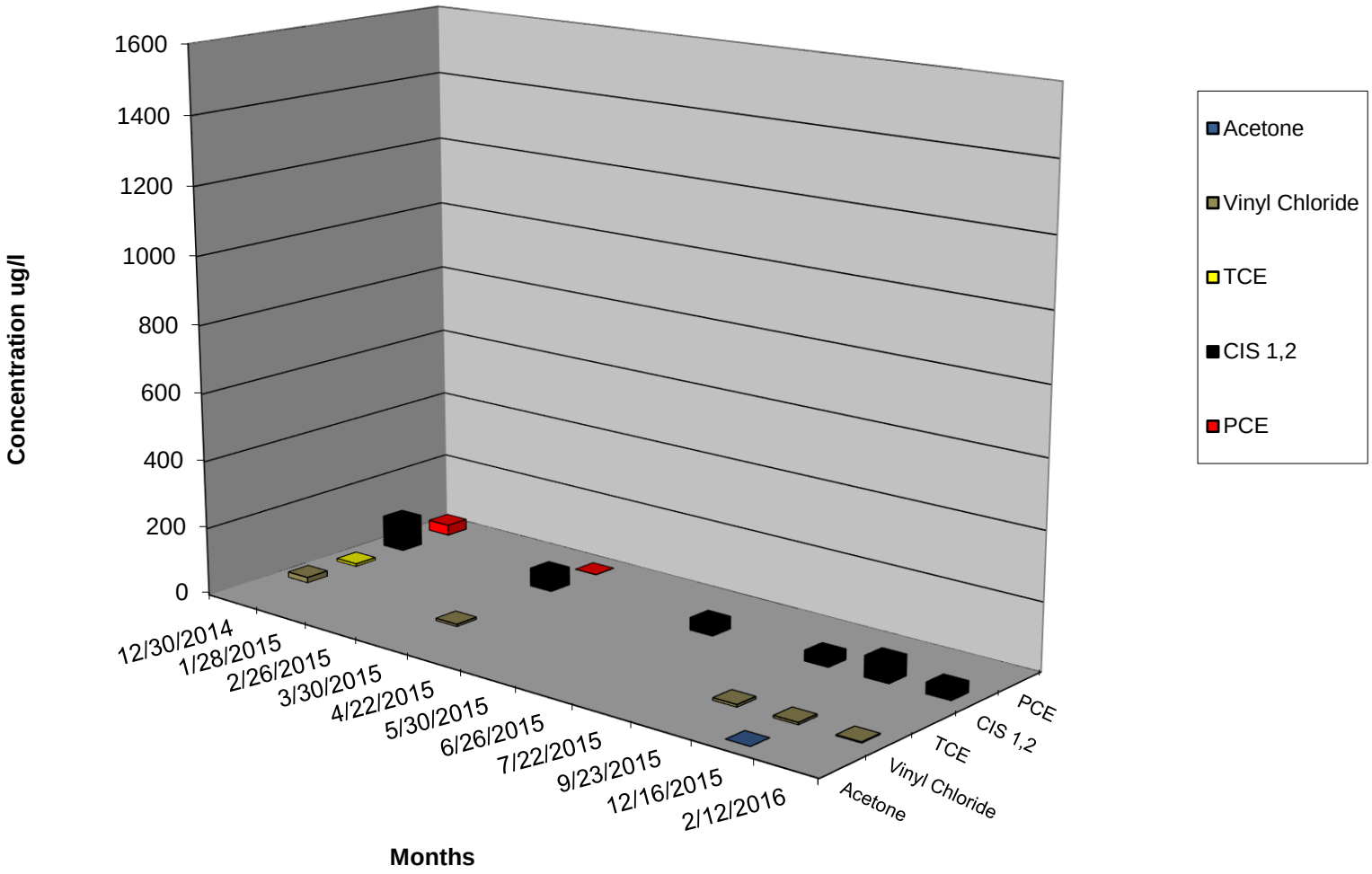


Exhibit 15. Rayloc VRP MW-19 Trends



Environmental X2 Contracting, Inc.

VRP Groundwater Remediation Progress Report

Project: Former Rayloc Facility

600 Rayloc Drive

Atlanta, GA 30336

For: **Mr. Jack Wintle, P.G.**

Clearwater Environmental Resources, LLC

3870 Peachtree Ind. Blvd.

Suite 340139

Duluth, GA 30096

April 4, 2016

OVERVIEW

This report provides a technical summary of remedial operations during the period October 2015 through March 2016. There was a significant reduction in PCE concentrations throughout the source area, an increase in the downgradient zone Area 2, and modest change in the offsite Area 3. However, there was substantial generation of CIS-1,2 -Dichloroethene daughter product in Area 2, indicating that a high level of reduction is occurring as greater mass of PCE migrates into the area. The 27 percent improvement in ORP during this period supports the conclusion that reductive dechlorination is increasing in most of the treatment zone. The areas that are deficient in organic acids and buffering capacity continue to experience excess methane generation due to *methanogenic* competition for hydrogen, thus inhibiting reductive dechlorination.

During this reporting period, several maintenance and enhancement projects were undertaken. The primary groundwater injection system treating Area 1 and 2 was replaced with a state-of-the-art mixing system that allows for automated adjustment of the % hydrogen injected. Anticipating the application of methanogen inhibitor during the next quarter, the new system will allow for increased levels of hydrogen, which will support higher rates of reductive dechlorination. In addition, the injection system treating Area 3 was damaged by vandalism and has been replaced by a new system to improve performance via the 4 injection points in Area 3.

SOURCE AREA

The perimeter of the primary source area (Area 1) is monitored by 3 deep wells MW-21,22,23. There are presently 12 groundwater injection wells that deliver gas phase reagents to this zone. The percent change in key parameters is presented in Figure 1 below; note that positive numbers indicate a decrease from the prior period, while a negative value reflects an increase. There was substantial reduction of PCE mass in the source area during this period. MW-22 revealed a large increase of CIS-1,2 daughter product, indicating a higher level of reductive dechlorination; MW-22 is most influenced by the supplemental injection wells that were installed in December 2014. The long term trends in key parameters listed in Figure 1 and illustrated graphically in Exhibits 1-5; trends in key parameters for MW-21,22,23 are illustrated graphically in Exhibits 6-8.

Figure 1. Percent Change in Key Parameters

AreaLocation	PCE	CIS	TCE	DO	ORP
1-MW-21	56	0	69	20	30
1-MW-22	66	-74	-5	-84	20
1-MW-23	38	55	44	20	-19
2-MW-12	-30	-48	100	14	3
2-MW-20	-62	-705	-192	29	-4
2-PT-3	13	-436	-9	67	-10
2-MW-24	-24	-28	-11	-29	10
3-MW-15	0	0	0	0	0
3-MW-17	-3	-5	13	-80	58
3-MW-19	0	100	0	5	179
Average	5	-114	1	-4	27

AREA 2 – DOWN GRADIENT

The treatment zone immediately down gradient of the source area (Area 2) is an abandoned railroad right of way. Prior pilot studies with various technologies were conducted in Area 2. This zone has seen fluctuations in mass migration and reaction rates due to geochemical conditions that in some cases inhibit reductive dechlorination. Process control sampling was implemented in January 2015 to include the following parameters:

- pH, EC, Temp, ORP, DO, Alkalinity
- Organic Carbon: DOC/TOC,
- CAHs,
- chloride,
- nitrate, nitrite
- sulphate,
- Iron: (II) and (III)
- ethane/ethene/methane.

Evaluation of the process control information facilitates decisions on supplemental reagents such as methanogen inhibitor, organic acids, and hydrogen percentage. Although 3 of the 4 monitoring wells in Area 2 experienced an influx of PCE mass during this period, the concurrent increase in CIS-1,2 daughter product indicates that reductive dechlorination is progressing, but at a rate that is less than the rate of influx from the source area. Recent maintenance improvements to injection system components in Area 2, coupled with the recent system capacity upgrade should improve the rates during the present quarter. The key parameter trends for the monitoring wells in Area 2 (MW-12, 20, PT-3, MW-24) are illustrated graphically in Exhibits 9-12.

OFF SITE AREA 3

This area is located adjacent to a Chattahoochee River tributary creek south of Wendell Drive, and down gradient from the source area. It is monitored by MW-15,17,19. There are 4 groundwater injections wells in a linear array between MW-17 and MW-19. This area is influenced by the creek hydraulics, and has experienced some down time due to vandalism during the reporting period. A new system was fabricated and installed within a steel shipping container to avoid further vandalism delays. There was little change in conditions in Area 3 during this period; the results for key parameters are illustrated graphically in Exhibits 13-15.

Environmental X2 Contracting, Inc.

Soil Remediation Status Report

Parts Disassembly Area

Project: Former Rayloc Facility

600 Rayloc Drive

Atlanta, GA 30336

For: **Mr. Jack Wintle, P.G.**

Clearwater Environmental Resources, LLC

3870 Peachtree Ind. Blvd.

Suite 340139

Duluth, GA 30096

April 4, 2016

OVERVIEW

Since start up in April of 2015, confirmation soil sampling has been performed on a bi-monthly schedule to monitor progress. The results through December 2015 are summarized in Table 1 below; note that the percent reduction calculations are based on the 5 confirmation sampling points. The baseline sampling stations that have not been sampled were assumed to be the same as baseline in an attempt to be conservative, however we know from field vapor VOC readings that these stations have been reduced significantly. Although the 79 % reduction is substantial, the soil PCE concentrations are still well above the Type 3 HSRA Risk Reduction Standard of 0.5 mg/kg. The ISCO pilot work was commenced for that reason, and has shown encouraging impacts during the first month of operation. The SVE system has continued to operate efficiently. A moisture condensation issue was discovered in early December that was causing elevated water content in the activated carbon filter, resulting in diminished efficiency. That has been resolved and the carbon is now removing over 99% of the VOC influent.

BACKGROUND

The former Rayloc Facility Parts Disassembly Area (PDA) is presently undergoing remediation of PCE contaminated soil under the concrete floor. The treatment zone is approximately 1400 square feet in surface area; the baseline condition was approximately 520 pounds (236 kg) of perchloroethene (PCE) in 1 million kg of soil. A soil vapor extraction (SVE) system was installed in April 2015 as the primary remedial technology. The SVE process involves inducing flow in the subsurface with an applied vacuum, thus enhancing in situ volatilization of contaminants. The original system included 11 vacuum extraction wells and 8 gas injection wells. The extraction vapor is processed through an air-water separator, an air cooled heat exchanger, followed by fixed bed activated carbon vessel.

Analysis of operating results to date in September 2015 led to the conclusion that there may be substantial PCE mass in the area west of the existing system. As a result of exploratory soil sampling performed in October 2015 at locations ADD-1 and ADD-2 shown on Exhibit 1, it was determined that 3 additional extraction wells (IW-12, 13, 14) and 1 injection well (I-9) should be installed on the west side of the existing treatment zone. In November 2015, the supplemental wells were installed to a depth of 15 feet with a 1-inch PVC riser and screened between 5 feet and 15 feet, while the upper 5 feet was grouted.

In March 2016 a pilot study was initiated using in situ chemical oxidation (ISCO) to evaluate the effectiveness in accelerating the degradation of PCE in the areas of higher concentration in the western area of the treatment zone. The initial chemical injections were performed with persulfate and results to date have been encouraging. Referring to Exhibit 1, injection wells PDS-I-6, PDS-I-8, and PDS-I-9 were included in the first phase of the ISCO pilot. Each injection point received between 80 and 120 gallons in the first phase. A second phase was recently performed with the volume being adjusted based on observed results. The extraction wells adjacent to each injection point have been monitored, and the results to date are summarized in later sections.

Table 1. PCE Mass Reduction Performance

Location	Baseline PCE Conc. mg/kg	11/14/2014 PCE Mass kg	Confirmation PCE Conc. mg/kg	12/14/2015 PCE Mass kg	% PCE Reduction
WD-1	4.89	0.28	4.89	0.28	0.00
WD-2*	1670	95.04	33.9	1.93	97.97
WD-3	1.04	0.02	1.04	0.02	0.00
WD-4*	2190	124.63	619	35.23	71.74
WD-5	75.5	0.60	75.5	0.60	0.00
WD-6	0.025	0.00	0.025	0.00	0.00
WD-7	0.321	0.02	0.321	0.02	0.00
WD-8*	60.6	3.45	52.3	2.98	13.70
WD-9	1.38	0.08	1.38	0.08	0.00
WD-10	327	3.93	327	3.93	0.00
WD-11*	150	4.00	56.2	1.50	62.53
WD-12	7.13	0.06	7.13	0.06	0.00
PD-1	115	1.38	115	1.38	0.00
PD-2*	103	1.24	4.76	0.06	95.38
PD-3	48.7	1.08	48.7	1.08	0.00
		235.80		49.14	79.16

* Confirmation Sampling Points

Location	Prior PCE Conc. mg/kg	12/14/2015 PCE Mass kg	Confirmation PCE Conc. mg/kg	3/10/2016 PCE Mass kg	% PCE Reduction
WD-2*	33.9	1.93	38.3	2.18	-12.98
WD-4*	619	14.09	1280	29.14	-106.79
WD-8*	52.3	1.49	2590	73.70	-4852.20
WD-11*	56.2	1.25	238	5.29	-323.49
PD-2*	4.76	0.06	1.11	0.01	76.68
ADD1-6	46.1	1.57	22.5	0.77	51.19
ADD1-10	31.7	1.80	13.7	0.78	56.78
ADD2-5	455	12.95	3830	108.98	-741.76
ADD2-10	1830	104.14	764	43.48	58.25
		139.28		264.32	-89.78

PDA ISCO PILOT

A targeted program of injection in areas of highest PCE concentration commenced in early March 2016 to demonstrate the effectiveness of the technology in the PDA environment, and determine full scale requirements. The conventional method of ISCO injection in soil is to use direct push drilling on a triangular grid pattern, with screening set at the required depths to reach the contaminated zones. However, since there are pre-existing injection wells throughout the PDA grid, 3 injection wells were used for the initial injections; referring to Exhibit 1, injection wells PDS-I-6, PDS-I-8, and PDS-I-9 were included in the first phase of the ISCO pilot.

Each injection point received between 80 and 120 gallons in the first phase. Understanding that the underlying soil is very dense, low permeability material, a gravity feed system was developed to maintain injection pressure near 5 psi. The extraction wells adjacent to each injection point were monitored using a hand held PID, prior to and during the injection program. The results of the monitoring are presented graphically in Exhibits 2 through 5.

The lower portion of Table 1 provides a comparison of the December 2015 soil analytic levels with the post-ISCO application numbers. As of March 10th, the first application had been completed. The second phase was initiated the following week. Although the PCE levels in the sampling stations do not show significant, clear impacts from the first phase of the ISCO injection, the extraction well PID data reveals that the oxidation process has had a significant impact on the PDA soil environment.

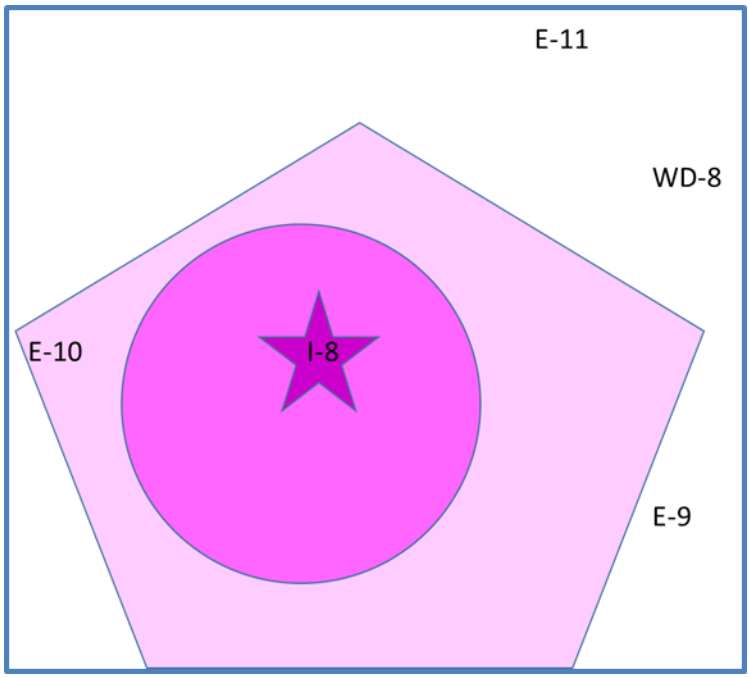


Figure 1. Zone of Influence Schematic

Referring to Figure 1, the 3 color zones represent the dark injection well area, the mid-color oxidation zone, and the lighter fringe reduced zone. The field PID monitoring data indicates that the persulfate oxidation reactions are depleting the oxygen and creating reducing conditions outside the reaction zone.

An increase in carbon monoxide and hydrogen sulfide are clear markers of this process. Carbon dioxide is produced by the oxidation of VOC, and sulfate is released as well. As the oxygen is depleted, the carbon dioxide is reduced to monoxide, and the sulfate is reduced to sulfides. The extraction wells associated with the SCVE system have been monitored on a routine basis since start up. Sulfides have never been detected in any of the wells. However, within 24 hours of the initial persulfate injections, sulfide was detected in several adjacent wells, as well as elevated levels of carbon monoxide.

The schematic of Figure 1 uses I-8 as an example because it had a high rate of throughput with the liquid injection. Monitoring point E-10 had clear spikes in sulfides and carbon monoxide during the injection process. After the injection was completed, the levels subsided as the oxygen levels recovered.

The conclusion is that persulfate is being completely consumed within the medium color zone by both native organic materials in the soil and PCE and related VOC compounds. As the second phase of injection progresses, it is anticipated that the reactive zone will spread outward to the soil sampling wells and clear evidence will be obtained of successful oxidation.

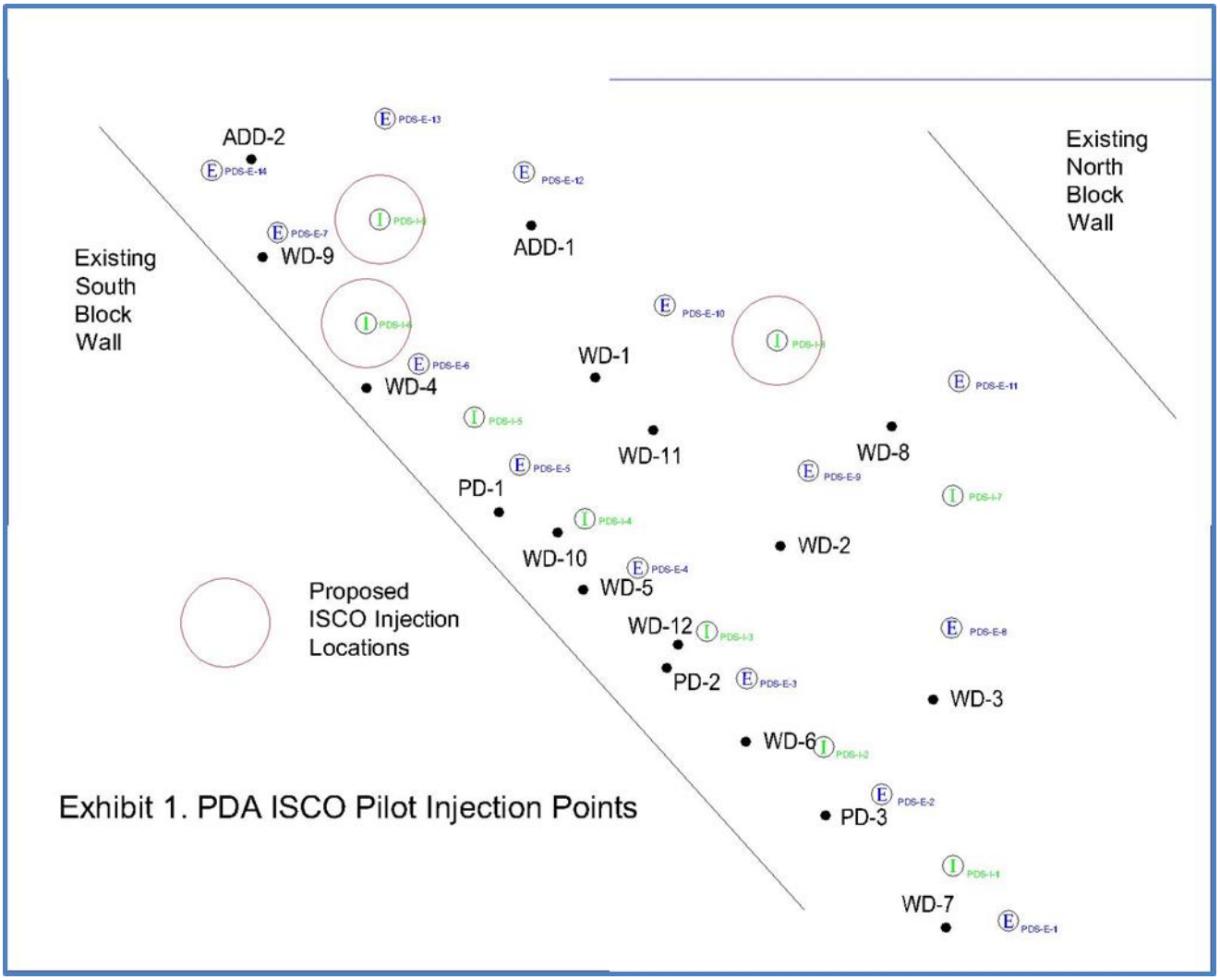


Exhibit 1. PDA ISCO Pilot Injection Points

Exhibit 2.

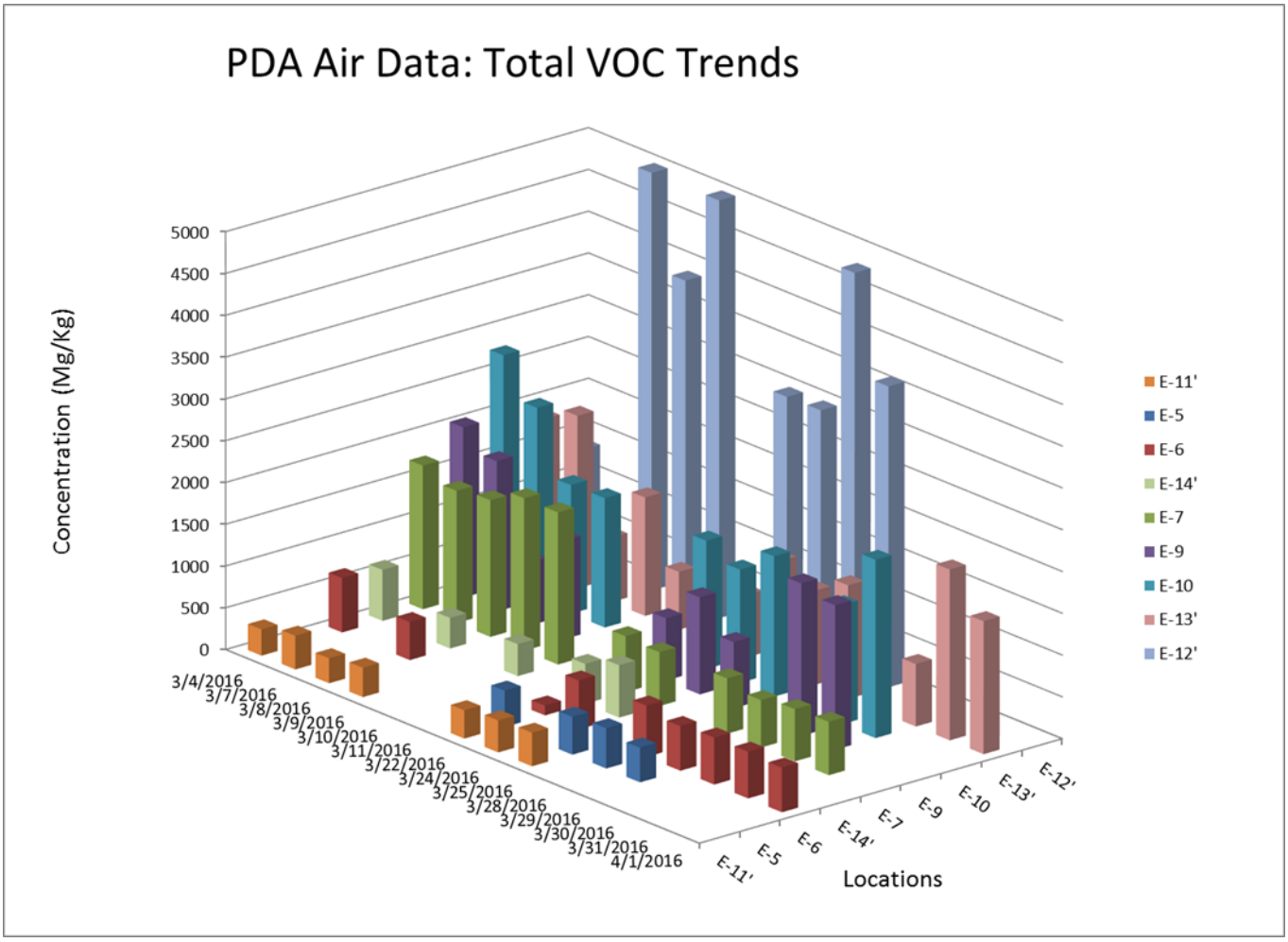

PDA Air Data: Total VOC Trends
Concentration (Mg/Kg)
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
3/4/2016
3/7/2016
3/8/2016
3/9/2016
3/10/2016
3/11/2016
3/22/2016
3/24/2016
3/25/2016
3/28/2016
3/29/2016
3/30/2016
3/31/2016
4/1/2016
E-11'
E-5
E-6
E-14'
E-7
E-9
E-10
E-13'
E-12'
Locations
E-11'
E-5
E-6
E-14'
E-7
E-9
E-10
E-13'
E-12'

Exhibit 3.

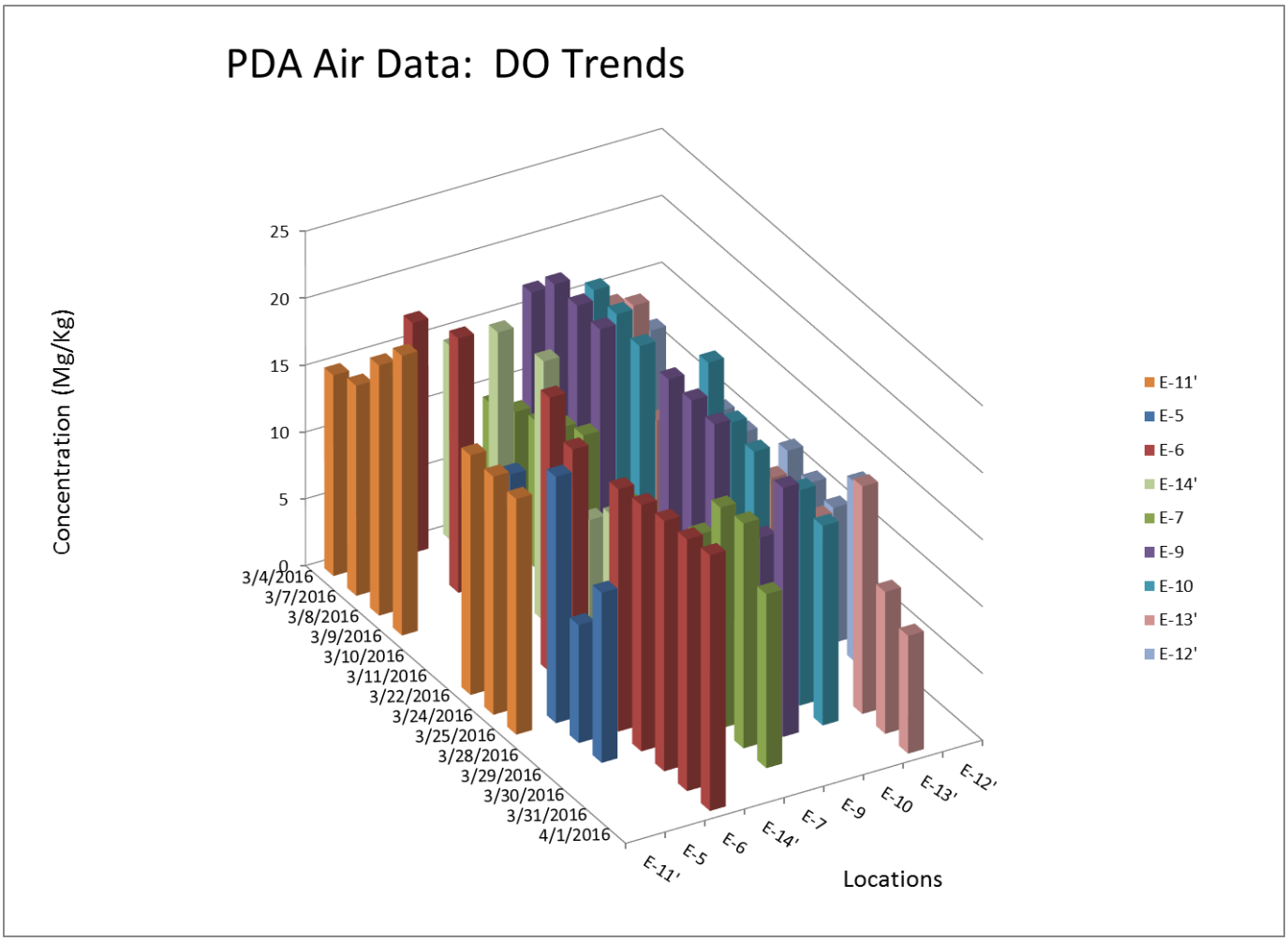

PDA Air Data: DO Trends
Concentration (Mg/Kg)
25
20
15
10
5
0
3/4/2016
3/7/2016
3/8/2016
3/9/2016
3/10/2016
3/11/2016
3/22/2016
3/24/2016
3/25/2016
3/28/2016
3/29/2016
3/30/2016
3/31/2016
4/1/2016
E-11'
E-5
E-6
E-14'
E-7
E-9
E-10
E-13'
E-12'
Locations
E-11'
E-5
E-6
E-14'
E-7
E-9
E-10
E-13'
E-12'

Exhibit 4.

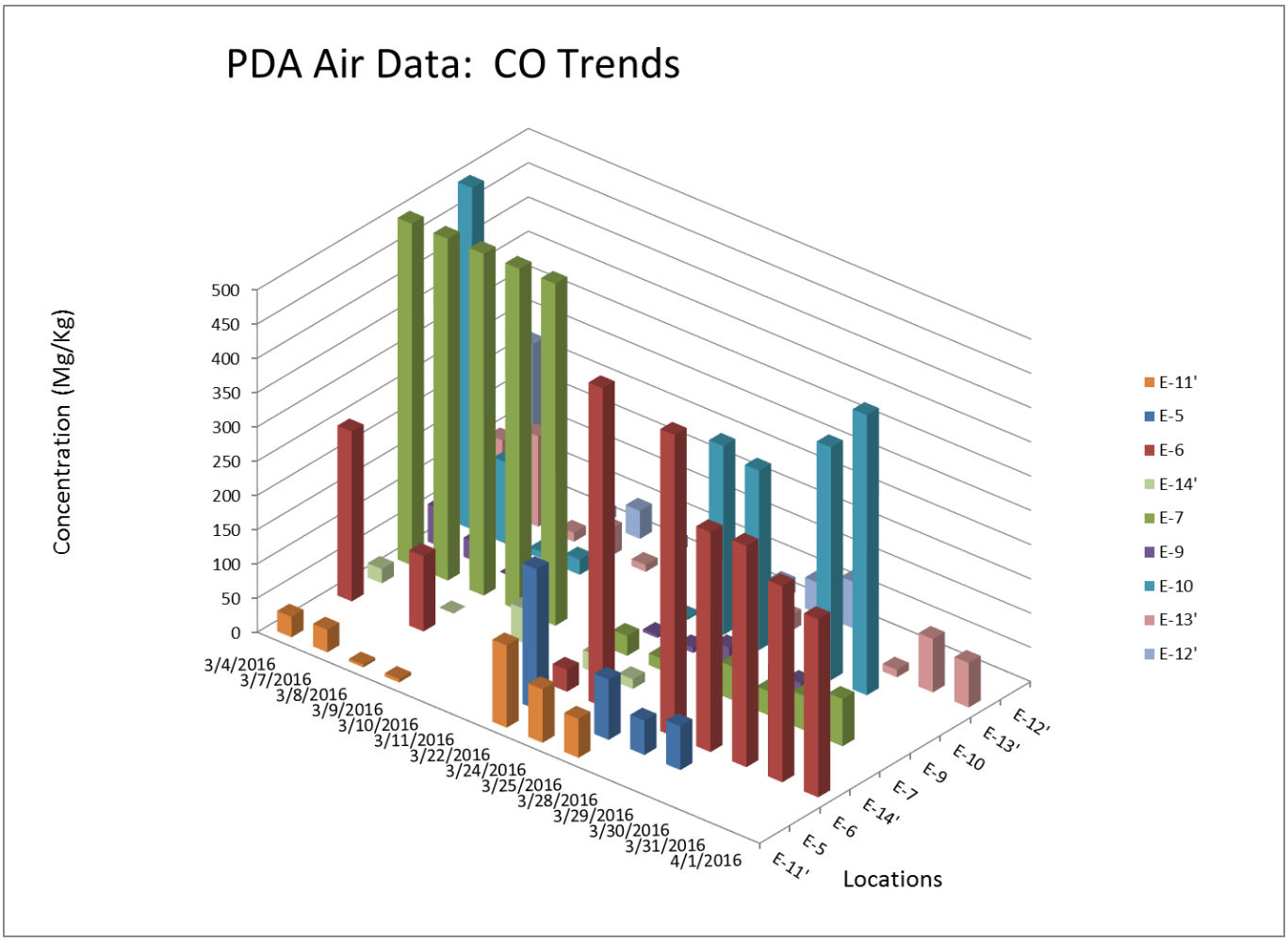

PDA Air Data: CO Trends
Concentration (Mg/Kg)
500
450
400
350
300
250
200
150
100
50
0
3/4/2016
3/7/2016
3/8/2016
3/9/2016
3/10/2016
3/11/2016
3/22/2016
3/24/2016
3/25/2016
3/28/2016
3/29/2016
3/30/2016
3/31/2016
4/1/2016
E-11'
E-5
E-6
E-14'
E-7
E-9
E-10
E-13'
E-12'
Locations
E-11'
E-5
E-6
E-14'
E-7
E-9
E-10
E-13'
E-12'

Exhibit 5.

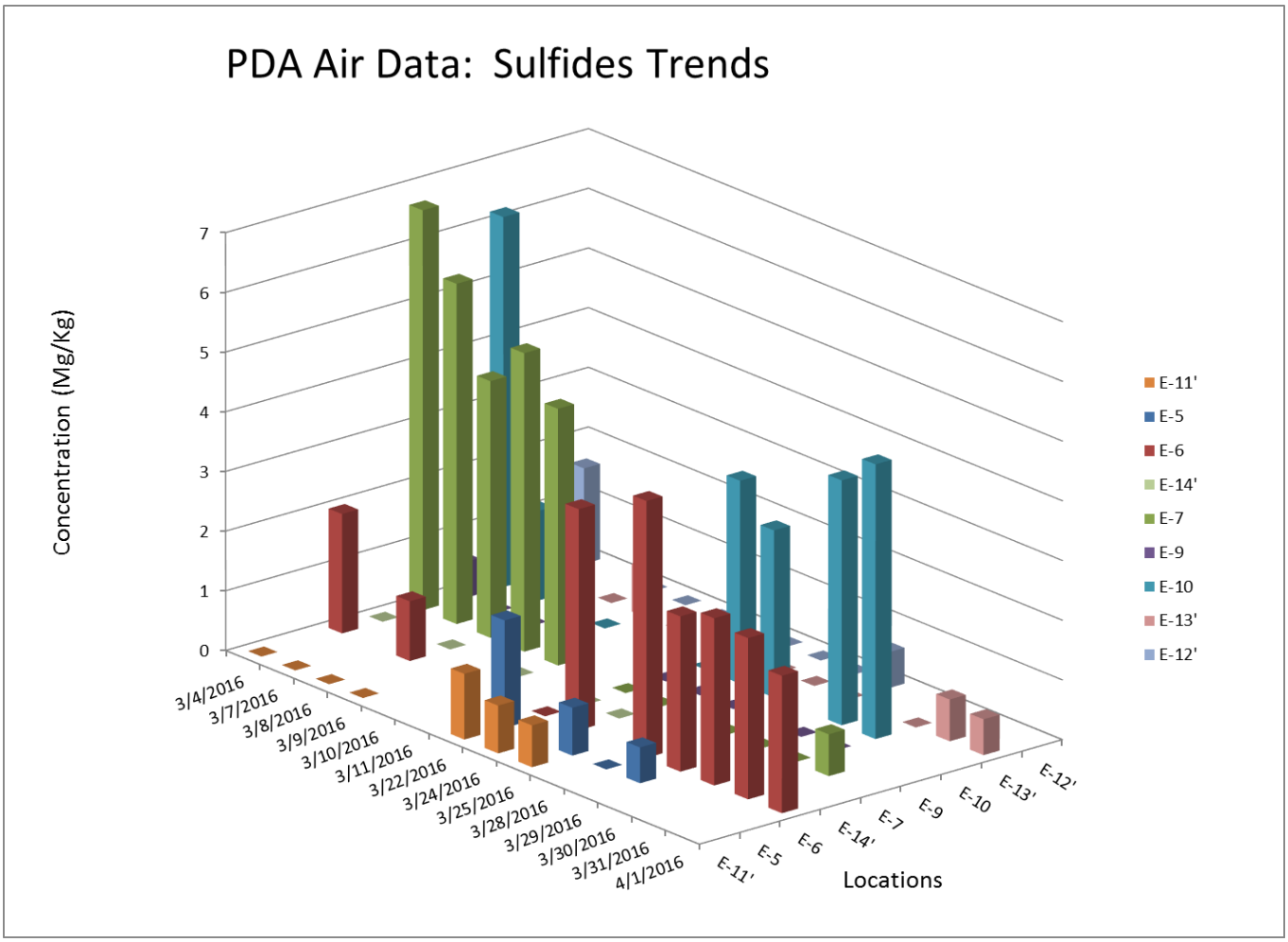

PDA Air Data: Sulfides Trends
Concentration (Mg/Kg)
0
1
2
3
4
5
6
7
3/4/2016
3/7/2016
3/8/2016
3/9/2016
3/10/2016
3/11/2016
3/22/2016
3/24/2016
3/25/2016
3/28/2016
3/29/2016
3/30/2016
3/31/2016
4/1/2016
E-11'
E-5
E-6
E-14'
E-7
E-9
E-10
E-13'
E-12'
Locations
E-11'
E-5
E-6
E-14'
E-7
E-9
E-10
E-13'
E-12'

Exhibit 6.

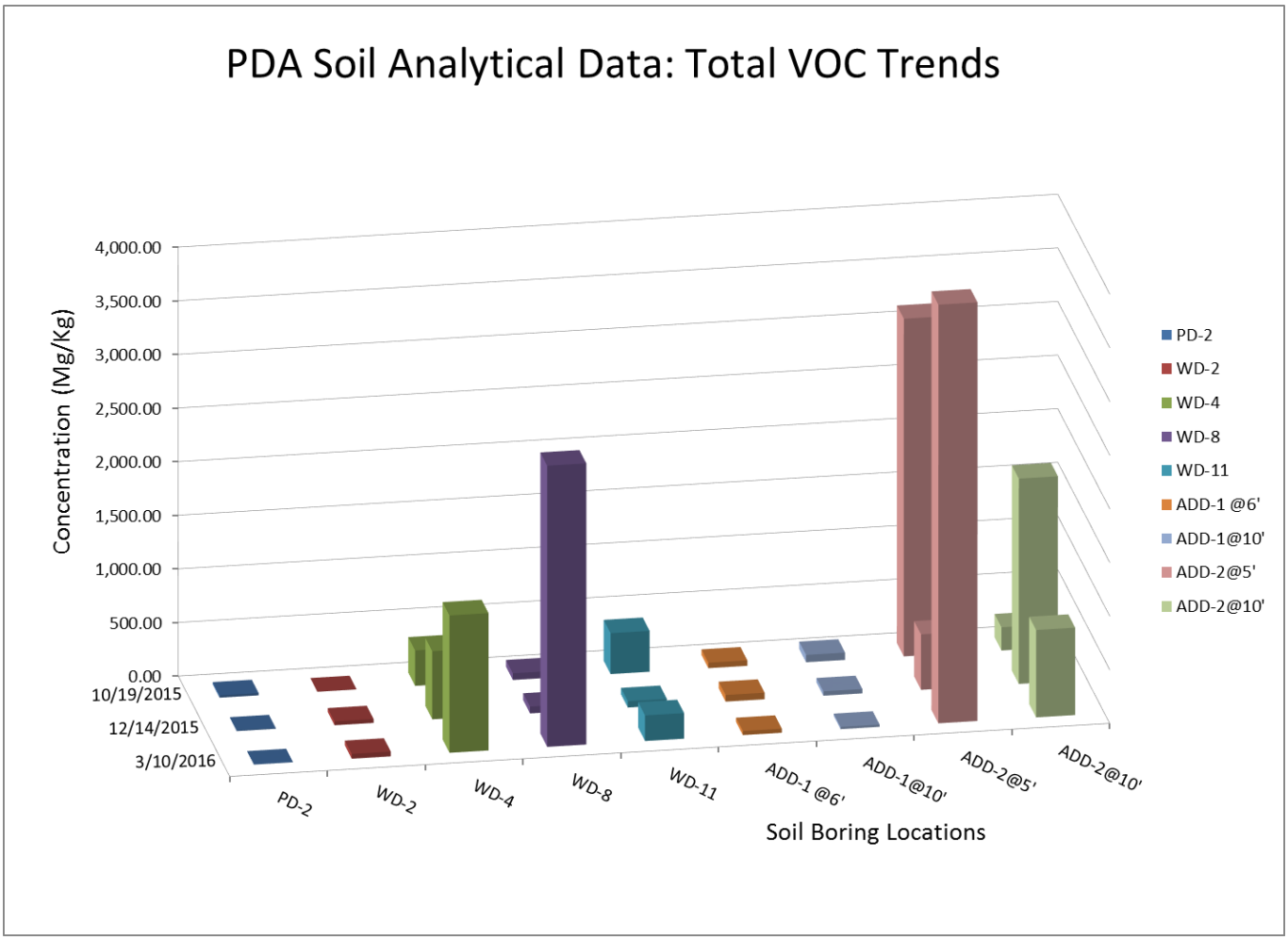

PDA Soil Analytical Data: Total VOC Trends
Concentration (Mg/Kg)
4,000.00
3,500.00
3,000.00
2,500.00
2,000.00
1,500.00
1,000.00
500.00
0.00
10/19/2015
12/14/2015
3/10/2016
PD-2
WD-2
WD-4
WD-8
WD-11
ADD-1 @6'
ADD-1@10'
ADD-2@5'
ADD-2@10'
Soil Boring Locations

Exhibit 7.

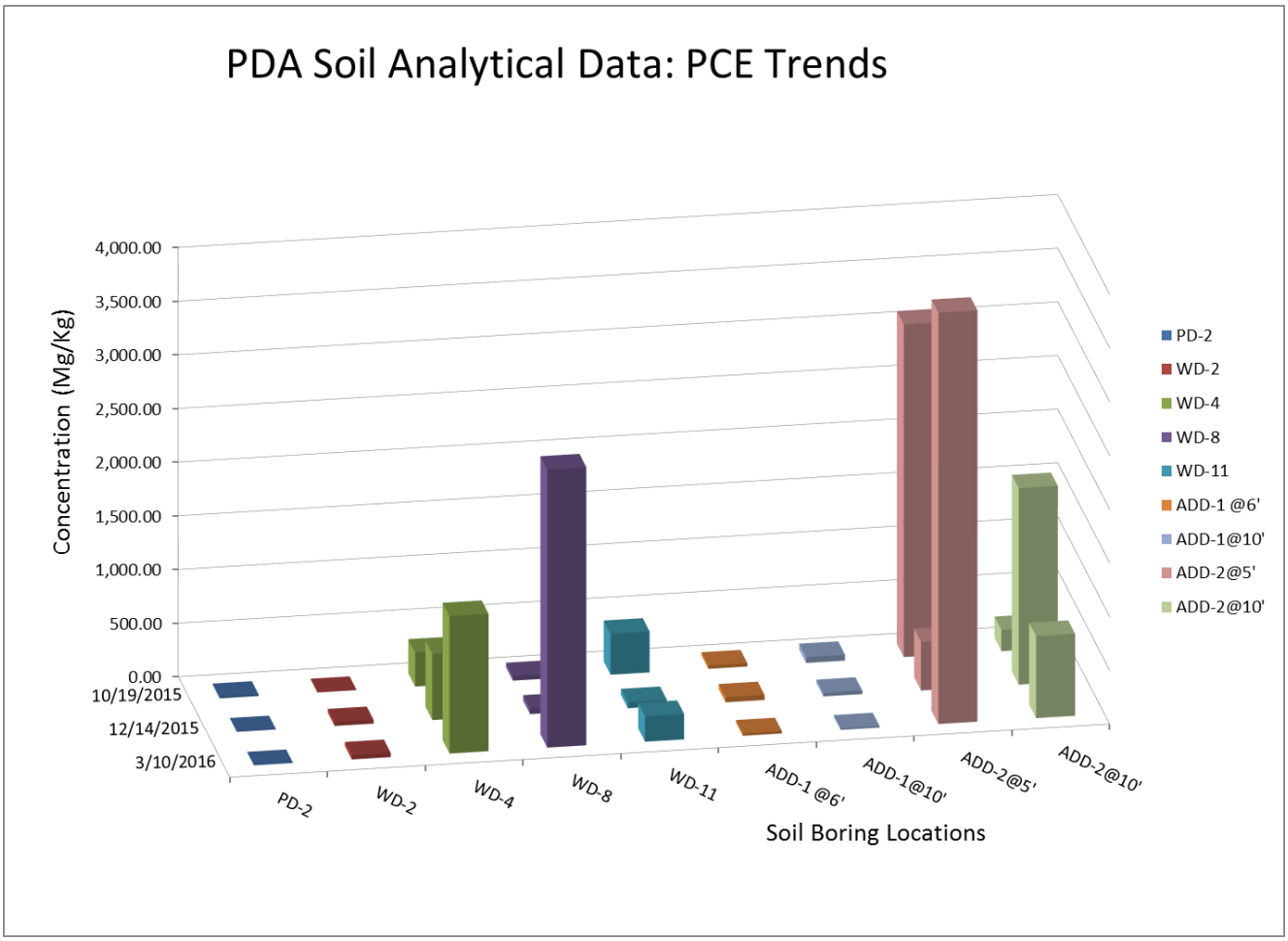

PDA Soil Analytical Data: PCE Trends
Concentration (Mg/Kg)
4,000.00
3,500.00
3,000.00
2,500.00
2,000.00
1,500.00
1,000.00
500.00
0.00
10/19/2015
12/14/2015
3/10/2016
PD-2
WD-2
WD-4
WD-8
WD-11
ADD-1 @6'
ADD-1@10'
ADD-2@5'
ADD-2@10'
Soil Boring Locations

Exhibit 8.

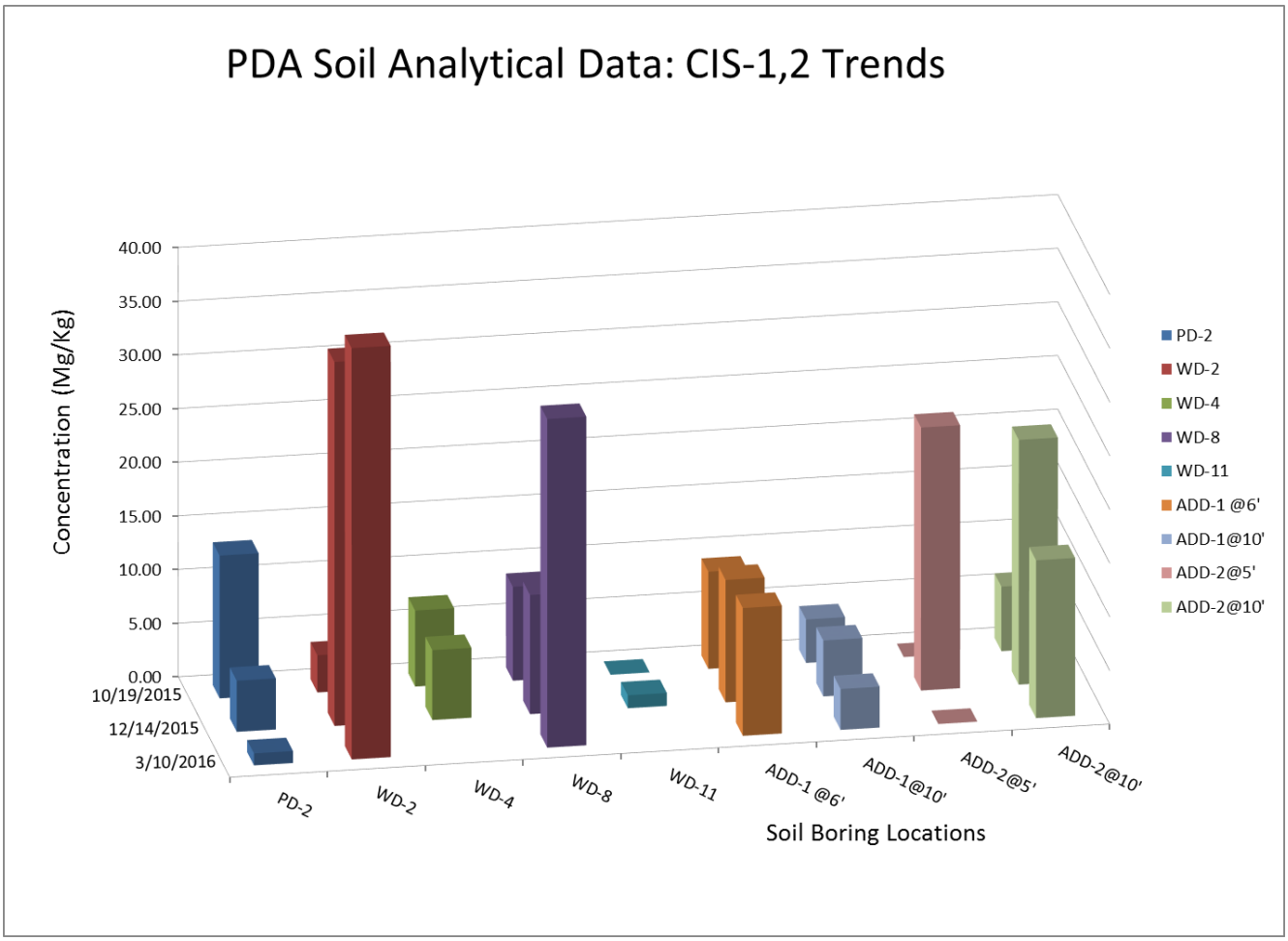
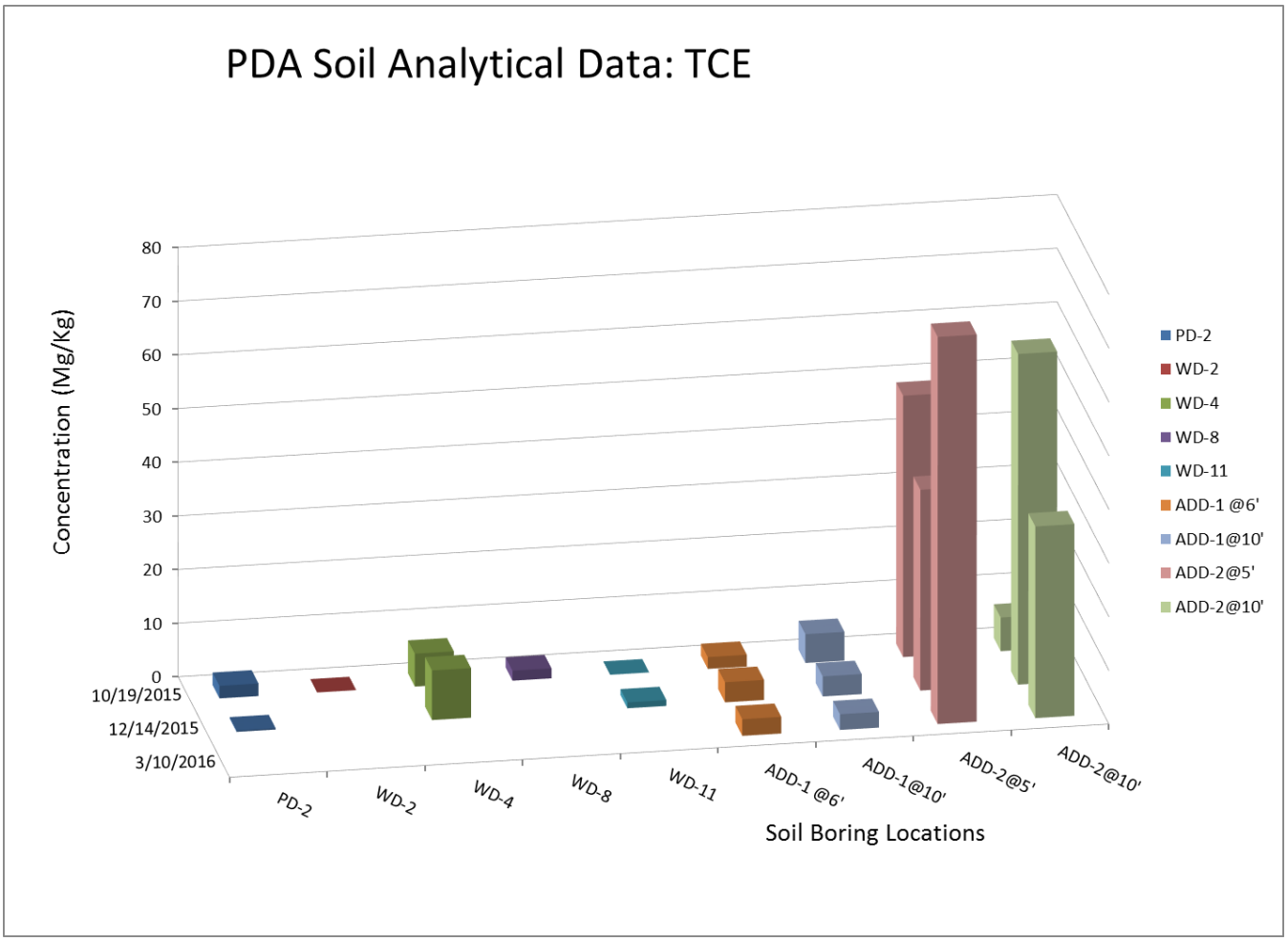
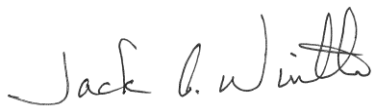

PDA Soil Analytical Data: CIS-1,2 Trends
Concentration (Mg/Kg)
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
10/19/2015
12/14/2015
3/10/2016
PD-2
WD-2
WD-4
WD-8
WD-11
ADD-1 @6'
ADD-1@10'
ADD-2@5'
ADD-2@10'
Soil Boring Locations

Exhibit 9.


PDA Soil Analytical Data: TCE
Concentration (Mg/Kg)
80
70
60
50
40
30
20
10
0
10/19/2015
12/14/2015
3/10/2016
PD-2
WD-2
WD-4
WD-8
WD-11
ADD-1 @6'
ADD-1@10'
ADD-2@5'
ADD-2@10'
Soil Boring Locations

CD CERTIFICATION

I certify that this electronic copy is complete, identical to the paper copy, and virus free.



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