CLEARWATER ENVIRONMENTAL RESOURCES, LLC

SEMI-ANNUAL PROGRESS REPORT NO. 6 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

OCTOBER 5, 2016

CLEARWATER ENVIRONMENTAL RESOURCES, LLC

October 5, 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. 6**
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 6th Semi-Annual Progress Report for the Rayloc facility. This report describes the actions taken at the site since the 5th Semi-Annual Progress Report was submitted on April 7, 2016.

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 and gravity fed In-Situ Chemical Oxidation (ISCO) to the only area of impact identified within the former Rayloc building to effect the same result. Further, Clearwater 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 APRIL 7, 2016

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.

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 identified outside of the Rayloc building during the PPCAP investigation (AST-2, OT-3 and OT-5). These soil impacts have 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 with call-outs for each of the excavation locations with sample locations noted, Table 1 for a summary of the confirmation sample results, and Appendix A for the laboratory reports.

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

Soil Blending has been identified as a suitable alternative remedial option for the source area and discussion has been underway with a subcontractor including the subcontractor requested sample collection and analysis of soil within the source area. GPC anticipates this work will be underway in the first quarter of 2017.

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.

In March 2016, a pilot study was initiated in the PDA area using a gravity fed in-situ chemical oxidation (ISCO) using sodium persulfate and hydrogen in three (3) existing injection wells in an to attempt to accelerate the remedial process. Each injection point received between 80 and 120 gallons. During the initial six (6) months of operation, the PCE mass in the pilot area was reduced by 79%. 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 allowing X_2 to adjust injection or extraction flows and/or gas concentrations to provide more effective remediation of the impact. Please refer to Table 2 for a summary of historical PDA sampling results and Figure 3 for a figure showing the PDA sampling locations and results. June and September 2016 PDA laboratory data are located in Appendix A. The X_2 Soil Remediation Status Report is located in Appendix E.

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 3 for a summary of monitoring well and groundwater elevations, Table 4 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 5 for a summary of the Historical X2 Remedial System Sampling Results and Figure 5 for a figure showing the September 2016 X2 Remedial System Sampling Results. June and September 2016 laboratory data is located in Appendix C, Sampling Logs are located in Appendix D, and the X2 Groundwater Remediation Status Report is located in Appendix E.

3.4 Installation of Additional POD Wells

Clearwater has recently received approval from 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. These wells will be installed prior to the April 2017 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 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."

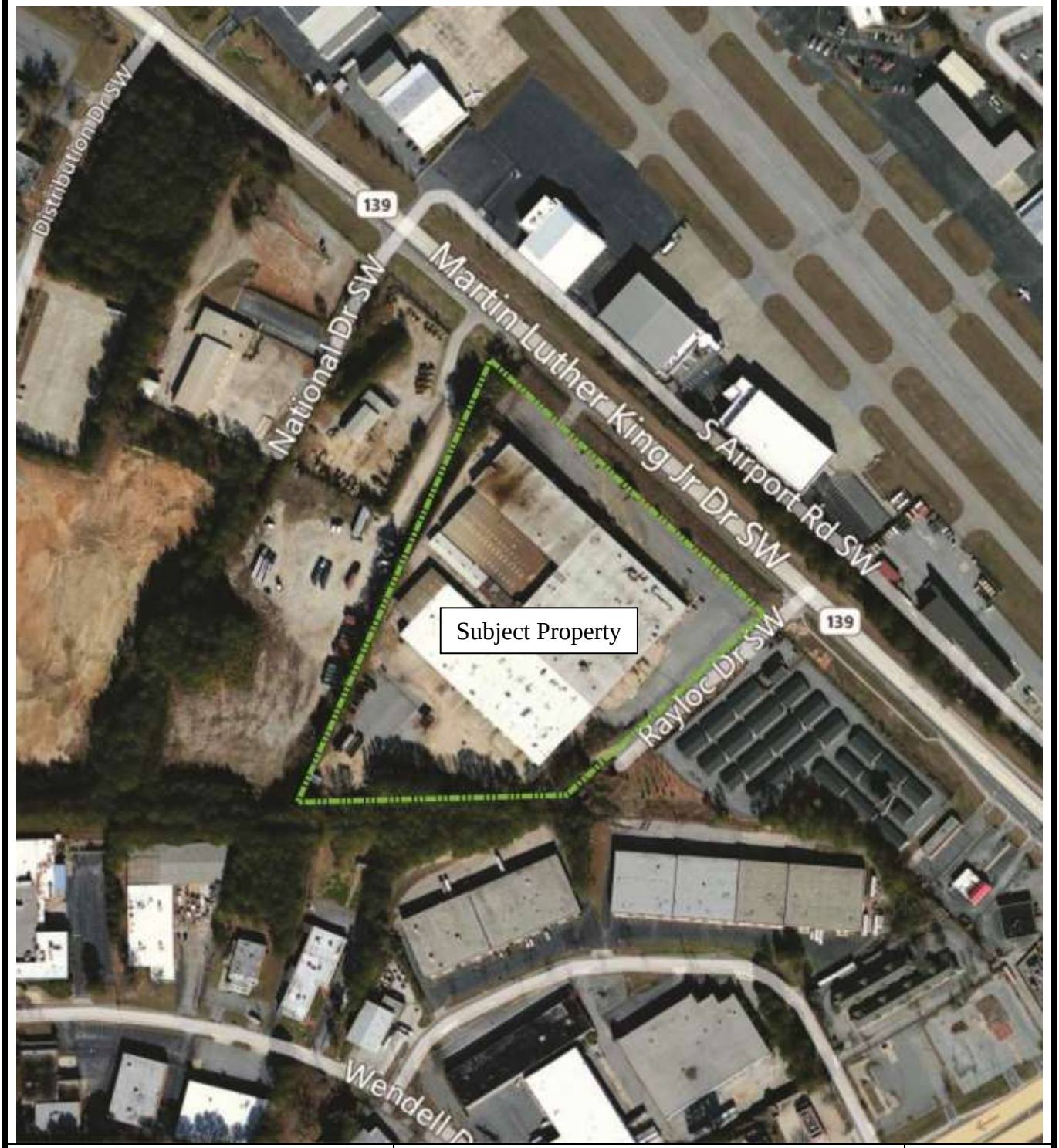
Please refer to Table 6 for a Summary of Professional Oversight Hours.

Jack A. Wintle P.G.
Senior Environmental Geologist

Date: October 5, 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		

Former Location of 20,000 Gallon UST

Parking Lot

LUTHER KING DRIVE (200' R/

Trench

BAY 12

North Wall

East Wall

Floor

OT-5

South Wall

West Wall

Excavation Limit

SOURCE DETAIL
SCALE: 1"=4'

North Wall

Floor

SO FL @ 8'

Trench

Excavation Limit

East Wall

OT-3

Trench

SO FL @ 9'

Excavation Limit

SOURCE DETAIL
SCALE: 1"=6'

BAY 25

SW Wall @ 6'

Trench

Location of Former Cleaning Ovens

CO-1

CO-2

Location of Former Parts Assembly and Cleaning Area

Parking Lot

PD-1

PD-2

PD-3

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-5

OT-4

OT-3

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

North Wall

East Wall

Floor

AST-2

West Wall

Utility Pole

AST Enclosure

South Wall

AST-3

SOURCE DETAIL
SCALE: 1"=4'

Anchored I-Beam

CONCRETE BUILDING

Power Po

30' 15' 0 30'
Feet
1"=15'

LEGEND

Excavations

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

Excavation Samples

CLEARWATER ENVIRONMENTAL RESOURCES, LLC	Drawing: Rayloc Sept2016.dwg	FIGURE 2
	Revision #: 0	LOCATION OF EXCAVATIONS
	Date: 09/2016	RAYLOC FACILITY
	Project #: 1502-1-3	SEPTEMBER 2016

Rayloc Sept2016.dwg

Clearwater Environmental Resources, LLC
April 2016

Genuine Parts Company
Atlanta, GA

ADD-2	5'	10'
Cis -	10.6	9.08
PCE -	1690	11.4
TCE -	22.7	4.26
VC -	<8.77	<0.198

ADD-1	6'	10'
Cis -	12.1	1.02
PCE -	27.2	40.2
TCE -	3.15	1.81
VC -	<0.192	<0.276

WD-11 @ 10'	
Cis -	<0.282
PCE -	10.1
TCE -	<0.282
VC -	<0.282

WD-8 @ 5'	
Cis -	6.47
PCE -	29
TCE -	1.25
VC -	<0.232

WD-4 @ 10'	
Cis -	5.74
PCE -	99.2
TCE -	3.91
VC -	<0.725

WD-2 @ 10'	
Cis -	0.298
PCE -	3.95
TCE -	<0.201
VC -	<0.201

PD-2 @ 10'	
Cis -	<0.396
PCE -	<0.396
TCE -	<0.396
VC -	<0.396

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 -	##

Results in ppm

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

0 5' 10'
Approximate Scale In Feet

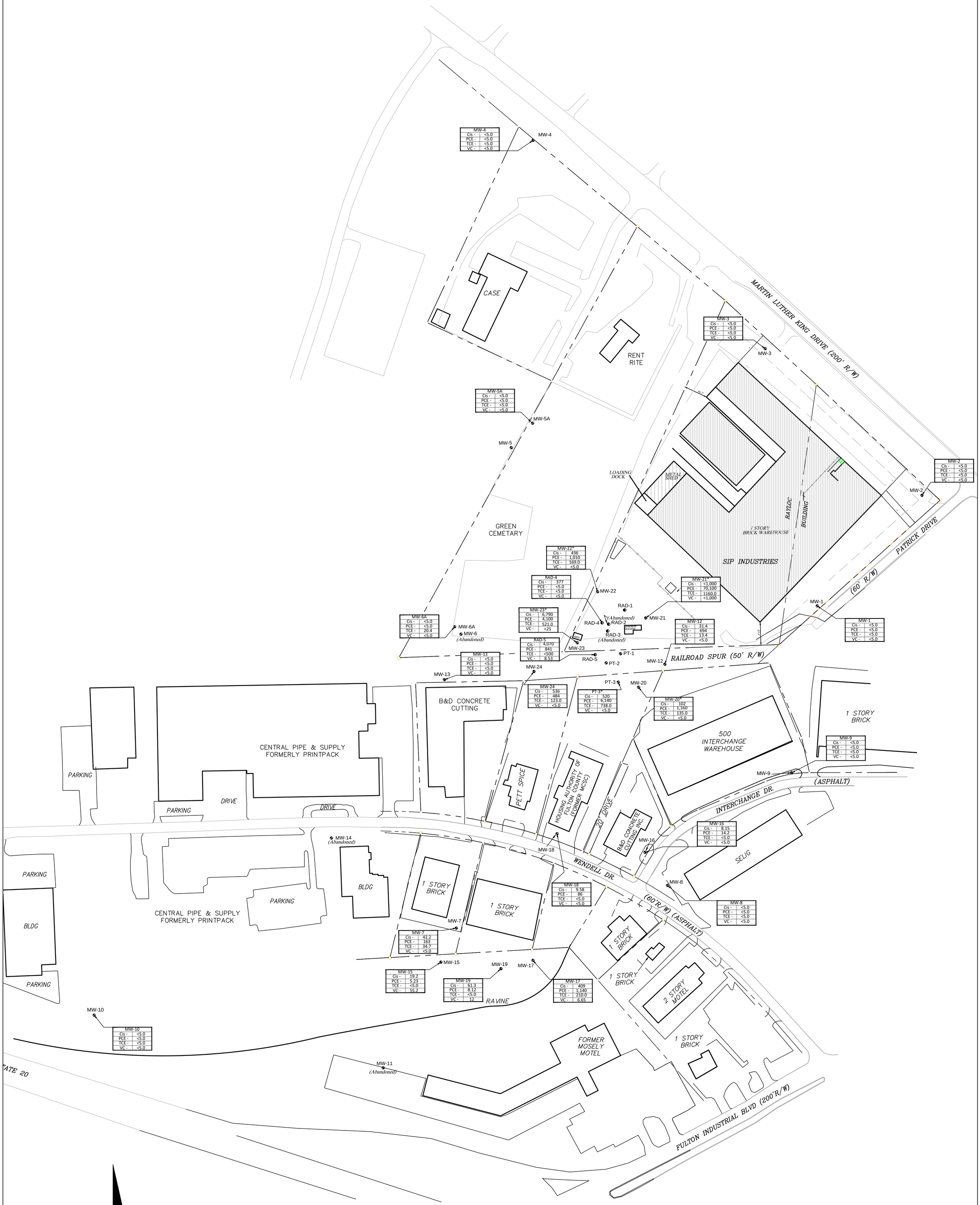
N

Note: PDA Sampling Results (09/07/2016)

CLEARWATER ENVIRONMENTAL RESOURCES, LLC

Drawing:	Rayloc_Fig3 PDA Sept2016.dwg	FIGURE 3
Revision #:	0	September 2016 PDA Sampling Results
Date:	9/2016	RAYLOC FACILITY
Project #:	1502-1-3	SEPTEMBER 2016

Rayloc_Fig3 PDA Sept2016.dwg



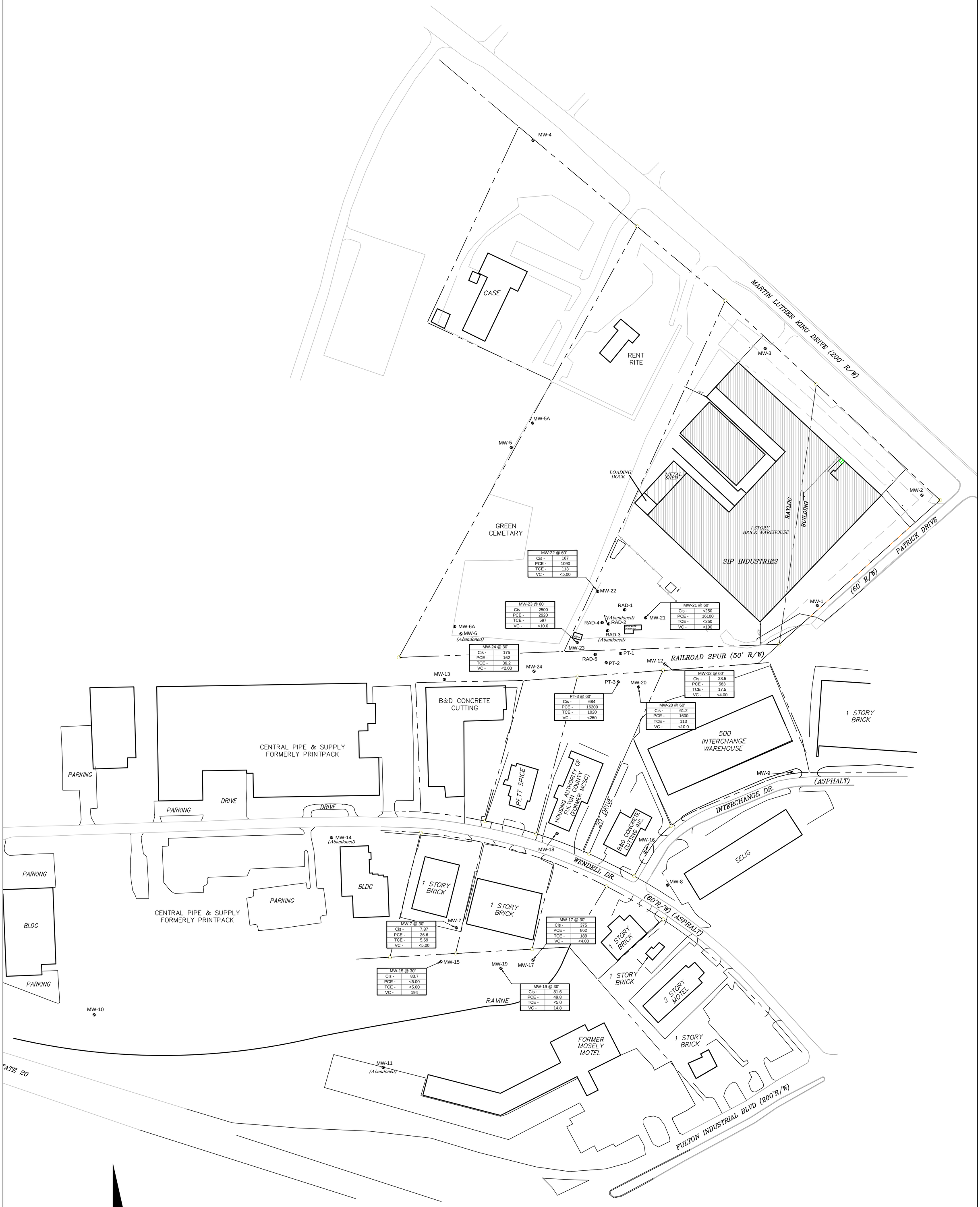
Rayloc Sept2016.dwg

CLEARWATER ENVIRONMENTAL RESOURCES, LLC

Drawing:	Rayloc Sept2016.dwg	FIGURE 4
Revision #:	0	OCTOBER 2015 COMPLIANCE WELL SAMPLING RESULTS
Date:	09/2016	RAYLOC FACILITY
Project #:	1502-1-3	SEPTEMBER 2016

Clearwater Environmental Resources, LLC
October 2015

Genuine Parts Company
Atlanta, GA



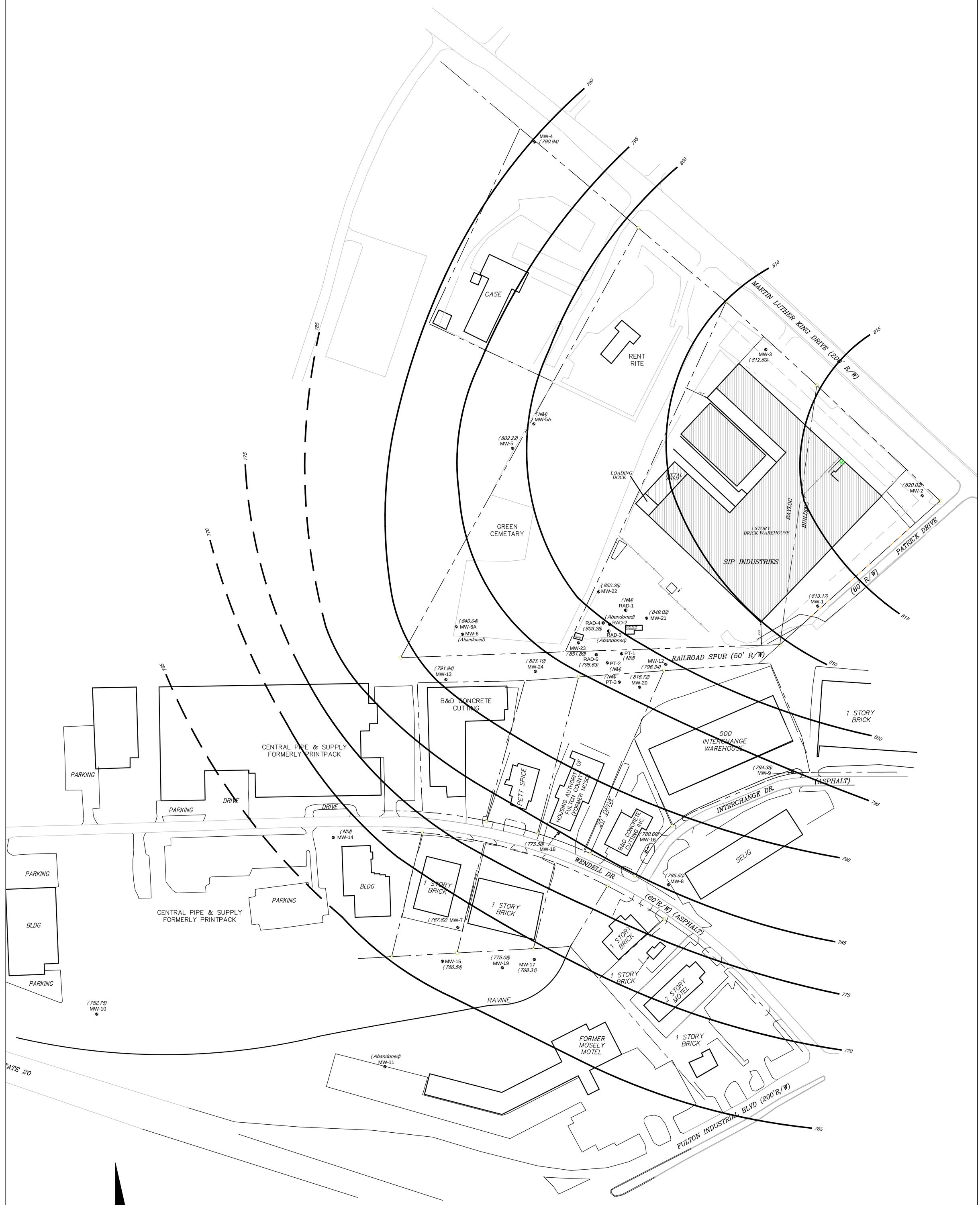
CLEARWATER ENVIRONMENTAL RESOURCES, LLC

Drawing:	Rayloc Sept2016.dwg	FIGURE 5
Revision #:	0	SEPTEMBER 2016 X2 REMEDIAL SYSTEM SAMPLING RESULTS
Date:	09/2016	RAYLOC FACILITY
Project #:	1502-1-3	SEPTEMBER 2016

Rayloc Sept2016.dwg

Clearwater Environmental Resources, LLC
September 2016

Genuine Parts Company
Atlanta, GA



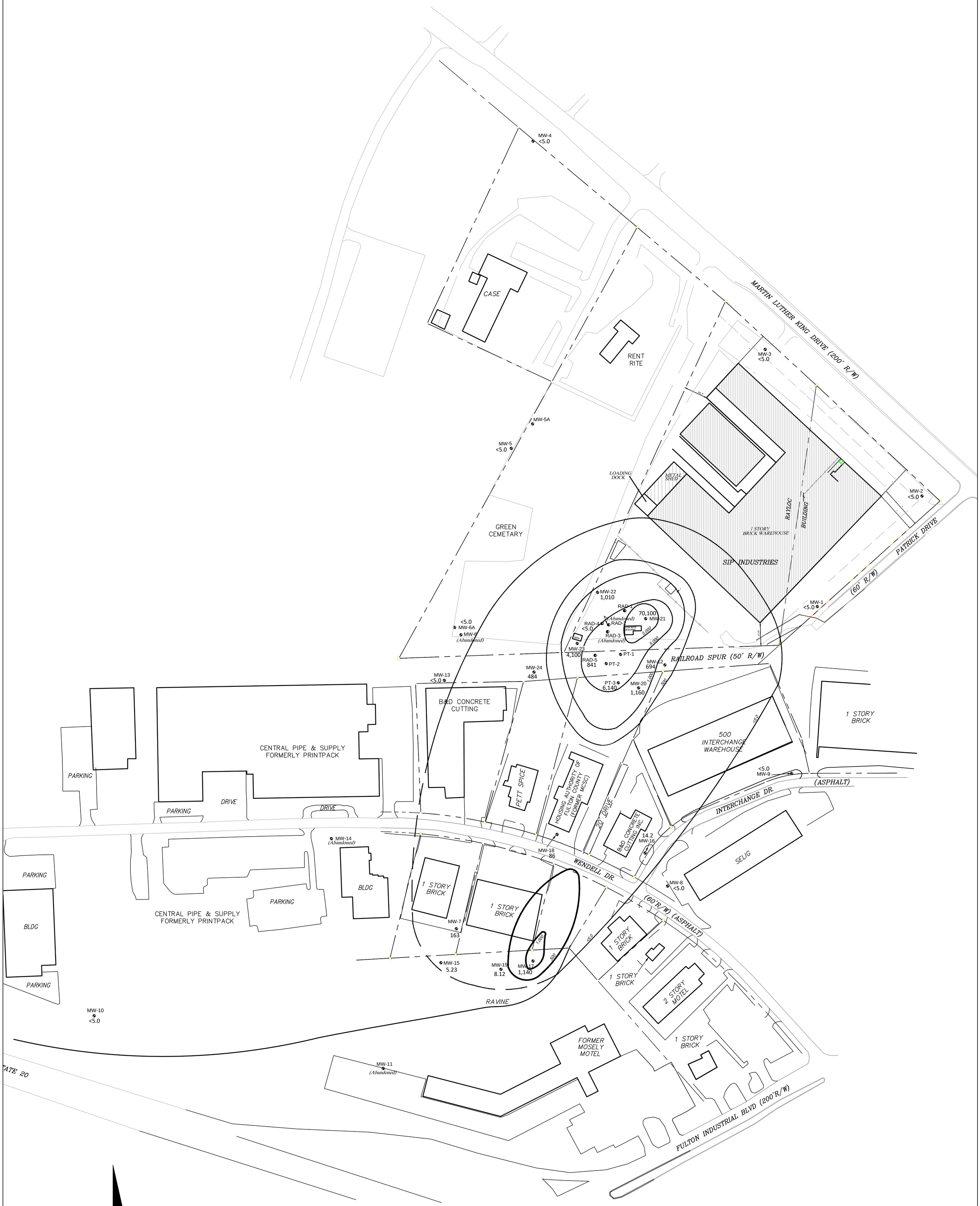
Rayloc Sept2016.dwg

CLEARWATER ENVIRONMENTAL RESOURCES, LLC

Drawing:	Rayloc Sept2016.dwg	FIGURE 6
Revision #:	0	OCTOBER 2015 POTENTIOMETRIC-SURFACE MAP
Date:	09/2016	RAYLOC FACILITY
Project #:	1502-1-3	SEPTEMBER 2016

Clearwater Environmental Resources, LLC
October 2015

Genuine Parts Company
Atlanta, GA



Rayloc Sept2016.dwg

CLEARWATER ENVIRONMENTAL RESOURCES, LLC

Drawing:	Rayloc Sept2016.dwg	FIGURE 7
Revision #:	0	OCTOBER 2015 PCE ISOCONCENTRATION MAP
Date:		RAYLOC FACILITY
Project #:	1502-1-3	SEPTEMBER 2016

Sage Environmental Consulting, L.P.
October 2015

Genuine Parts Company
Atlanta, GA

TABLES

TABLE 1
Summary of AST & OT Excavation Confirmation Sampling Results
Semi-Annual Progress Report #6
October 2016
Rayloc Facility
HIS# 10547

Sample Location	AST	AST	AST	AST	AST	OT-5	OT-5	OT-5	OT-5	OT-5	OT-3	OT-3	OT-3	OT-3	OT-3	OT-3	Type 3 RRS
Sample Date	10/19/2015	10/19/2015	10/19/2015	10/19/2015	10/19/2015	11/5/2015	10/20/2015	10/20/2015	10/20/2015	10/20/2015	10/20/2015	12/15/2015	2/12/2016	2/12/2016	10/20/2015	11/3/2015	
Sample Location	Floor	South Wall	North Wall	East Wall	West Wall	Floor	South Wall	North Wall	East Wall	West Wall	Floor	SO FL @ 9'	SO FL @ 8'	SW Wall @ 6'	East Wall	North Wall	
1,2,4-Trimethylbenzene	<0.007	<0.006	<0.006	<0.006	<0.006	<0.007	<0.006	<0.005	<0.007	<0.006	<0.288	<0.327	<0.006	<0.006	<0.006	<0.265	NA
1,2-Dichlorobenzene	<0.007	<0.006	<0.006	<0.006	<0.006	<0.007	<0.006	<0.005	<0.007	<0.006	<0.288	<0.327	<0.006	0.280	<0.006	<0.265	NA
1,2-Dichloroethane	<0.007	<0.006	<0.006	<0.006	<0.006	<0.007	<0.006	<0.005	<0.007	<0.006	<0.288	<0.327	<0.006	<0.006	<0.006	<0.265	NA
1,2-Dichloroethene (Total)	<0.13	<0.12	<0.12	<0.12	<0.12	<0.013	<0.012	0.011	<0.014	0.136	<0.456	<0.655	<0.012	0.109	0.055	<0.530	NA
1,3,5-Trimethylbenzene	<0.007	<0.006	<0.006	<0.006	<0.006	<0.007	<0.006	<0.005	<0.007	<0.006	<0.288	<0.327	<0.006	<0.006	<0.006	<0.265	NA
1,4-Dichlorobenzene	<0.007	<0.006	<0.006	<0.006	<0.006	<0.007	<0.006	<0.005	<0.007	<0.006	<0.288	<0.327	<0.006	<0.006	<0.006	<0.265	NA
2-Butanone	<0.007	<0.006	<0.006	<0.006	<0.006	<0.007	<0.006	<0.005	<0.007	<0.006	<0.288	<0.327	<0.006	<0.006	<0.006	<0.265	200
Acetone	<0.033	<0.028	<0.029	<0.028	<0.031	<0.033	<0.03	<0.023	<0.034	<0.03	<0.033	<1.64	<0.030	<0.006	<0.028	<1.33	400
Benzene	<0.007	<0.006	<0.006	<0.006	<0.006	<0.007	<0.006	<0.005	<0.007	<0.006	<0.288	<0.327	<0.006	<0.006	<0.006	<0.265	0.5
Bromomethane	<0.007	<0.006	<0.006	<0.006	<0.006	<0.007	<0.006	<0.005	<0.007	<0.006	<0.288	<0.327	<0.006	<0.006	<0.006	<0.265	NA
Carbon Disulfide	<0.007	<0.006	<0.006	<0.006	<0.006	<0.007	<0.006	<0.005	<0.007	<0.006	<0.288	<0.327	<0.006	<0.006	<0.006	<0.265	NA
Cis-1,2-dichloroethene	<0.007	<0.006	<0.006	<0.006	<0.006	<0.007	0.007	0.011	<0.007	0.136	<0.288	<0.327	<0.006	0.109	0.055	<0.265	7
Ethylbenzene	<0.007	<0.006	<0.006	<0.006	<0.006	<0.007	<0.006	<0.005	<0.007	<0.006	<0.288	<0.327	<0.006	<0.006	<0.006	<0.265	70
m,p-Xylene	<0.007	<0.006	<0.006	<0.006	<0.006	<0.007	<0.006	<0.005	<0.007	<0.006	<0.288	<0.327	<0.006	<0.006	<0.006	<0.265	NA
o-Xylene	<0.007	<0.006	<0.006	<0.006	<0.006	<0.007	<0.006	<0.005	<0.007	<0.006	<0.288	<0.327	<0.006	<0.006	<0.006	<0.265	NA
Naphthalene	<0.007	<0.006	<0.006	<0.006	<0.006	<0.007	<0.006	<0.005	<0.007	<0.006	<0.288	<0.327	<0.006	<0.006	<0.006	<0.265	NA
Styrene	<0.007	<0.006	<0.006	<0.006	<0.006	<0.007	<0.006	<0.005	<0.007	<0.006	<0.288	<0.327	<0.006	<0.006	<0.006	<0.265	14
Tetrachloroethene	0.076	0.006	<0.006	<0.006	0.031	0.020	<0.006	0.079	<0.007	0.141	0.273	0.467	0.035	0.490	0.109	0.509	0.5
Toluene	<0.007	<0.006	<0.006	<0.006	<0.006	<0.007	<0.006	<0.005	<0.007	<0.006	<0.288	<0.327	<0.006	<0.006	<0.006	<0.265	100
Trichloroethene	<0.007	<0.006	<0.006	<0.006	<0.006	<0.007	<0.006	<0.005	<0.007	0.032	<0.288	<0.327	<0.006	0.224	0.010	<0.265	0.5
Xylenes, Total	<0.02	<0.017	<0.017	<0.017	<0.019	<0.02	<0.018	<0.014	<0.021	<0.018	<0.684	<0.982	<0.018	<0.018	<0.017	<0.796	0.2

Notes:
Matrix: soil
Units: mg/kg
NA - Not Applicable
Indicates detection of compound greater than HSRA Type 3 RRS .

Table 2
Historical Quarterly PDA Sampling Results
Semi-Annual Progress Report #6

Octoberl 2016
Rayloc Facility
HSI# 10547

Sample Location	PD-2	PD-2	PD-2	PD-2	PD-2	PD-2	PD-2	PD-2
Sample Date	1/14/2014	6/26/2015	8/20/2015	10/19/2015	12/14/2015	3/10/2016	6/8/2016	9/7/2016
Sample Depth	10	10	10	10	10	10	10	10
1,2,4-Trimethylbenzene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396
1,2-Dichlorobenzene	--	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396
1,2-Dichloroethane	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396
1,2-Dichloroethene (Total)	--	<0.476	<0.193	<2.43	<0.183	<0.233	0.591	<0.792
1,3,5-Trimethylbenzene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396
1,4-Dichlorobenzene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396
2-Butanone	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396
Acetone	2.02	<1.19	<0.967	<1.03	<0.913	<1.16	<0.934	<1.98
Benzene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396
Bromomethane	--	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396
Carbon Disulfide	--	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396
Cis-1,2-dichloroethene	1.73	0.312	0.197	2.35	0.366	<0.233	0.572	<0.396
Ethylbenzene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396
m,p-Xylene	--	<0.476	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396
o-Xylene	--	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396
Naphthalene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396
Styrene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396
Tetrachloroethene	**115**	**4.32**	**1.00**	**13.30**	**4.76**	**1.11**	**3.57**	<0.396
Toluene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396
Trichloroethene	**1.69**	0.445	0.415	**2.33**	0.259	<0.233	0.477	<0.396
Vinyl Chloride	**0.404**	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396
Xylenes, Total	0.807	<0.714	<0.580	<0.618	<0.548	<0.699	<0.560	<1.19

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

Table 2 (continued)

WD-2	WD-2	WD-2	WD-2	WD-2	WD-2	WD-2	WD-2
8/28/2014	6/26/2015	8/20/2015	10/19/2015	12/14/2015	3/10/2016	6/8/2016	9/7/2016
10	10	10	10	10	10	10	10
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201
< 67.2	<0.419	<0.246	<0.265	<0.380	4.55	<0.460	<0.402
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201
< 168	<1.05	<1.23	<1.33	<1.90	<2.63	<1.15	<0.201
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201
< 33.6	0.242	<0.246	<0.265	0.737	4.55	<0.230	0.298
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201
< 33.6	<0.419	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201
1,670	**15**	**42.2**	**3.46**	**33.9**	**38.3**	**3.13**	**3.95**
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201
< 33.6	0.214		<0.265	**0.589**	**1.52**	<0.230	<0.201
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201
< 67.2	<0.628	<0.739	<0.796	<1.14	<1.58	<0.690	<0.604

Table 2 (continued)

WD-4	WD-4	WD-4	WD-4	WD-4	WD-4	WD-4	WD-4
8/28/2014	6/26/2015	8/20/2015	10/19/2015	12/14/2015	3/10/2016	6/8/2016	9/7/2016
10	10	10	10	10	10	10	10
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	3.38
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725
< 93.0	1.94	<0.205	<3.93	<4.04	<22.0	<4.33	6.01
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	0.833
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725
< 232	<4.06	<10.2	<3.93	<20.0	<110	<10.8	<3.62
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725
< 46.5	1.94	<0.205	**7.08**	6.51	<22.0	<2.17	5.74
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725
< 46.5	<1.62	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725
2,190	**142**	**61.3**	**317**	**619**	**1280**	**137**	**99.2**
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725
< 46.5	4.89	<0.205	**6.12**	**9.24**	**<22.0**	**2.28**	**3.91**
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725
< 93.0	<2.43	<6.14	<11.8	<12.1	<66.0	<6.50	<2.17

Table 2 (continued)

WD-8	WD-8	WD-8	WD-8	WD-8	WD-8	WD-8	WD-8
11/17/2014	6/26/2015	8/20/2015	10/19/2015	12/14/2015	3/10/2016	6/8/2016	9/7/2016
5	5	5	5	5	5	5	5
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232
<2.53	<35.1	<24.7	<0.996	<0.474	<27.1	6.31	6.50
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232
<6.32	<87.6	<123	<0.996	<2.37	<135	<1.26	<1.16
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232
<1.26	<17.5	<24.7	**8.74**	**11.1**	**30.6**	6.28	6.47
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232
<1.26	<35.1	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232
60.6	**1,660**	**1,920**	**43**	**52**	**2,590**	**34.8**	**29**
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232
<1.26	**<17.5**	**<24.7**	**1.87**	**2.29**	**<27.1**	**1.21**	**1.25**
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232
<2.53	<52.6	<74	<2.99	<1.42	<81.2	<0.754	<0.697

Table 2 (continued)

WD-11	WD-11	WD-11	WD-11	WD-11	WD-11	WD-11	WD-11
11/17/2014	6/26/2015	8/20/2015	10/19/2015	12/14/2015	3/10/2016	6/8/2016	9/7/2016
10	10	10	10	10	10	10	10
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282
<1.85	<3.61	<20.3	<8.43	<0.414	<4.51	2.21	<0.563
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282
<4.62	<4.16	<101	<21.1	<2.07	<22.6	<2.30	<1.41
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282
1.57	3.61	<20.3	<4.21	1.2	<4.51	2.21	<0.282
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282
<0.925	<1.66	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282
150	**108**	**<20.3**	**381**	**56.2**	**238**	**68.8**	**10.1**
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282
2.24	**2.53**	**<20.3**	**<4.21**	**1.08**	**<4.51**	**1.26**	<0.282
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282
<1.85	<2.50	<60.9	<12.6	<1.24	<13.5	<1.38	<0.845

Table 2 (continued)

ADD-1	ADD-1	ADD-1	ADD-1	ADD-1	ADD-1	ADD-1	ADD-1	ADD-1	ADD-1
10/19/2015	12/14/2015	3/10/2016	6/8/2016	9/7/2016	10/19/2015	12/14/2015	3/10/2016	6/8/2016	9/7/2016
6	6	6	6	6	10	10	10	10	10
<0.476	<0.389	<0.468	<0.275	<0.192	<0.500	<0.392	<0.223	<0.217	<0.276
<0.476	<0.389	<0.468	<0.275	<0.192	<0.500	<0.392	<0.223	<0.217	<0.276
<0.476	<0.389	<0.468	<0.275	<0.192	<0.500	<0.392	<0.223	<0.217	<0.276
9.05	11.4	11.9	10.4	12.9	<0.500	5.53	3.88	7.12	1.02
<0.476	<0.389	<0.468	<0.275	<0.192	<0.500	<0.392	<0.223	<0.217	<0.276
<0.476	<0.389	<0.468	<0.275	<0.192	<0.500	<0.392	<0.223	<0.217	<0.276
<0.476	<0.389	<0.468	<0.275	<0.192	<0.500	<0.392	<0.223	<0.217	<0.276
<2.38	<1.95	<2.34	<1.38	<0.961	<2.50	<1.96	<1.12	<1.09	<1.38
<0.476	<0.389	<0.468	<0.275	<0.192	<0.500	<0.392	<0.223	<0.217	<0.276
<0.476	<0.389	<0.468	<0.275	<0.192	<0.500	<0.392	<0.223	<0.217	<0.276
<0.476	<0.389	<0.468	<0.275	<0.192	<0.500	<0.392	<0.223	<0.217	<0.276
9.05	**11.4**	**11.8**	**10.3**	**12.1**	<0.500	5.21	3.81	6.98	1.02
<0.476	<0.389	<0.468	<0.275	<0.192	<0.500	<0.392	<0.223	<0.217	<0.276
<0.476	<0.389	<0.468	<0.275	<0.192	<0.500	<0.392	<0.223	<0.217	<0.276
<0.476	<0.389	<0.468	<0.275	<0.192	<0.500	<0.392	<0.223	<0.217	<0.276
<0.476	<0.389	<0.468	<0.275	<0.192	<0.500	<0.392	<0.223	<0.217	<0.276
<0.476	<0.389	<0.468	<0.275	<0.192	<0.500	<0.392	<0.223	<0.217	<0.276
30.4	**46.1**	**22.5**	**44.4**	**27.2**	**54.9**	**31.7**	**13.7**	**29.7**	**40.2**
<0.476	<0.389	<0.468	<0.275	<0.192	<0.500	<0.392	<0.223	<0.217	<0.276
2.19	**3.74**	**3.09**	**2.67**	**3.15**	**5.36**	**3.73**	**2.92**	**4.92**	**1.81**
<0.476	<0.389	<0.468	<0.275	<0.192	<0.500	<0.392	<0.223	<0.217	<0.276
<1.43	<1.17	<1.40	<0.825	<0.577	<1.50	<1.18	<0.670	<0.651	<0.829

Table 2 (continued)

ADD-2	ADD-2	ADD-2	ADD-2	ADD-2	ADD-2	ADD-2	ADD-2	ADD-2	ADD-2	Type 3 RRS
10/19/2015	12/14/2015	3/10/2016	6/8/2016	9/7/2016	10/19/2015	12/14/2015	3/10/2016	6/8/2016	9/7/2016	
5	5	5	5	5	10	10	10	10	10	
<44.9	<4.26	<47.2	<0.210	<8.77	<2.68	<10.5	<12.4	<0.207	<0.198	NA[2]
<44.9	<4.26	<47.2	<0.210	<8.77	<2.68	<10.5	<12.4	<0.207	<0.198	NA[2]
<44.9	<4.26	<47.2	<0.210	<8.77	<2.68	<10.5	<12.4	<0.207	<0.198	NA[2]
<89.8	24.5	<47.2	4.7	<17.5	6.01	22.8	<12.4	7.55	9.92	NA[2]
<44.9	<4.26	<47.2	<0.210	<8.77	<2.68	<10.5	<12.4	<0.207	<0.198	NA[2]
<44.9	<4.26	<47.2	<0.210	<8.77	<2.68	<10.5	<12.4	<0.207	<0.198	NA[2]
<44.9	<4.26	<47.2	<0.210	<8.77	<2.68	<10.5	<12.4	<0.207	<0.198	200
<225	<21.3	<236	<1.05	<43.8	<2.68	<52.4	<62.1	<1.04	<0.988	400
<44.9	<4.26	<47.2	<0.210	<8.77	<2.68	<10.5	<12.4	<0.207	<0.198	NA[2]
<44.9	<4.26	<47.2	<0.210	<8.77	<2.68	<10.5	<12.4	<0.207	<0.198	NA[2]
<44.9	<4.26	<47.2	<0.210	<8.77	<2.68	<10.5	<12.4	<0.207	<0.198	NA[2]
<44.9	**24.5**	**<47.2**	4.7	**10.6**	6.01	**22.8**	**14.7**	**7.50**	**9.08**	7
<44.9	<4.26	<47.2	<0.210	<8.77	<2.68	<10.5	<12.4	<0.207	<0.198	70
<44.9	<4.26	<47.2	<0.210	<8.77	<2.68	<10.5	<12.4	<0.207	<0.198	NA[2]
<44.9	<4.26	<47.2	<0.210	<8.77	<2.68	<10.5	<12.4	<0.207	<0.198	NA[2]
<44.9	<4.26	<47.2	<0.210	<8.77	<2.68	<10.5	<12.4	<0.207	<0.198	NA[2]
<44.9	<4.26	<47.2	<0.210	<8.77	<2.68	<10.5	<12.4	<0.207	<0.198	14
3100	**455**	**3830**	**39.6**	**1690**	**198**	**1830**	**764**	**21.7**	**11.4**	0.5
<44.9	<4.26	<47.2	<0.210	<8.77	<2.68	<10.5	<12.4	<0.207	<0.198	100
48.7	**37.4**	**72.1**	**1.63**	**22.7**	**6.26**	**61.6**	**35.7**	**3.61**	**4.26**	0.5
<44.9	<4.26	<47.2	<0.210	<8.77	<2.68	<10.5	<12.4	<0.207	<0.198	0.2
<135	<12.8	<141	<0.631	<26.3	<8.03	<31.4	<37.3	<0.622	<0.593	1,000

TABLE 3
Summary of Monitoring Well and Groundwater Elevations
Semi-Annual Progress Report #6

October 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 4
Summary of Historical Compliance Well Sampling Results
Semi-Annual Progress Report #5
October 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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	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	<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	<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	<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	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	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	<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	<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	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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0

Notes:
The analytical results that exceed the laboratory detection limits are bolded.
ug/L = micrograms per Liter
NS = Not Sampled

TABLE 4 (continued)

Analyte		1,1-Dichloroethane	1,1-Dichloroethene	Acetone	Benzene	cis-1,2-DCE	Dichlorofluoromethane	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-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

Notes:

The analytical results that exceed the laboratory detection limits are bolded.

ug/L = micrograms per Liter

NS = Not Sampled

Table 5

Summary of X² Remedial System Sampling Results
Semi-Annual Progress Report #6
October 2016
HSI Site Numbers 10547
Atlanta, Georgia

Analyte		1,1-Dichloroethane	1,1-Dichloroethene	Acetone	Benzene	cis-1,2-DCE	Dichlorofluorome thane	Chloromethane	Methylene Chloride	Tetrachloroethene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Xylenes (Total)	1,2-Dichlorobenzene	Chlorobenzene	Chloroform	Ethylbenzene	Isopropylbenzene	o-Xylene	m,p-Xylene	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
Sample Location	**Date**																													
MW-7 @ 30'	Nov-12	<5.0	<5.0	<20.0	<5.0	**19.8**	<5.0	<5.0	<5.0	**114**	**32.6**	<5.0	<1.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jul-13	<5.0	<5.0	<20.0	<5.0	**6.8**	<5.0	<5.0	<5.0	**35.3**	**9.46**	<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	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-13	<5.0	<5.0	<20.0	<5.0	<5.0	<5.0	<5.0	<5.0	**7.28**	<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	<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	**14.6**	<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	<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	**5.35**	<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	<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	**8.38**	<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	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-14	<5.0	<5.0	<5.0	<5.0	**7.59**	<5.0	<5.0	<5.0	**38.2**	**9.17**	<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	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-14	<5.0	<5.0	<5.0	<5.0	**22.0**	<5.0	<5.0	<5.0	**65.4**	**19.1**	<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	<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	**6.31**	<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	<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	**8.01**	<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	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-15	<5.0	<5.0	<5.0	<5.0	**9.72**	<5.0	<5.0	<5.0	**28.6**	7.75	<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	<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	**10.3**	<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	<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	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-16	<5.0	<5.0	<5.0	<5.0	6.9	<5.0	<5.0	<5.0	**8**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-16	<5.0	<5.0	<5.0	<5.0	**7.87**	<5.0	<5.0	<5.0	**26.6**	**5.69**	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<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**	<5.0	<1.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jul-13	<10.0	<10.0	<20.0	<10.0	**58**	<10.0	<10.0	<10.0	**1250**	<10.0	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20	<10.0	<10.0	<10.0	<10.0	<10	<10.0	<10.0	<10	<10.0
	Sep-13	<10.0	<10.0	<20.0	<10.0	**105**	<10.0	<10.0	<10.0	**2280**	**19.1**	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Dec-13	<5.0	<5.0	<20.0	<5.0	**16.8**	<5.0	<5.0	<5.0	**557**	**10.8**	<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	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-14	<10.0	<10.0	<10.0	<10.0	**59.2**	<10.0	<10.0	<10.0	**1,590**	**12.3**	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<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	**125**	<25.0	<25.0	<25.0	**1,350**	<25.0	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**22.2**	<5.0	<5.0	<5.0	**748**	**13.4**	<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	<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	**365**	**14.3**	<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	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-15	<10.0	<10.0	<10.0	<10.0	**34.3**	<10.0	<10.0	<10.0	**901**	<10.0	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<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	**87.9**	<25.0	<25.0	<25.0	**1600**	<25.0	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<75.0	<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	**17.7**	<25.0	<25.0	<25.0	**538**	12.6	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<75.0	<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	**19.5**	<25.0	<25.0	<25.0	**667**	10.9	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<75.0	<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	**29.8**	<10.0	<10.0	<10.0	**867**	<10.0	<10.0	<4.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Jun-16	<10.0	<10.0	<10.0	<10.0	**90**	<10.0	<10.0	<10.0	**1400**	**19**	<10.0	<4.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Sep-16	<10.0	<10.0	<10.0	<10.0	**20.5**	<10.0	<10.0	<10.0	**563**	**17.5**	<10.0	<4.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<30.0	<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	<20.0	<5.0	**93.7**	<5.0	<5.0	<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	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jul-13	<5.0	<5.0	<20.0	<5.0	<5.0	<5.0	<5.0	<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	<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	<5.0	**6.83**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<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	<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	<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	<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	<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	<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	<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	<5.0	**98.8**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<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	<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	<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	<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	<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	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<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	<5.0	**97.7**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-15	<5.0	<5.0	**5.34**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**2.18**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<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	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-16	<5.0	<5.0	<5.0	<5.0	18	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	24	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-16	<5.0	<5.0	<5.0	<5.0	**83.7**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**194**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<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**	<10.0	**32.1**	<30	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Jul-13	<5.0	<5.0	<20.0	<5.0	**588**	<5.0	<5.0	<5.0	**1,370**	**266**	<5.0	**17.9**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-13	<10.0	<10.0	<20.0	<10.0	**567**	<10.0	<10.0	<10.0	**1,510**	**300**	<10.0	**33.7**	<30	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20	<10.0	<10.0	**10.2**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Dec-13	<10.0	<10.0	<20.0	<10.0	**514**	<10.0	<10.0	<10.0	**1,330**	**353**	<10.0	<10.0	<30	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20	<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	**447**	<10.0	<10.0	<10.0	**1,210**	**238**	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<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	**533**	<5.0	<5.0	<5.0	**1,180**	**235**	<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	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-14	<5.0	<5.0	<5.0	<5.0	**382**	<5.0	<5.0	<5.0	**734**	**180**	<5.0	**5.77**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<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	**394**	<5.0	<5.0	<5.0	**922**	**190**	<5.0	**7.74**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<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	**361**	<5.0	<5.0	<5.0	**969**	**161**	<5.0	<10.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-15	<10.0	<10.0	<10.0	<10.0	**383**	<10.0	<10.0	<10.0	**916**	**235**	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<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	**409**	<10.0	<10.0	<10.0	**1090**	**219**	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<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	**377**	<10.0	<10.0	<10.0	**952**	**206**	<10.0	**3.56**	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<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	**392**	<10.0	<10.0	<10.0	**978**	**179**	<10.0	<4.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Jun-16	<10.0	<10.0	<10.0	<10.0	**470**	<10.0	<10.0	<10.0	**1,300**	**280**	<10.0	<4.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Sep-16	<10.0	<10.0	<10.0	<10.0	**375**	<10.0	<10.0	<10.0	**862**	**189**	<10.0	<4.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<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	<20.0	<5.0	**186**	<5.0	<5.0	<5.0	**97**	**19.9**	<5.0	**58.8**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jul-13	<5.0	<5.0	<20.0	<5.0	**96.5**	<5.0	<5.0	<5.0	**69.1**	**14.8**	<5.0	**28.1**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-13	<5.0	<5.0	<20.0	<5.0	**58.4**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**15.4**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<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	<5.0	**17.7**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<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	**63.2**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**14.5**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-14	<5.0	<5.0	<5.0	<5.0	**42.6**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**7.29**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<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	**66.1**	<5.0	<5.0	<5.0	**9.69**	<5.0	<5.0	**15.9**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<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	**92.1**	<5.0	<5.0	<5.0	**31.4**	**7.71**	<5.0	**16.1**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-15*	<5.0	<5.0	<5.0	<5.0	**53.9**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**6.68**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<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	**36.5**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**<5.0**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<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	**31.7**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**7.49**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<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	**62.8**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**6.62**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<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	**33.7**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**2.84**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-16	<5.0	<5.0	<5.0	<5.0	**27**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**3**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-16	<5.0	<5.0	<5.0	<5.0	**81.6**	<5.0	<5.0	<5.0	**49.8**	<5.0	<5.0	**14.8**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0

Notes:
The analytical results that exceed the laboratory detection limits are bolded.
ug/L = micrograms per Liter
NS = Not Sampled

Table 5 (continued)

Analyte		1,1-Dichloroethane	1,1-Dichloroethene	Acetone	Benzene	cis-1,2-DCE	Dichlorodifluoromethane	Chloromethane	Methylene Chloride	Tetrachloroethene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Xylenes (Total)	1,2-Dichlorobenzene	Chlorobenzene	Chloroform	Ethylbenzene	Isopropylbenzene	o-Xylene	m,p-Xylene	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
Sample Location	**Date**																													
MW-20 @ 60'	Mar-13	<50.0	<50.0	<50.0	<50.0	**1,110**	<50.0	<50.0	<50.0	**889**	**99.8**	<50.0	<50.0	<150	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
	Jul-13	<10.0	<10.0	<20.0	<10.0	**272**	<10.0	<10.0	<10.0	**1,380**	**98.7**	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<10.0	<10.0	<10.0	<10.0	<10	<10.0	<10.0	<10	<10.0
	Sep-13	<10.0	<10.0	<20.0	<10.0	**784**	<10.0	<10.0	<10.0	**254**	**51.7**	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<10.0	<10.0	**11.1**	<10.0	<10	<10.0	<10.0	<10	<10.0
	Dec-13	<10.0	<10.0	<20.0	<10.0	**165**	<10.0	<10.0	<10.0	**1,270**	**154**	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<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	**1,890**	<25.0	<25.0	<25.0	**2,850**	**288**	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**518**	<25.0	<25.0	<25.0	**1,310**	**150**	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**104**	<5.0	<5.0	<5.0	**1,460**	**140**	<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	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-14	<25.0	<25.0	<25.0	<25.0	**149**	<25.0	<25.0	<25.0	**984**	**105**	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**1,380**	<25.0	<25.0	<25.0	**2,070**	**248**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**383**	<10.0	<10.0	<10.0	**1,220**	**153**	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<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	**102**	<10.0	<10.0	<10.0	**1,160**	**133**	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<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	**152**	<10.0	<10.0	<10.0	**1,460**	**113**	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Feb-16	<25.0	<25.0	<25.0	<25.0	**1,200**	<25.0	<25.0	<25.0	**2,360**	**330**	<25.0	<10.0	<75.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Jun-16	<25.0	<25.0	<25.0	<25.0	**99**	<25.0	<25.0	<25.0	**2,000**	**170**	<25.0	<10.0	<75.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Sep-16	<25.0	<25.0	<25.0	<25.0	**61.2**	<25.0	<25.0	<25.0	**1,600**	**113**	<25.0	<10.0	<75.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<50.0	<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	**40,900**	<2,500	<2,500	<2,500	<7,500	<2,500	<2,500	<2,500	<2,500	<2,500	<2,500	<5,000	<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	**65,600**	**693**	<250	<250	<750	<250	<250	<250	<250	<250	<.250	<500	<250	<250	<250	<250	<250	<250	<250	<250	<250
	Sep-13	<25.0	<25.0	<25.0	<25.0	**82.9**	<25.0	<25.0	<25.0	**7,520**	**130**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50	<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	**58.4**	<50.0	<50.0	<50.0	**5,760**	**105**	<50.0	<50.0	<150	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100	<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	**58.2**	<25.0	<25.0	<25.0	**2,410**	**82.2**	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**83.5**	<50.0	<50.0	<50.0	**7,950**	**187**	<50.0	<50.0	<150	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100.0	<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	**38,900**	**738**	<250.0	<250.0	<750	<250.0	<250.0	<250.0	<250.0	<250.0	<250.0	<500.0	<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	**13,000**	**573**	<250.0	<250.0	<750	<250.0	<250.0	<250.0	<250.0	<250.0	<250.0	<500.0	<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	**7,680**	**81.1**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100	<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	**4,900**	**88.3**	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**70,100**	**1610**	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**6,180**	**169**	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**2,700**	**53.2**	<50.0	<20.0	<150.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
	Jun-16	<50.0	<50.0	<50.0	<50.0	**10**	<50.0	<50.0	<50.0	**4,100**	**240**	<50.0	<20.0	<150.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
	Sep-16	<250	<250	<250	<250	<250	<250	<250	<250	**16,100**	<250	<250	<100.0	<750.0	<250	<250	<250	<250	<250	<250	<100.0	<250	<250	<250	<250	<250	<250	<250	<250	<250
MW-22 @ 60'	Mar-13	<250	<250	<250	<250	**4,270**	<250	<250	<250	**1,120**	**389**	<250	<250	<750	<250	<250	<250	<250	<250	<250	<500	<250	<250	<250	<250	<250	<250	<250	<250	<250
	Jul-13	<25.0	<25.0	<25.0	<25.0	**1,910**	<25.0	<25.0	<25.0	**1,270**	**310**	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Sep-13	<10.0	**12.6**	<20.0	<10.0	**623**	<10.0	<10.0	<10.0	**1,310**	**265**	<10.0	<10.0	<30	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<10.0	<10.0	**10.1**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Dec-13	<10.0	<10.0	<20.0	<10.0	**552**	<10.0	<10.0	<10.0	**1,200**	**239**	<10.0	<10.0	<30	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<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	**2,070**	<25.0	<25.0	<25.0	**2,210**	**347**	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**800**	<25.0	<25.0	<25.0	**1,090**	**244**	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**576**	<5.0	<5.0	<5.0	**1,760**	**263**	<5.0	<5.0	<15.0	**5.38**	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<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	**1990**	<25.0	<25.0	<25.0	**2,580**	**329**	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**4,600**	<50.0	<50.0	<50.0	**921**	**357**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100	<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	**2,730**	<10.0	<10.0	<10.0	**892**	**139**	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<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	**436**	<10.0	<10.0	<10.0	**1,010**	**169**	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<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	**2,550**	<10.0	<10.0	<10.0	**1,150**	**292**	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<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	**4,440**	<50.0	<50.0	<50.0	**395**	**306**	<50.0	**28.7**	<150.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
	Jun-16	<50.0	<50.0	<50.0	<50.0	**250**	<50.0	<50.0	<50.0	**1,500**	**150**	<50.0	<2.0	<150.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
	Sep-16	<5.0	<5.0	<25.0	<5.0	**167**	<10	<5.0	<5.0	**1,090**	**113**	<5.0	<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	<50.0	<50.0
MW-23 @ 60'	Mar-13	<250	<250	<250	<250	**2,870**	<250	<250	<250	**503**	<250	<250	<250	<750	<250	<250	<250	<250	<250	<250	<500	<250	<250	<250	<250	<250	<250	<250	<250	<250
	Jul-13	<5.0	<5.0	<25.0	<5.0	**2,120**	<10	<10	<5.0	**1,650**	**314**	<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	<5.0	<5.0	<10	<5.0	<5.0
	Sep-13	<5.0	**5.32**	<20.0	<5.0	**1,250**	<5.0	<5.0	<5.0	**1,830**	**150**	<5.0	<5.0	<15.0	**6.33**	<5.0	**9.60**	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	**5.95**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-13	<10	<10	<20.0	<10	**2,750**	<10	<10	<10	**1,270**	**304**	<10	<10	<30.0	**10.5**	<10	**12.6**	<10	<10	<10	<20.0	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Mar-14	<25.0	<25.0	<25.0	<25.0	**2,180**	<25.0	<25.0	<25.0	**1,870**	**402**	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**1,970**	<25.0	<25.0	<25.0	**860**	**328**	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**2,730**	<25.0	<25.0	<25.0	**2,520**	**541**	<25.0	<25.0	<75.0	**26.1**	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**1,990**	<25.0	<25.0	<25.0	**1,930**	**382**	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**3,220**	<25.0	<25.0	<25.0	**2,160**	**476**	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**2,730**	<25.0	<25.0	<25.0	**2,050**	**618**	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**6,790**	<25.0	<25.0	<25.0	**4,100**	**521**	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**3,480**	<25.0	<25.0	<25.0	**1,880**	**547**	<25.0	<25.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	**1,570**	<25.0	<25.0	<25.0	**1,170**	**306**	<25.0	<10.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Jun-16	<25.0	<25.0	<25.0	<25.0	**1,900**	<25.0	<25.0	<25.0	**2,600**	**490**	<25.0	<10.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
	Sep-16	<25.0	<25.0	<25.0	<25.0	**2,500**	<25.0	<25.0	<25.0	**2,920**	**597**	<25.0	<10.0	<75.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<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	<20.0	<5.0	**458**	<5.0	<5.0	<5.0	**577**	**122**	<5.0	<1.0	<15.0	<5.0	<5.0	**14.4**	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	**2.07**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jul-13	<10.0	<10.0	<20.0	<10.0	**1,040**	<10.0	<10.0	<10.0	**743**	**221**	<10.0	<10.0	<30.0	<10.0	<10.0	**16**	<10.0	<10.0	<10.0	<20.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Sep-13	<5.0	**6.63**	<20.0	<5.0	**1,010**	<5.0	<5.0	<5.0	**743**	**212**	<5.0	<5.0	<15.0	<5.0	<5.0	**14.6**	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	**11.6**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-13	<5.0	<5.0	<20.0	<5.0	**647**	<5.0	<5.0	<5.0	**356**	**144**	<5.0	<5.0	<5.0	<5.0	<5.0	**8.76**	<5.0	<5.0	<5.0	<5.0	<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	**960**	<10.0	<10.0	<10.0	**695**	**195**	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<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	**648**	<10.0	<10.0	<10.0	**385**	**153**	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<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	**578**	<5.0	<5.0	<5.0	**547**	**139**	<5.0	<5.0	<15.0	<5.0	<5.0	**7.07**	<5.0	<5.0	<5.0	<10.0	<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	**376**	<10.0	<10.0	<10.0	**335**	**95.8**	<10.0	<10.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<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	**599**	<5.0	<5.0	<5.0	**392**	**116**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<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	**575**	<5.0	<5.0	<5.0	**386**	**166**	<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	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-15	<5.0	<5.0	<5.0	<5.0	**196**	<5.0	<5.0	<5.0	**150**	**40.6**	<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	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-15	<5.0	<5.0	<5.0	<5.0	**399**	<5.0	<5.0	<5.0	**280**	**94.1**	<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	<5.0	<5.0	<5.0	<5.0	<5.0
	Feb-16	<5.0	<5.0	<5.0	<5.0	**512**	<5.0	<5.0	<5.0	**347**	**104**	<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	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-16	<5.0	<5.0	<5.0	<5.0	**310**	<5.0	<5.0	<5.0	**220**	**67**	<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	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-16	<5.0	<5.0	<5.0	<5.0	**175**	<5.0	<5.0	<5.0	**162**	**36.2**	<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	<5.0	<5.0	<5.0	<5.0	<5.0
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**	<1,250	<1,250	<3,750	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<2,500	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250
	Jul-13	<250	<250	**6,080**	<250	**21,900**	<250	<250	**506**	**43,300**	**3,290**	<250	<250	<750	<250	<250	<250	<250	<250	<250	<500	<250	<250	**389**	<250	<250	<250	<250	**294**	<250
	Sep-13	**391**	<250	**15,700**	<250	**51,000**	<250	<250	**900**	**42,600**	**3,560**	<250	**270**	<750	<250	<250	<250	<250	<250	<250	<500	<250	**271**	**650**	<250	**293**	<250	<250	**1010**	<250
	Dec-13	**356**	<250	**9,460**	<250	**40,300**	<250	<250	**531**	**9,120**	**1,250**	<250	<250	<750	<250	<250	<250	<250	<250	<250	<500	<250	<250	<250	<250	<250	<250	<250	**471**	<250
	Mar-14	<100	<100	**496**	<100	**9,180**	<100	<100	**110**	**17,400**	**1,170**	<100	<100	<300	<100	<100	<100	<100	<100	<100	<200	<100	<100	**106**	<100	<100	<100	<100	<100	<100
	Jun-14	<500	<500	**13,800**	<500	**33,200**	<500	<500	<500	**10,900**	**1,390**	<500	<500	<1,500	<500	<500	<500	<500	<500	<500	<1,000	<500	<500	<500	<500	<500	<500	<500	<500	<500
	Sep-14	<250	<250	**1,650**	<250	**7,460**	<250	<250	<250	**10,200**	**1,010**	<250	<250	<750	<250	<250	<250	<250	<250	<250	<500	<250	<250	<250	<250	<250	<250	<250	<250	<250
	Dec-14	<50.0	<50.0	<50.0	<50.0	**789**	<50.0	<50.0	<50.0	**7,930**	**924**	<50.0	<50.0	<150	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
	Mar-15	<250	<250	**1,460**	<250	**27,300**	<250	<250	<250	**5,140**	**895**	<250	<250	<250	<250	<250	<250	<250	<250	<250	<500	<250	<250	<250	<250	<250	<250	<250	<250	<250
	Jun-15	<100	<100	**923**	<100	**27,300**	<100	<100	<100	**11,300**	**811**	<100	<100	<300	<100	<100	<100	<100	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100
	Sep-15	<100	<100	<100	<100	**520**	<100	<100	<100	**6,140**	**520**	<100	<100	<300	<100	<100	<100	<100	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100
	Dec-15	<100	<100	**5.34**	<100	**418**	<100	<100	<100	**9,320**	**680**	<100	<100	<300	<100	<100	<100	<100	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100
	Feb-16	<100	<100	<100	<100	**2,240**	<100	<100	<100	**8,100**	**741**	<100	<40.0	<300	<100	<100	<100	<100	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100
	Jun-16	<100	<100	<50	<100	**980**	<100	<100	<100	**18,000**	**1,500**	<100	**3.5**	<300	<100	<100	<100	<100	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100
	Sep-16	<250	<250	<250	<250	**684**	<250	<250	<250	**16,200**	**1,020**	<250	**<250**	<750	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250

Notes:

The analytical results that exceed the laboratory detection limits are bolded.

ug/L = micrograms per Liter

NS = Not Sampled

TABLE 6
Summary of Professional Oversight Hours
Semi-Annual Progress Report #6

October 2016
Rayloc Facility
HSI# 10547

Month	Hours
May	48
June	46
July	42
August	48
September	52
October	18

APPENDIX A
AST & OT CONFIRMATION SAMPLING LABORATORY REPORTS

GCAL
ANALYTICAL LABORATORIES, LLC

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 12/24/2015

GCAL Report 215121819

Project Rayloc Excavation

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

PJLA Testing DoD ELAP

ISO 17025

NELAP ACCREDITED TNI LABORATORY

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 215121819

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:** 215121819

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, sample 21512181902 (OT-3 SOUTH WEST WALL @ 6) had to be diluted due to the presence of non-target background. This dilution is reflected in the elevated reporting limits.

In the EPA 8260B analysis, samples 21512181901 (OT-3 SOUTH FLOOR @ 9) and 21512181902 (OT-3 SOUTH WEST WALL @ 6) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument. The dilution is reflected in elevated detection limits.

In the EPA 8260B analysis for analytical batch 575413, the LCS/LCSD exhibited marginal sporadic recovery failures for the extended list of spike compounds.

Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21512181901	OT-3 SOUTH FLOOR @ 9	Solid	12/15/2015 15:15	12/18/2015 10:20
21512181902	OT-3 SOUTH WEST WALL @ 6	Solid	12/15/2015 15:45	12/18/2015 10:20

Summary of Compounds Detected

OT-3 SOUTH FLOOR @ 9	**Collect Date**	12/15/2015 15:15	**GCAL ID**	21512181901
	Receive Date	12/18/2015 10:20	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	0.467	0.327	mg/kg

OT-3 SOUTH WEST WALL @ 6	**Collect Date**	12/15/2015 15:45	**GCAL ID**	21512181902
	Receive Date	12/18/2015 10:20	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
156-59-2	cis-1,2-Dichloroethene	0.381	0.306	mg/kg
127-18-4	Tetrachloroethene	15.3	1.53	mg/kg
79-01-6	Trichloroethene	0.917	0.306	mg/kg

Sample Results

OT-3 SOUTH FLOOR @ 9	**Collect Date**	12/15/2015 15:15	**GCAL ID**	21512181901
	Receive Date	12/18/2015 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	12/24/2015 07:19	LBH	575413

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.327	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.327	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.327	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.327	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.327	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.327	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.327	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.327	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.327	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.327	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.327	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.327	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.327	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.327	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.655	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.327	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.327	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.327	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.327	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.327	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.327	mg/kg
78-93-3	2-Butanone	ND	0.327	mg/kg
95-49-8	2-Chlorotoluene	ND	0.327	mg/kg
591-78-6	2-Hexanone	ND	0.327	mg/kg
106-43-4	4-Chlorotoluene	ND	0.327	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.327	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.327	mg/kg
67-64-1	Acetone	ND	1.64	mg/kg
71-43-2	Benzene	ND	0.327	mg/kg
108-86-1	Bromobenzene	ND	0.327	mg/kg
74-97-5	Bromochloromethane	ND	0.327	mg/kg
75-27-4	Bromodichloromethane	ND	0.327	mg/kg
75-25-2	Bromoform	ND	0.327	mg/kg
74-83-9	Bromomethane	ND	0.327	mg/kg
75-15-0	Carbon disulfide	ND	0.327	mg/kg
56-23-5	Carbon tetrachloride	ND	0.327	mg/kg
108-90-7	Chlorobenzene	ND	0.327	mg/kg
75-00-3	Chloroethane	ND	0.327	mg/kg
67-66-3	Chloroform	ND	0.327	mg/kg
74-87-3	Chloromethane	ND	0.327	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	0.327	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.327	mg/kg
124-48-1	Dibromochloromethane	ND	0.327	mg/kg
74-95-3	Dibromomethane	ND	0.327	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.327	mg/kg
100-41-4	Ethylbenzene	ND	0.327	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.327	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.327	mg/kg

Sample Results

OT-3 SOUTH FLOOR @ 9

Collect Date 12/15/2015 15:15 **GCAL ID** 21512181901
Receive Date 12/18/2015 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	12/24/2015 07:19	LBH	575413

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.655	mg/kg
74-88-4	Methyl iodide	ND	0.327	mg/kg
75-09-2	Methylene chloride	ND	0.655	mg/kg
91-20-3	Naphthalene	ND	0.327	mg/kg
104-51-8	n-Butylbenzene	ND	0.327	mg/kg
103-65-1	n-Propylbenzene	ND	0.327	mg/kg
95-47-6	o-Xylene	ND	0.327	mg/kg
135-98-8	sec-Butylbenzene	ND	0.327	mg/kg
100-42-5	Styrene	ND	0.327	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.327	mg/kg
98-06-6	tert-Butylbenzene	ND	0.327	mg/kg
127-18-4	**Tetrachloroethene**	**0.467**	**0.327**	**mg/kg**
108-88-3	Toluene	ND	0.327	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.327	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.327	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.327	mg/kg
79-01-6	Trichloroethene	ND	0.327	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.327	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.327	mg/kg
75-01-4	Vinyl chloride	ND	0.327	mg/kg
1330-20-7	Xylene (total)	ND	0.982	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2.59	2.74	ug/Kg	106	62 - 127
1868-53-7	Dibromofluoromethane	2.59	2.47	ug/Kg	95	65 - 130
2037-26-5	Toluene d8	2.59	2.62	ug/Kg	101	71 - 132
17060-07-0	1,2-Dichloroethane-d4	2.59	2.55	ug/Kg	98	62 - 125

OT-3 SOUTH WEST WALL @ 6

Collect Date 12/15/2015 15:45 **GCAL ID** 21512181902
Receive Date 12/18/2015 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	12/24/2015 07:42	JCK	575413

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.306	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.306	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.306	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.306	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.306	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.306	mg/kg

Sample Results

OT-3 SOUTH WEST WALL @ 6	**Collect Date**	12/15/2015 15:45	**GCAL ID**	21512181902
	Receive Date	12/18/2015 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	12/24/2015 07:42	JCK	575413

CAS#	Parameter	Result	LOQ	Units
563-58-6	1,1-Dichloropropene	ND	0.306	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.306	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.306	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.306	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.306	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.306	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.306	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.306	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.612	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.306	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.306	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.306	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.306	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.306	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.306	mg/kg
78-93-3	2-Butanone	ND	0.306	mg/kg
95-49-8	2-Chlorotoluene	ND	0.306	mg/kg
591-78-6	2-Hexanone	ND	0.306	mg/kg
106-43-4	4-Chlorotoluene	ND	0.306	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.306	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.306	mg/kg
67-64-1	Acetone	ND	1.53	mg/kg
71-43-2	Benzene	ND	0.306	mg/kg
108-86-1	Bromobenzene	ND	0.306	mg/kg
74-97-5	Bromochloromethane	ND	0.306	mg/kg
75-27-4	Bromodichloromethane	ND	0.306	mg/kg
75-25-2	Bromoform	ND	0.306	mg/kg
74-83-9	Bromomethane	ND	0.306	mg/kg
75-15-0	Carbon disulfide	ND	0.306	mg/kg
56-23-5	Carbon tetrachloride	ND	0.306	mg/kg
108-90-7	Chlorobenzene	ND	0.306	mg/kg
75-00-3	Chloroethane	ND	0.306	mg/kg
67-66-3	Chloroform	ND	0.306	mg/kg
74-87-3	Chloromethane	ND	0.306	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**0.381**	**0.306**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.306	mg/kg
124-48-1	Dibromochloromethane	ND	0.306	mg/kg
74-95-3	Dibromomethane	ND	0.306	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.306	mg/kg
100-41-4	Ethylbenzene	ND	0.306	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.306	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.306	mg/kg
136777-61-2	m,p-Xylene	ND	0.612	mg/kg
74-88-4	Methyl iodide	ND	0.306	mg/kg
75-09-2	Methylene chloride	ND	0.612	mg/kg
91-20-3	Naphthalene	ND	0.306	mg/kg
104-51-8	n-Butylbenzene	ND	0.306	mg/kg
103-65-1	n-Propylbenzene	ND	0.306	mg/kg

Sample Results

OT-3 SOUTH WEST WALL @ 6	**Collect Date**	12/15/2015 15:45	**GCAL ID**	21512181902
	Receive Date	12/18/2015 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	12/24/2015 07:42	JCK	575413

CAS#	Parameter	Result	LOQ	Units
95-47-6	o-Xylene	ND	0.306	mg/kg
135-98-8	sec-Butylbenzene	ND	0.306	mg/kg
100-42-5	Styrene	ND	0.306	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.306	mg/kg
98-06-6	tert-Butylbenzene	ND	0.306	mg/kg
108-88-3	Toluene	ND	0.306	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.306	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.306	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.306	mg/kg
79-01-6	**Trichloroethene**	**0.917**	**0.306**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.306	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.306	mg/kg
75-01-4	Vinyl chloride	ND	0.306	mg/kg
1330-20-7	Xylene (total)	ND	0.918	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2.34	2.36	ug/Kg	101	62 - 127
1868-53-7	Dibromofluoromethane	2.34	2.23	ug/Kg	95	65 - 130
2037-26-5	Toluene d8	2.34	2.38	ug/Kg	102	71 - 132
17060-07-0	1,2-Dichloroethane-d4	2.34	2.34	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	250	12/24/2015 02:21	LBH	575413

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**15.3**	**1.53**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	11.70	11.9	ug/Kg	102	62 - 127
1868-53-7	Dibromofluoromethane	11.70	11.4	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	11.70	12	ug/Kg	103	71 - 132
17060-07-0	1,2-Dichloroethane-d4	11.70	11.4	ug/Kg	97	62 - 125

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
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
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

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
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

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: 215121819
PM: SAK

Report to:	Bill to:
Client: Clearwater Env'l Resources	Client: SAME
Address: 3870 Peachtree Ind. Blvd Ste. 340139	Address:
Contact: Jack Wintle	Contact:
Phone: 678-491-4601	Phone:
E-mail: Jack.wintle@clearwaterenv.net	E-mail:

P.O. Number: —
Project Name/Number: Rayloc Excavation
Sampled By: Jack Wintle

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	No Containers	Analytical Requests & Method: EPA Method 8260B-VOCs	Preservative
S	12/15/15	15:15		X	OT-3 South Floor @ 9'		X	1
↓	↓	15:45		↓	OT-3 Southwest Wall @ 6'		↓	2
~~Trip Blank~~ MRH					~~Trip Blank~~ MRH			

GCAL use only:
Custody Seal used ☑ yes ☐ no
intact ☐ yes ☐ no
Temperature °C 1.5 E26

☐ Dissolved Analysis Requested
☐ Field filtered
☐ Lab filtered

Air Bill No: 7752 3650 4367

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:
Jack Wintle	12/16	14:57	[illegible]	12/16	14:57
[illegible]	12/17	1305	Rick Wichman	12/17/15	1305
Brad Wichman	12/17/15	1415	FEDEX		

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.

Fedex 12-18-15 1020 [illegible] 12-18-15 1020

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT

GCAL ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIVING CHECKLIST

215121819

SAMPLE DELIVERY GROUP 215121819	
Client PM SAK 4912 - Clearwater Environmental Resources	**Transport Method** FEDEX
Profile Number 259985	**Received By** McCune, Dodie N.
Line Item(s) 2 - Soils	**Receive Date(s)** 12/18/15

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)
775236504367		1.5

DISCREPANCIES

None

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 02/23/2016

GCAL Report 216021622

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 216021622

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:** 216021622

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, sample 21602162202 (OT-3 SW WALL 2 @ 6) had to be diluted to bracket the concentration of Tetrachloroethene within the calibration range of the instrument. This is reflected in the elevated detection limit.

Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21602162201	OT-3 SW FL 2 @ 8	Solid	02/12/2016 15:15	02/16/2016 10:15
21602162202	OT-3 SW WALL 2 @ 6	Solid	02/12/2016 15:30	02/16/2016 10:15

Summary of Compounds Detected

OT-3 SW FL 2 @ 8

Collect Date 02/12/2016 15:15 **GCAL ID** 21602162201
Receive Date 02/16/2016 10:15 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	0.035	0.00596	mg/kg

OT-3 SW WALL 2 @ 6

Collect Date 02/12/2016 15:30 **GCAL ID** 21602162202
Receive Date 02/16/2016 10:15 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
95-50-1	1,2-Dichlorobenzene	0.028	0.00615	mg/kg
540-59-0	1,2-Dichloroethene(Total)	0.109	0.012	mg/kg
156-59-2	cis-1,2-Dichloroethene	0.109	0.00615	mg/kg
127-18-4	Tetrachloroethene	0.490	0.234	mg/kg
79-01-6	Trichloroethene	0.224	0.00615	mg/kg

Sample Results

OT-3 SW FL 2 @ 8	**Collect Date**	02/12/2016 15:15	**GCAL ID**	21602162201
	Receive Date	02/16/2016 10:15	**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	1	02/18/2016 22:09	JCK	579811

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.00596	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.00596	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00596	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.00596	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.00596	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.00596	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.00596	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.00596	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.00596	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.00596	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.00596	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.00596	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.00596	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.00596	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.012	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.00596	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.00596	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.00596	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.00596	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.00596	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.00596	mg/kg
78-93-3	2-Butanone	ND	0.00596	mg/kg
95-49-8	2-Chlorotoluene	ND	0.00596	mg/kg
591-78-6	2-Hexanone	ND	0.00596	mg/kg
106-43-4	4-Chlorotoluene	ND	0.00596	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.00596	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.00596	mg/kg
67-64-1	Acetone	ND	0.030	mg/kg
71-43-2	Benzene	ND	0.00596	mg/kg
108-86-1	Bromobenzene	ND	0.00596	mg/kg
74-97-5	Bromochloromethane	ND	0.00596	mg/kg
75-27-4	Bromodichloromethane	ND	0.00596	mg/kg
75-25-2	Bromoform	ND	0.00596	mg/kg
74-83-9	Bromomethane	ND	0.00596	mg/kg
75-15-0	Carbon disulfide	ND	0.00596	mg/kg
56-23-5	Carbon tetrachloride	ND	0.00596	mg/kg
108-90-7	Chlorobenzene	ND	0.00596	mg/kg
75-00-3	Chloroethane	ND	0.00596	mg/kg
67-66-3	Chloroform	ND	0.00596	mg/kg
74-87-3	Chloromethane	ND	0.00596	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	0.00596	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.00596	mg/kg
124-48-1	Dibromochloromethane	ND	0.00596	mg/kg
74-95-3	Dibromomethane	ND	0.00596	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.00596	mg/kg
100-41-4	Ethylbenzene	ND	0.00596	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.00596	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.00596	mg/kg

Sample Results

OT-3 SW FL 2 @ 8

Collect Date 02/12/2016 15:15 **GCAL ID** 21602162201
Receive Date 02/16/2016 10:15 **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	1	02/18/2016 22:09	JCK	579811

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.012	mg/kg
74-88-4	Methyl iodide	ND	0.00596	mg/kg
75-09-2	Methylene chloride	ND	0.012	mg/kg
91-20-3	Naphthalene	ND	0.00596	mg/kg
104-51-8	n-Butylbenzene	ND	0.00596	mg/kg
103-65-1	n-Propylbenzene	ND	0.00596	mg/kg
95-47-6	o-Xylene	ND	0.00596	mg/kg
135-98-8	sec-Butylbenzene	ND	0.00596	mg/kg
100-42-5	Styrene	ND	0.00596	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.00596	mg/kg
98-06-6	tert-Butylbenzene	ND	0.00596	mg/kg
127-18-4	**Tetrachloroethene**	**0.035**	**0.00596**	**mg/kg**
108-88-3	Toluene	ND	0.00596	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.00596	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.00596	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.00596	mg/kg
79-01-6	Trichloroethene	ND	0.00596	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.00596	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.00596	mg/kg
75-01-4	Vinyl chloride	ND	0.00596	mg/kg
1330-20-7	Xylene (total)	ND	0.018	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	0.0480	.045	ug/Kg	93	62 - 127
1868-53-7	Dibromofluoromethane	0.0480	.048	ug/Kg	99	65 - 130
2037-26-5	Toluene d8	0.0480	.051	ug/Kg	106	71 - 132
17060-07-0	1,2-Dichloroethane-d4	0.0480	.049	ug/Kg	102	62 - 125

OT-3 SW WALL 2 @ 6

Collect Date 02/12/2016 15:30 **GCAL ID** 21602162202
Receive Date 02/16/2016 10:15 **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	1	02/18/2016 22:53	JCK	579811

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.00615	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.00615	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00615	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.00615	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.00615	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.00615	mg/kg

Sample Results

OT-3 SW WALL 2 @ 6	**Collect Date**	02/12/2016 15:30	**GCAL ID**	21602162202
	Receive Date	02/16/2016 10:15	**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	1	02/18/2016 22:53	JCK	579811

CAS#	Parameter	Result	LOQ	Units
563-58-6	1,1-Dichloropropene	ND	0.00615	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.00615	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.00615	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.00615	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.00615	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.00615	mg/kg
95-50-1	**1,2-Dichlorobenzene**	**0.028**	**0.00615**	**mg/kg**
107-06-2	1,2-Dichloroethane	ND	0.00615	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**0.109**	**0.012**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.00615	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.00615	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.00615	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.00615	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.00615	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.00615	mg/kg
78-93-3	2-Butanone	ND	0.00615	mg/kg
95-49-8	2-Chlorotoluene	ND	0.00615	mg/kg
591-78-6	2-Hexanone	ND	0.00615	mg/kg
106-43-4	4-Chlorotoluene	ND	0.00615	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.00615	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.00615	mg/kg
67-64-1	Acetone	ND	0.031	mg/kg
71-43-2	Benzene	ND	0.00615	mg/kg
108-86-1	Bromobenzene	ND	0.00615	mg/kg
74-97-5	Bromochloromethane	ND	0.00615	mg/kg
75-27-4	Bromodichloromethane	ND	0.00615	mg/kg
75-25-2	Bromoform	ND	0.00615	mg/kg
74-83-9	Bromomethane	ND	0.00615	mg/kg
75-15-0	Carbon disulfide	ND	0.00615	mg/kg
56-23-5	Carbon tetrachloride	ND	0.00615	mg/kg
108-90-7	Chlorobenzene	ND	0.00615	mg/kg
75-00-3	Chloroethane	ND	0.00615	mg/kg
67-66-3	Chloroform	ND	0.00615	mg/kg
74-87-3	Chloromethane	ND	0.00615	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**0.109**	**0.00615**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.00615	mg/kg
124-48-1	Dibromochloromethane	ND	0.00615	mg/kg
74-95-3	Dibromomethane	ND	0.00615	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.00615	mg/kg
100-41-4	Ethylbenzene	ND	0.00615	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.00615	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.00615	mg/kg
136777-61-2	m,p-Xylene	ND	0.012	mg/kg
74-88-4	Methyl iodide	ND	0.00615	mg/kg
75-09-2	Methylene chloride	ND	0.012	mg/kg
91-20-3	Naphthalene	ND	0.00615	mg/kg
104-51-8	n-Butylbenzene	ND	0.00615	mg/kg
103-65-1	n-Propylbenzene	ND	0.00615	mg/kg

Sample Results

OT-3 SW WALL 2 @ 6

Collect Date	02/12/2016 15:30	**GCAL ID**	21602162202
Receive Date	02/16/2016 10:15	**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	1	02/18/2016 22:53	JCK	579811

CAS#	Parameter	Result	LOQ	Units
95-47-6	o-Xylene	ND	0.00615	mg/kg
135-98-8	sec-Butylbenzene	ND	0.00615	mg/kg
100-42-5	Styrene	ND	0.00615	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.00615	mg/kg
98-06-6	tert-Butylbenzene	ND	0.00615	mg/kg
108-88-3	Toluene	ND	0.00615	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.00615	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.00615	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.00615	mg/kg
79-01-6	**Trichloroethene**	**0.224**	**0.00615**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.00615	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.00615	mg/kg
75-01-4	Vinyl chloride	ND	0.00615	mg/kg
1330-20-7	Xylene (total)	ND	0.018	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	0.0460	.046	ug/Kg	99	62 - 127
1868-53-7	Dibromofluoromethane	0.0460	.046	ug/Kg	99	65 - 130
2037-26-5	Toluene d8	0.0460	.047	ug/Kg	101	71 - 132
17060-07-0	1,2-Dichloroethane-d4	0.0460	.044	ug/Kg	94	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	100	02/22/2016 14:14	DTB	580022

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**0.490**	**0.234**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	8.78	8.71	ug/Kg	99	62 - 127
1868-53-7	Dibromofluoromethane	8.78	9.04	ug/Kg	103	65 - 130
2037-26-5	Toluene d8	8.78	8.81	ug/Kg	100	71 - 132
17060-07-0	1,2-Dichloroethane-d4	8.78	9.08	ug/Kg	103	62 - 125

GC/MS Volatiles QC Summary

Analytical Batch 579811	Client ID	MB579811		LCS579811				LCSD579811				
	GCAL ID	1542358		1542359				1542360				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	02/18/2016 16:18		02/18/2016 14:49				02/18/2016 15:12				
	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	0.00500	0.050	0.053	105	77 - 122	0.050	0.051	102	4	30
1,1,1-Trichloroethane	71-55-6	ND	0.00500	0.050	0.053	107	70 - 130	0.050	0.050	99	6	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.00500	0.050	0.043	85	66 - 129	0.050	0.041	83	5	30
1,1,2-Trichloroethane	79-00-5	ND	0.00500	0.050	0.046	93	74 - 120	0.050	0.046	91	0	30
1,1-Dichloroethane	75-34-3	ND	0.00500	0.050	0.051	102	71 - 126	0.050	0.048	96	6	30
1,1-Dichloroethene	75-35-4	ND	0.00500	0.050	0.052	103	68 - 129	0.050	0.048	95	8	20
1,1-Dichloropropene	563-58-6	ND	0.00500	0.050	0.054	108	70 - 138	0.050	0.051	103	6	30
1,2,3-Trichloropropane	96-18-4	ND	0.00500	0.050	0.040	80	63 - 132	0.050	0.040	79	0	30
1,2,4-Trichlorobenzene	120-82-1	ND	0.00500	0.050	0.049	99	64 - 135	0.050	0.048	96	2	30
1,2,4-Trimethylbenzene	95-63-6	ND	0.00500	0.050	0.055	109	75 - 130	0.050	0.053	106	4	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.00500	0.050	0.037	74	60 - 123	0.050	0.036	72	3	30
1,2-Dibromoethane	106-93-4	ND	0.00500	0.050	0.045	89	74 - 122	0.050	0.045	89	0	30
1,2-Dichlorobenzene	95-50-1	ND	0.00500	0.050	0.051	101	76 - 125	0.050	0.050	100	2	30
1,2-Dichloroethane	107-06-2	ND	0.00500	0.050	0.047	95	68 - 126	0.050	0.046	91	2	30
1,2-Dichloroethene(Total)	540-59-0	ND	0.010	0.100	0.104	104	72 - 129	0.100	0.100	100	4	30
1,2-Dichloropropane	78-87-5	ND	0.00500	0.050	0.051	102	72 - 129	0.050	0.050	99	2	30
1,3,5-Trimethylbenzene	108-67-8	ND	0.00500	0.050	0.053	106	74 - 136	0.050	0.052	104	2	30
1,3-Dichlorobenzene	541-73-1	ND	0.00500	0.050	0.052	104	77 - 127	0.050	0.051	102	2	30
1,3-Dichloropropane	142-28-9	ND	0.00500	0.050	0.045	90	77 - 121	0.050	0.044	88	2	30
1,4-Dichlorobenzene	106-46-7	ND	0.00500	0.050	0.051	102	74 - 123	0.050	0.050	99	2	30
2,2-Dichloropropane	594-20-7	ND	0.00500	0.050	0.055	109	74 - 129	0.050	0.052	103	6	30
2-Butanone	78-93-3	ND	0.00500	0.050	0.036	72	47 - 142	0.050	0.035	69	3	30
2-Chlorotoluene	95-49-8	ND	0.00500	0.050	0.052	104	75 - 132	0.050	0.051	102	2	30
2-Hexanone	591-78-6	ND	0.00500	0.050	0.037	74	47 - 137	0.050	0.037	73	0	30
4-Chlorotoluene	106-43-4	ND	0.00500	0.050	0.053	106	74 - 133	0.050	0.052	104	2	30
4-Isopropyltoluene	99-87-6	ND	0.00500	0.050	0.056	112	71 - 136	0.050	0.053	107	6	30
4-Methyl-2-pentanone	108-10-1	ND	0.00500	0.050	0.039	78	52 - 136	0.050	0.038	76	3	30
Acetone	67-64-1	ND	0.025	0.050	0.034	69	38 - 152	0.050	0.031	63	9	30
Benzene	71-43-2	ND	0.00500	0.050	0.053	105	73 - 128	0.050	0.050	101	6	20
Bromobenzene	108-86-1	ND	0.00500	0.050	0.050	101	73 - 124	0.050	0.049	98	2	30
Bromochloromethane	74-97-5	ND	0.00500	0.050	0.049	98	73 - 127	0.050	0.047	93	4	30
Bromodichloromethane	75-27-4	ND	0.00500	0.050	0.051	103	74 - 126	0.050	0.050	100	2	30
Bromoform	75-25-2	ND	0.00500	0.050	0.044	89	67 - 122	0.050	0.044	88	0	30
Bromomethane	74-83-9	ND	0.00500	0.050	0.044	88	48 - 139	0.050	0.044	87	0	30
Carbon disulfide	75-15-0	ND	0.00500	0.050	0.052	104	68 - 133	0.050	0.047	95	10	30
Carbon tetrachloride	56-23-5	ND	0.00500	0.050	0.055	109	71 - 133	0.050	0.049	99	12	30
Chlorobenzene	108-90-7	ND	0.00500	0.050	0.052	103	75 - 121	0.050	0.051	102	2	20
Chloroethane	75-00-3	ND	0.00500	0.050	0.048	96	57 - 144	0.050	0.044	89	9	30
Chloroform	67-66-3	ND	0.00500	0.050	0.052	104	74 - 124	0.050	0.050	100	4	30
Chloromethane	74-87-3	ND	0.00500	0.050	0.045	90	61 - 130	0.050	0.047	93	4	30
cis-1,2-Dichloroethene	156-59-2	ND	0.00500	0.050	0.052	104	72 - 130	0.050	0.050	100	4	30
cis-1,3-Dichloropropene	10061-01-5	ND	0.00500	0.050	0.052	104	72 - 129	0.050	0.051	102	2	30
Dibromochloromethane	124-48-1	ND	0.00500	0.050	0.048	96	74 - 122	0.050	0.048	95	0	30
Dibromomethane	74-95-3	ND	0.00500	0.050	0.047	94	72 - 125	0.050	0.045	89	4	30
Dichlorodifluoromethane	75-71-8	ND	0.00500	0.050	0.045	91	59 - 138	0.050	0.041	83	9	30
Ethylbenzene	100-41-4	ND	0.00500	0.050	0.053	106	74 - 130	0.050	0.052	104	2	30
Hexachlorobutadiene	87-68-3	ND	0.00500	0.050	0.054	107	71 - 140	0.050	0.048	97	12	30
Isopropylbenzene (Cumene)	98-82-8	ND	0.00500	0.050	0.056	112	74 - 125	0.050	0.054	107	4	30
m,p-Xylene	136777-61-2	ND	0.010	0.100	0.110	110	72 - 128	0.100	0.107	107	3	30
Methyl iodide	74-88-4	ND	0.00500	0.050	0.041	81	54 - 140	0.050	0.039	78	5	30
Methylene chloride	75-09-2	ND	0.010	0.050	0.055	111	66 - 130	0.050	0.055	110	0	30
Naphthalene	91-20-3	ND	0.00500	0.050	0.041	82	54 - 132	0.050	0.041	81	0	35
n-Butylbenzene	104-51-8	ND	0.00500	0.050	0.054	108	68 - 144	0.050	0.051	101	6	30
n-Propylbenzene	103-65-1	ND	0.00500	0.050	0.054	108	73 - 137	0.050	0.052	104	4	30
o-Xylene	95-47-6	ND	0.00500	0.050	0.055	111	69 - 133	0.050	0.053	107	4	30
sec-Butylbenzene	135-98-8	ND	0.00500	0.050	0.055	111	72 - 141	0.050	0.053	105	4	30
Styrene	100-42-5	ND	0.00500	0.050	0.053	107	72 - 128	0.050	0.052	105	2	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	0.00500	0.050	0.043	87	69 - 126	0.050	0.044	88	2	30

GC/MS Volatiles QC Summary

Analytical Batch 579811	Client ID	MB579811		LCS579811				LCSD579811				
	GCAL ID	1542358		1542359				1542360				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	02/18/2016 16:18		02/18/2016 14:49				02/18/2016 15:12				
	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	0.00500	0.050	0.055	109	72 - 136	0.050	0.052	103	6	30
Tetrachloroethene	127-18-4	ND	0.00500	0.050	0.053	105	70 - 127	0.050	0.050	100	6	30
Toluene	108-88-3	ND	0.00500	0.050	0.051	103	74 - 121	0.050	0.050	101	2	20
trans-1,2-Dichloroethene	156-60-5	ND	0.00500	0.050	0.053	105	67 - 134	0.050	0.050	99	6	30
trans-1,3-Dichloropropene	10061-02-6	ND	0.00500	0.050	0.049	99	72 - 126	0.050	0.049	98	0	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.00500	0.050	0.035	70	44 - 146	0.050	0.035	70	0	30
Trichloroethene	79-01-6	ND	0.00500	0.050	0.051	102	78 - 127	0.050	0.048	97	6	20
Trichlorofluoromethane	75-69-4	ND	0.00500	0.050	0.053	107	64 - 141	0.050	0.048	96	10	30
Trichlorotrifluoroethane	76-13-1	ND	0.00500	0.050	0.053	106	66 - 139	0.050	0.048	96	10	30
Vinyl chloride	75-01-4	ND	0.00500	0.050	0.049	97	67 - 131	0.050	0.044	88	11	30
Xylene (total)	1330-20-7	ND	0.015	0.150	0.165	110	71 - 129	0.150	0.160	107	3	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	.0476	95	.05	.0461	92	62 - 125	.05	.0455	91	NA	NA
4-Bromofluorobenzene	460-00-4	.0461	92	.05	.0499	100	62 - 127	.05	.0495	99	NA	NA
Dibromofluoromethane	1868-53-7	.0489	98	.05	.0498	100	65 - 130	.05	.0493	99	NA	NA
Toluene d8	2037-26-5	.053	106	.05	.0499	100	71 - 132	.05	.0505	101	NA	NA

Analytical Batch 580022	Client ID	MB580022		LCS580022				LCSD580022				
	GCAL ID	1543103		1543104				1543105				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	02/22/2016 10:35		02/22/2016 08:54				02/22/2016 09:17				
	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
Tetrachloroethene	127-18-4	ND	0.050	2.50	2.65	106	70 - 127	2.50	2.66	106	0	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	2.68	107	2.5	2.62	105	62 - 125	2.5	2.68	107	NA	NA
4-Bromofluorobenzene	460-00-4	2.39	96	2.5	2.4	96	62 - 127	2.5	2.29	92	NA	NA
Dibromofluoromethane	1868-53-7	2.6	104	2.5	2.68	107	65 - 130	2.5	2.7	108	NA	NA
Toluene d8	2037-26-5	2.52	101	2.5	2.49	100	71 - 132	2.5	2.43	97	NA	NA

GCAL ANALYTICAL LABORATORIES, LLC

CHAIN OF CUSTODY RECORD

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

Client ID: 4912 - Clearwater Environmental Resources
SDG: 216021622
PM: SAK

Report to:	**Bill to:**
Client: Clearwater Env Rscs	Client: SAME
Address: 3870 PIB Suite 340139	Address:
Contact: Jack Wittle	Contact:
Phone: 678 491-4601	Phone:
E-mail: jackwittle@clearwaterenv.net	E-mail:

P.O. Number: 1507-1-3
Project Name/Number: Raylec ~~OTS~~
Sampled By:

Analytical Requests & Method: VOCs

GCAL use only:
Custody Seal used ☑ yes ☐ no
intact ☑ yes ☐ no
Temperature °C 2.5°C E26
3:16pm

☐ Dissolved Analysis Requested
☐ Field filtered
☐ Lab filtered

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	No Containers	VOCs	Preservative
S	2/12	1515		✓	OT-3 SW FL 2@8'	4	✓	1
S	2/12	1530		✓	OT-3 SW Wall 2@6'	4	✓	2

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 Wittle	2/15/16	0900	Hugo Arce	2/15/16	9:10
Hugo Arce	2/15/16		Fedex	2/15/16	
Fedex	2-16-16	1015	Natalie Fallon	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

216021622

SAMPLE DELIVERY GROUP 216021622

Client PM SAK 4912 - Clearwater Environmental Resources	**Transport Method** FEDEX
Profile Number 259985	**Received By** McCune, Dodie N.
Line Item(s) 2 - Soils	**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

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 10/23/2015

GCAL Report 215102105

Project Rayloc Excavations

Deliver To	***Report cc***
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 215102105

Case Narrative

Client: Clearwater Environmental Resources **Report:** 215102105

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 21510210506 (OT-3 FLOOR), 21510210507 (OT-3 NORTH WALL), and 21510210509 (OT-3 SOUTH WALL) 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 570729, the LCS/LCSD RPD is above the control limit for Carbon disulfide. All other batch QC is acceptable.

In the EPA 8260B analysis for analytical batch 570783, the LCS/LCSD RPD is above the control limit for Acetone. All other batch QC is acceptable.

Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21510210501	AST-FLOOR	Solid	10/19/2015 17:00	10/21/2015 10:11
21510210502	AST-WEST WALL	Solid	10/19/2015 17:03	10/21/2015 10:11
21510210503	AST-SOUTH WALL	Solid	10/19/2015 17:06	10/21/2015 10:11
21510210504	AST-NORTH WALL	Solid	10/19/2015 17:09	10/21/2015 10:11
21510210505	AST-EAST WALL	Solid	10/19/2015 17:12	10/21/2015 10:11
21510210506	OT-3 FLOOR	Solid	10/20/2015 10:13	10/21/2015 10:11
21510210507	OT-3 NORTH WALL	Solid	10/20/2015 10:16	10/21/2015 10:11
21510210508	OT-3 WEST WALL	Solid	10/20/2015 10:19	10/21/2015 10:11
21510210509	OT-3 SOUTH WALL	Solid	10/20/2015 10:22	10/21/2015 10:11
21510210510	OT-3 EAST WALL	Solid	10/20/2015 10:25	10/21/2015 10:11
21510210511	TRIP BLANK	Water	10/20/2015 00:01	10/21/2015 10:11

Summary of Compounds Detected

AST-FLOOR

Collect Date 10/19/2015 17:00 **GCAL ID** 21510210501
Receive Date 10/21/2015 10:11 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	0.076	0.00661	mg/kg

AST-WEST WALL

Collect Date 10/19/2015 17:03 **GCAL ID** 21510210502
Receive Date 10/21/2015 10:11 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	0.031	0.00617	mg/kg

AST-SOUTH WALL

Collect Date 10/19/2015 17:06 **GCAL ID** 21510210503
Receive Date 10/21/2015 10:11 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	0.00616	0.00566	mg/kg

OT-3 FLOOR

Collect Date 10/20/2015 10:13 **GCAL ID** 21510210506
Receive Date 10/21/2015 10:11 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	0.273	0.228	mg/kg

OT-3 NORTH WALL

Collect Date 10/20/2015 10:16 **GCAL ID** 21510210507
Receive Date 10/21/2015 10:11 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	5.52	0.263	mg/kg

Summary of Compounds Detected

OT-3 SOUTH WALL

Collect Date	10/20/2015 10:22	**GCAL ID**	21510210509
Receive Date	10/21/2015 10:11	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	0.672	0.290	mg/kg

OT-3 EAST WALL

Collect Date	10/20/2015 10:25	**GCAL ID**	21510210510
Receive Date	10/21/2015 10:11	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	0.055	0.011	mg/kg
156-59-2	cis-1,2-Dichloroethene	0.055	0.00557	mg/kg
127-18-4	Tetrachloroethene	0.109	0.00557	mg/kg
79-01-6	Trichloroethene	0.010	0.00557	mg/kg

Sample Results

AST-FLOOR	**Collect Date**	10/19/2015 17:00	**GCAL ID**	21510210501
	Receive Date	10/21/2015 10:11	**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	1	10/21/2015 22:49	CJR	570729

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.00661	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.00661	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00661	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.00661	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.00661	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.00661	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.00661	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.00661	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.00661	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.00661	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.00661	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.00661	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.00661	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.00661	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.013	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.00661	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.00661	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.00661	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.00661	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.00661	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.00661	mg/kg
78-93-3	2-Butanone	ND	0.00661	mg/kg
95-49-8	2-Chlorotoluene	ND	0.00661	mg/kg
591-78-6	2-Hexanone	ND	0.00661	mg/kg
106-43-4	4-Chlorotoluene	ND	0.00661	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.00661	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.00661	mg/kg
67-64-1	Acetone	ND	0.033	mg/kg
71-43-2	Benzene	ND	0.00661	mg/kg
108-86-1	Bromobenzene	ND	0.00661	mg/kg
74-97-5	Bromochloromethane	ND	0.00661	mg/kg
75-27-4	Bromodichloromethane	ND	0.00661	mg/kg
75-25-2	Bromoform	ND	0.00661	mg/kg
74-83-9	Bromomethane	ND	0.00661	mg/kg
75-15-0	Carbon disulfide	ND	0.00661	mg/kg
56-23-5	Carbon tetrachloride	ND	0.00661	mg/kg
108-90-7	Chlorobenzene	ND	0.00661	mg/kg
75-00-3	Chloroethane	ND	0.00661	mg/kg
67-66-3	Chloroform	ND	0.00661	mg/kg
74-87-3	Chloromethane	ND	0.00661	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	0.00661	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.00661	mg/kg
124-48-1	Dibromochloromethane	ND	0.00661	mg/kg
74-95-3	Dibromomethane	ND	0.00661	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.00661	mg/kg
100-41-4	Ethylbenzene	ND	0.00661	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.00661	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.00661	mg/kg

Sample Results

AST-FLOOR

Collect Date 10/19/2015 17:00 **GCAL ID** 21510210501
Receive Date 10/21/2015 10:11 **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	1	10/21/2015 22:49	CJR	570729

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.013	mg/kg
74-88-4	Methyl iodide	ND	0.00661	mg/kg
75-09-2	Methylene chloride	ND	0.013	mg/kg
91-20-3	Naphthalene	ND	0.00661	mg/kg
104-51-8	n-Butylbenzene	ND	0.00661	mg/kg
103-65-1	n-Propylbenzene	ND	0.00661	mg/kg
95-47-6	o-Xylene	ND	0.00661	mg/kg
135-98-8	sec-Butylbenzene	ND	0.00661	mg/kg
100-42-5	Styrene	ND	0.00661	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.00661	mg/kg
98-06-6	tert-Butylbenzene	ND	0.00661	mg/kg
127-18-4	**Tetrachloroethene**	**0.076**	**0.00661**	**mg/kg**
108-88-3	Toluene	ND	0.00661	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.00661	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.00661	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.00661	mg/kg
79-01-6	Trichloroethene	ND	0.00661	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.00661	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.00661	mg/kg
75-01-4	Vinyl chloride	ND	0.00661	mg/kg
1330-20-7	Xylene (total)	ND	0.020	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	0.0480	.044	ug/Kg	92	62 - 127
1868-53-7	Dibromofluoromethane	0.0480	.047	ug/Kg	98	65 - 130
2037-26-5	Toluene d8	0.0480	.048	ug/Kg	101	71 - 132
17060-07-0	1,2-Dichloroethane-d4	0.0480	.055	ug/Kg	114	62 - 125

AST-WEST WALL

Collect Date 10/19/2015 17:03 **GCAL ID** 21510210502
Receive Date 10/21/2015 10:11 **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	1	10/21/2015 23:10	CJR	570729

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.00617	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.00617	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00617	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.00617	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.00617	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.00617	mg/kg

Sample Results

AST-WEST WALL	**Collect Date**	10/19/2015 17:03	**GCAL ID**	21510210502
	Receive Date	10/21/2015 10:11	**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	1	10/21/2015 23:10	CJR	570729

CAS#	Parameter	Result	LOQ	Units
563-58-6	1,1-Dichloropropene	ND	0.00617	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.00617	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.00617	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.00617	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.00617	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.00617	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.00617	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.00617	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.012	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.00617	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.00617	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.00617	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.00617	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.00617	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.00617	mg/kg
78-93-3	2-Butanone	ND	0.00617	mg/kg
95-49-8	2-Chlorotoluene	ND	0.00617	mg/kg
591-78-6	2-Hexanone	ND	0.00617	mg/kg
106-43-4	4-Chlorotoluene	ND	0.00617	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.00617	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.00617	mg/kg
67-64-1	Acetone	ND	0.031	mg/kg
71-43-2	Benzene	ND	0.00617	mg/kg
108-86-1	Bromobenzene	ND	0.00617	mg/kg
74-97-5	Bromochloromethane	ND	0.00617	mg/kg
75-27-4	Bromodichloromethane	ND	0.00617	mg/kg
75-25-2	Bromoform	ND	0.00617	mg/kg
74-83-9	Bromomethane	ND	0.00617	mg/kg
75-15-0	Carbon disulfide	ND	0.00617	mg/kg
56-23-5	Carbon tetrachloride	ND	0.00617	mg/kg
108-90-7	Chlorobenzene	ND	0.00617	mg/kg
75-00-3	Chloroethane	ND	0.00617	mg/kg
67-66-3	Chloroform	ND	0.00617	mg/kg
74-87-3	Chloromethane	ND	0.00617	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	0.00617	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.00617	mg/kg
124-48-1	Dibromochloromethane	ND	0.00617	mg/kg
74-95-3	Dibromomethane	ND	0.00617	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.00617	mg/kg
100-41-4	Ethylbenzene	ND	0.00617	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.00617	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.00617	mg/kg
136777-61-2	m,p-Xylene	ND	0.012	mg/kg
74-88-4	Methyl iodide	ND	0.00617	mg/kg
75-09-2	Methylene chloride	ND	0.012	mg/kg
91-20-3	Naphthalene	ND	0.00617	mg/kg
104-51-8	n-Butylbenzene	ND	0.00617	mg/kg
103-65-1	n-Propylbenzene	ND	0.00617	mg/kg

Sample Results

AST-WEST WALL

Collect Date 10/19/2015 17:03 **GCAL ID** 21510210502
Receive Date 10/21/2015 10:11 **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	1	10/21/2015 23:10	CJR	570729

CAS#	Parameter	Result	LOQ	Units
95-47-6	o-Xylene	ND	0.00617	mg/kg
135-98-8	sec-Butylbenzene	ND	0.00617	mg/kg
100-42-5	Styrene	ND	0.00617	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.00617	mg/kg
98-06-6	tert-Butylbenzene	ND	0.00617	mg/kg
127-18-4	**Tetrachloroethene**	**0.031**	**0.00617**	**mg/kg**
108-88-3	Toluene	ND	0.00617	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.00617	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.00617	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.00617	mg/kg
79-01-6	Trichloroethene	ND	0.00617	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.00617	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.00617	mg/kg
75-01-4	Vinyl chloride	ND	0.00617	mg/kg
1330-20-7	Xylene (total)	ND	0.019	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	0.0430	.038	ug/Kg	90	62 - 127
1868-53-7	Dibromofluoromethane	0.0430	.04	ug/Kg	95	65 - 130
2037-26-5	Toluene d8	0.0430	.042	ug/Kg	98	71 - 132
17060-07-0	1,2-Dichloroethane-d4	0.0430	.048	ug/Kg	113	62 - 125

AST-SOUTH WALL

Collect Date 10/19/2015 17:06 **GCAL ID** 21510210503
Receive Date 10/21/2015 10:11 **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	1	10/21/2015 23:30	CJR	570729

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.00566	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.00566	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00566	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.00566	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.00566	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.00566	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.00566	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.00566	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.00566	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.00566	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.00566	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.00566	mg/kg

Sample Results

AST-SOUTH WALL	**Collect Date**	10/19/2015 17:06	**GCAL ID**	21510210503
	Receive Date	10/21/2015 10:11	**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	1	10/21/2015 23:30	CJR	570729

CAS#	Parameter	Result	LOQ	Units
95-50-1	1,2-Dichlorobenzene	ND	0.00566	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.00566	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.011	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.00566	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.00566	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.00566	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.00566	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.00566	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.00566	mg/kg
78-93-3	2-Butanone	ND	0.00566	mg/kg
95-49-8	2-Chlorotoluene	ND	0.00566	mg/kg
591-78-6	2-Hexanone	ND	0.00566	mg/kg
106-43-4	4-Chlorotoluene	ND	0.00566	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.00566	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.00566	mg/kg
67-64-1	Acetone	ND	0.028	mg/kg
71-43-2	Benzene	ND	0.00566	mg/kg
108-86-1	Bromobenzene	ND	0.00566	mg/kg
74-97-5	Bromochloromethane	ND	0.00566	mg/kg
75-27-4	Bromodichloromethane	ND	0.00566	mg/kg
75-25-2	Bromoform	ND	0.00566	mg/kg
74-83-9	Bromomethane	ND	0.00566	mg/kg
75-15-0	Carbon disulfide	ND	0.00566	mg/kg
56-23-5	Carbon tetrachloride	ND	0.00566	mg/kg
108-90-7	Chlorobenzene	ND	0.00566	mg/kg
75-00-3	Chloroethane	ND	0.00566	mg/kg
67-66-3	Chloroform	ND	0.00566	mg/kg
74-87-3	Chloromethane	ND	0.00566	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	0.00566	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.00566	mg/kg
124-48-1	Dibromochloromethane	ND	0.00566	mg/kg
74-95-3	Dibromomethane	ND	0.00566	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.00566	mg/kg
100-41-4	Ethylbenzene	ND	0.00566	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.00566	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.00566	mg/kg
136777-61-2	m,p-Xylene	ND	0.011	mg/kg
74-88-4	Methyl iodide	ND	0.00566	mg/kg
75-09-2	Methylene chloride	ND	0.011	mg/kg
91-20-3	Naphthalene	ND	0.00566	mg/kg
104-51-8	n-Butylbenzene	ND	0.00566	mg/kg
103-65-1	n-Propylbenzene	ND	0.00566	mg/kg
95-47-6	o-Xylene	ND	0.00566	mg/kg
135-98-8	sec-Butylbenzene	ND	0.00566	mg/kg
100-42-5	Styrene	ND	0.00566	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.00566	mg/kg
98-06-6	tert-Butylbenzene	ND	0.00566	mg/kg
127-18-4	**Tetrachloroethene**	**0.00616**	**0.00566**	**mg/kg**

Sample Results

AST-SOUTH WALL

Collect Date 10/19/2015 17:06 **GCAL ID** 21510210503
Receive Date 10/21/2015 10:11 **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	1	10/21/2015 23:30	CJR	570729

CAS#	Parameter	Result	LOQ	Units
108-88-3	Toluene	ND	0.00566	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.00566	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.00566	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.00566	mg/kg
79-01-6	Trichloroethene	ND	0.00566	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.00566	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.00566	mg/kg
75-01-4	Vinyl chloride	ND	0.00566	mg/kg
1330-20-7	Xylene (total)	ND	0.017	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	0.0430	.037	ug/Kg	87	62 - 127
1868-53-7	Dibromofluoromethane	0.0430	.042	ug/Kg	98	65 - 130
2037-26-5	Toluene d8	0.0430	.042	ug/Kg	98	71 - 132
17060-07-0	1,2-Dichloroethane-d4	0.0430	.049	ug/Kg	113	62 - 125

AST-NORTH WALL

Collect Date 10/19/2015 17:09 **GCAL ID** 21510210504
Receive Date 10/21/2015 10:11 **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	1	10/21/2015 23:51	CJR	570729

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.00582	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.00582	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00582	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.00582	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.00582	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.00582	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.00582	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.00582	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.00582	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.00582	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.00582	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.00582	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.00582	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.00582	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.012	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.00582	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.00582	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.00582	mg/kg

Sample Results

AST-NORTH WALL	**Collect Date**	10/19/2015 17:09	**GCAL ID**	21510210504
	Receive Date	10/21/2015 10:11	**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	1	10/21/2015 23:51	CJR	570729

CAS#	Parameter	Result	LOQ	Units
142-28-9	1,3-Dichloropropane	ND	0.00582	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.00582	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.00582	mg/kg
78-93-3	2-Butanone	ND	0.00582	mg/kg
95-49-8	2-Chlorotoluene	ND	0.00582	mg/kg
591-78-6	2-Hexanone	ND	0.00582	mg/kg
106-43-4	4-Chlorotoluene	ND	0.00582	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.00582	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.00582	mg/kg
67-64-1	Acetone	ND	0.029	mg/kg
71-43-2	Benzene	ND	0.00582	mg/kg
108-86-1	Bromobenzene	ND	0.00582	mg/kg
74-97-5	Bromochloromethane	ND	0.00582	mg/kg
75-27-4	Bromodichloromethane	ND	0.00582	mg/kg
75-25-2	Bromoform	ND	0.00582	mg/kg
74-83-9	Bromomethane	ND	0.00582	mg/kg
75-15-0	Carbon disulfide	ND	0.00582	mg/kg
56-23-5	Carbon tetrachloride	ND	0.00582	mg/kg
108-90-7	Chlorobenzene	ND	0.00582	mg/kg
75-00-3	Chloroethane	ND	0.00582	mg/kg
67-66-3	Chloroform	ND	0.00582	mg/kg
74-87-3	Chloromethane	ND	0.00582	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	0.00582	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.00582	mg/kg
124-48-1	Dibromochloromethane	ND	0.00582	mg/kg
74-95-3	Dibromomethane	ND	0.00582	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.00582	mg/kg
100-41-4	Ethylbenzene	ND	0.00582	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.00582	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.00582	mg/kg
136777-61-2	m,p-Xylene	ND	0.012	mg/kg
74-88-4	Methyl iodide	ND	0.00582	mg/kg
75-09-2	Methylene chloride	ND	0.012	mg/kg
91-20-3	Naphthalene	ND	0.00582	mg/kg
104-51-8	n-Butylbenzene	ND	0.00582	mg/kg
103-65-1	n-Propylbenzene	ND	0.00582	mg/kg
95-47-6	o-Xylene	ND	0.00582	mg/kg
135-98-8	sec-Butylbenzene	ND	0.00582	mg/kg
100-42-5	Styrene	ND	0.00582	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.00582	mg/kg
98-06-6	tert-Butylbenzene	ND	0.00582	mg/kg
127-18-4	Tetrachloroethene	ND	0.00582	mg/kg
108-88-3	Toluene	ND	0.00582	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.00582	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.00582	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.00582	mg/kg
79-01-6	Trichloroethene	ND	0.00582	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.00582	mg/kg

Sample Results

AST-NORTH WALL

Collect Date 10/19/2015 17:09 **GCAL ID** 21510210504
Receive Date 10/21/2015 10:11 **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	1	10/21/2015 23:51	CJR	570729

CAS#	Parameter	Result	LOQ	Units
76-13-1	Trichlorotrifluoroethane	ND	0.00582	mg/kg
75-01-4	Vinyl chloride	ND	0.00582	mg/kg
1330-20-7	Xylene (total)	ND	0.017	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	0.0470	.042	ug/Kg	91	62 - 127
1868-53-7	Dibromofluoromethane	0.0470	.044	ug/Kg	94	65 - 130
2037-26-5	Toluene d8	0.0470	.046	ug/Kg	99	71 - 132
17060-07-0	1,2-Dichloroethane-d4	0.0470	.053	ug/Kg	113	62 - 125

AST-EAST WALL

Collect Date 10/19/2015 17:12 **GCAL ID** 21510210505
Receive Date 10/21/2015 10:11 **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	1	10/22/2015 00:11	CJR	570729

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.00555	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.00555	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00555	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.00555	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.00555	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.00555	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.00555	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.00555	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.00555	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.00555	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.00555	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.00555	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.00555	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.00555	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.011	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.00555	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.00555	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.00555	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.00555	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.00555	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.00555	mg/kg
78-93-3	2-Butanone	ND	0.00555	mg/kg
95-49-8	2-Chlorotoluene	ND	0.00555	mg/kg
591-78-6	2-Hexanone	ND	0.00555	mg/kg

Sample Results

AST-EAST WALL	**Collect Date**	10/19/2015 17:12	**GCAL ID**	21510210505
	Receive Date	10/21/2015 10:11	**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	1	10/22/2015 00:11	CJR	570729

CAS#	Parameter	Result	LOQ	Units
106-43-4	4-Chlorotoluene	ND	0.00555	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.00555	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.00555	mg/kg
67-64-1	Acetone	ND	0.028	mg/kg
71-43-2	Benzene	ND	0.00555	mg/kg
108-86-1	Bromobenzene	ND	0.00555	mg/kg
74-97-5	Bromochloromethane	ND	0.00555	mg/kg
75-27-4	Bromodichloromethane	ND	0.00555	mg/kg
75-25-2	Bromoform	ND	0.00555	mg/kg
74-83-9	Bromomethane	ND	0.00555	mg/kg
75-15-0	Carbon disulfide	ND	0.00555	mg/kg
56-23-5	Carbon tetrachloride	ND	0.00555	mg/kg
108-90-7	Chlorobenzene	ND	0.00555	mg/kg
75-00-3	Chloroethane	ND	0.00555	mg/kg
67-66-3	Chloroform	ND	0.00555	mg/kg
74-87-3	Chloromethane	ND	0.00555	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	0.00555	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.00555	mg/kg
124-48-1	Dibromochloromethane	ND	0.00555	mg/kg
74-95-3	Dibromomethane	ND	0.00555	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.00555	mg/kg
100-41-4	Ethylbenzene	ND	0.00555	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.00555	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.00555	mg/kg
136777-61-2	m,p-Xylene	ND	0.011	mg/kg
74-88-4	Methyl iodide	ND	0.00555	mg/kg
75-09-2	Methylene chloride	ND	0.011	mg/kg
91-20-3	Naphthalene	ND	0.00555	mg/kg
104-51-8	n-Butylbenzene	ND	0.00555	mg/kg
103-65-1	n-Propylbenzene	ND	0.00555	mg/kg
95-47-6	o-Xylene	ND	0.00555	mg/kg
135-98-8	sec-Butylbenzene	ND	0.00555	mg/kg
100-42-5	Styrene	ND	0.00555	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.00555	mg/kg
98-06-6	tert-Butylbenzene	ND	0.00555	mg/kg
127-18-4	Tetrachloroethene	ND	0.00555	mg/kg
108-88-3	Toluene	ND	0.00555	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.00555	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.00555	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.00555	mg/kg
79-01-6	Trichloroethene	ND	0.00555	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.00555	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.00555	mg/kg
75-01-4	Vinyl chloride	ND	0.00555	mg/kg

Sample Results

AST-EAST WALL

Collect Date 10/19/2015 17:12 **GCAL ID** 21510210505
Receive Date 10/21/2015 10:11 **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	1	10/22/2015 00:11	CJR	570729

CAS#	Parameter	Result	LOQ	Units
1330-20-7	Xylene (total)	ND	0.017	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	0.0440	.038	ug/Kg	88	62 - 127
1868-53-7	Dibromofluoromethane	0.0440	.042	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	0.0440	.044	ug/Kg	101	71 - 132
17060-07-0	1,2-Dichloroethane-d4	0.0440	.048	ug/Kg	111	62 - 125

OT-3 FLOOR

Collect Date 10/20/2015 10:13 **GCAL ID** 21510210506
Receive Date 10/21/2015 10:11 **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	10/22/2015 17:28	JCK	570783

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.228	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.228	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.228	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.228	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.228	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.228	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.228	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.228	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.228	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.228	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.228	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.228	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.228	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.228	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.456	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.228	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.228	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.228	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.228	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.228	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.228	mg/kg
78-93-3	2-Butanone	ND	0.228	mg/kg
95-49-8	2-Chlorotoluene	ND	0.228	mg/kg
591-78-6	2-Hexanone	ND	0.228	mg/kg
106-43-4	4-Chlorotoluene	ND	0.228	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.228	mg/kg

Sample Results

OT-3 FLOOR

Collect Date	10/20/2015 10:13	**GCAL ID**	21510210506
Receive Date	10/21/2015 10:11	**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	10/22/2015 17:28	JCK	570783

CAS#	Parameter	Result	LOQ	Units
108-10-1	4-Methyl-2-pentanone	ND	0.228	mg/kg
67-64-1	Acetone	ND	1.14	mg/kg
71-43-2	Benzene	ND	0.228	mg/kg
108-86-1	Bromobenzene	ND	0.228	mg/kg
74-97-5	Bromochloromethane	ND	0.228	mg/kg
75-27-4	Bromodichloromethane	ND	0.228	mg/kg
75-25-2	Bromoform	ND	0.228	mg/kg
74-83-9	Bromomethane	ND	0.228	mg/kg
75-15-0	Carbon disulfide	ND	0.228	mg/kg
56-23-5	Carbon tetrachloride	ND	0.228	mg/kg
108-90-7	Chlorobenzene	ND	0.228	mg/kg
75-00-3	Chloroethane	ND	0.228	mg/kg
67-66-3	Chloroform	ND	0.228	mg/kg
74-87-3	Chloromethane	ND	0.228	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	0.228	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.228	mg/kg
124-48-1	Dibromochloromethane	ND	0.228	mg/kg
74-95-3	Dibromomethane	ND	0.228	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.228	mg/kg
100-41-4	Ethylbenzene	ND	0.228	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.228	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.228	mg/kg
136777-61-2	m,p-Xylene	ND	0.456	mg/kg
74-88-4	Methyl iodide	ND	0.228	mg/kg
75-09-2	Methylene chloride	ND	0.456	mg/kg
91-20-3	Naphthalene	ND	0.228	mg/kg
104-51-8	n-Butylbenzene	ND	0.228	mg/kg
103-65-1	n-Propylbenzene	ND	0.228	mg/kg
95-47-6	o-Xylene	ND	0.228	mg/kg
135-98-8	sec-Butylbenzene	ND	0.228	mg/kg
100-42-5	Styrene	ND	0.228	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.228	mg/kg
98-06-6	tert-Butylbenzene	ND	0.228	mg/kg
127-18-4	**Tetrachloroethene**	**0.273**	**0.228**	**mg/kg**
108-88-3	Toluene	ND	0.228	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.228	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.228	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.228	mg/kg
79-01-6	Trichloroethene	ND	0.228	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.228	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.228	mg/kg
75-01-4	Vinyl chloride	ND	0.228	mg/kg

Sample Results

OT-3 FLOOR

Collect Date 10/20/2015 10:13 **GCAL ID** 21510210506
Receive Date 10/21/2015 10:11 **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	10/22/2015 17:28	JCK	570783

CAS#	Parameter	Result	LOQ	Units
1330-20-7	Xylene (total)	ND	0.684	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1.92	2.11	ug/Kg	110	62 - 127
1868-53-7	Dibromofluoromethane	1.92	2.09	ug/Kg	109	65 - 130
2037-26-5	Toluene d8	1.92	1.81	ug/Kg	94	71 - 132
17060-07-0	1,2-Dichloroethane-d4	1.92	2.1	ug/Kg	109	62 - 125

OT-3 NORTH WALL

Collect Date 10/20/2015 10:16 **GCAL ID** 21510210507
Receive Date 10/21/2015 10:11 **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	10/22/2015 17:48	JCK	570783

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.263	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.263	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.263	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.263	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.263	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.263	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.263	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.263	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.263	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.263	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.263	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.263	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.263	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.263	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.527	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.263	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.263	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.263	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.263	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.263	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.263	mg/kg
78-93-3	2-Butanone	ND	0.263	mg/kg
95-49-8	2-Chlorotoluene	ND	0.263	mg/kg
591-78-6	2-Hexanone	ND	0.263	mg/kg
106-43-4	4-Chlorotoluene	ND	0.263	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.263	mg/kg

Sample Results

OT-3 NORTH WALL

Collect Date	10/20/2015 10:16	**GCAL ID**	21510210507
Receive Date	10/21/2015 10:11	**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	10/22/2015 17:48	JCK	570783

CAS#	Parameter	Result	LOQ	Units
108-10-1	4-Methyl-2-pentanone	ND	0.263	mg/kg
67-64-1	Acetone	ND	1.32	mg/kg
71-43-2	Benzene	ND	0.263	mg/kg
108-86-1	Bromobenzene	ND	0.263	mg/kg
74-97-5	Bromochloromethane	ND	0.263	mg/kg
75-27-4	Bromodichloromethane	ND	0.263	mg/kg
75-25-2	Bromoform	ND	0.263	mg/kg
74-83-9	Bromomethane	ND	0.263	mg/kg
75-15-0	Carbon disulfide	ND	0.263	mg/kg
56-23-5	Carbon tetrachloride	ND	0.263	mg/kg
108-90-7	Chlorobenzene	ND	0.263	mg/kg
75-00-3	Chloroethane	ND	0.263	mg/kg
67-66-3	Chloroform	ND	0.263	mg/kg
74-87-3	Chloromethane	ND	0.263	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	0.263	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.263	mg/kg
124-48-1	Dibromochloromethane	ND	0.263	mg/kg
74-95-3	Dibromomethane	ND	0.263	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.263	mg/kg
100-41-4	Ethylbenzene	ND	0.263	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.263	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.263	mg/kg
136777-61-2	m,p-Xylene	ND	0.527	mg/kg
74-88-4	Methyl iodide	ND	0.263	mg/kg
75-09-2	Methylene chloride	ND	0.527	mg/kg
91-20-3	Naphthalene	ND	0.263	mg/kg
104-51-8	n-Butylbenzene	ND	0.263	mg/kg
103-65-1	n-Propylbenzene	ND	0.263	mg/kg
95-47-6	o-Xylene	ND	0.263	mg/kg
135-98-8	sec-Butylbenzene	ND	0.263	mg/kg
100-42-5	Styrene	ND	0.263	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.263	mg/kg
98-06-6	tert-Butylbenzene	ND	0.263	mg/kg
127-18-4	**Tetrachloroethene**	**5.52**	**0.263**	**mg/kg**
108-88-3	Toluene	ND	0.263	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.263	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.263	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.263	mg/kg
79-01-6	Trichloroethene	ND	0.263	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.263	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.263	mg/kg
75-01-4	Vinyl chloride	ND	0.263	mg/kg

Sample Results

OT-3 NORTH WALL

Collect Date 10/20/2015 10:16 **GCAL ID** 21510210507
Receive Date 10/21/2015 10:11 **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	10/22/2015 17:48	JCK	570783

CAS#	Parameter	Result	LOQ	Units
1330-20-7	Xylene (total)	ND	0.790	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2.23	2.46	ug/Kg	110	62 - 127
1868-53-7	Dibromofluoromethane	2.23	2.34	ug/Kg	105	65 - 130
2037-26-5	Toluene d8	2.23	2.07	ug/Kg	93	71 - 132
17060-07-0	1,2-Dichloroethane-d4	2.23	2.44	ug/Kg	109	62 - 125

OT-3 WEST WALL

Collect Date 10/20/2015 10:19 **GCAL ID** 21510210508
Receive Date 10/21/2015 10:11 **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	1	10/22/2015 14:53	CLH	570766

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.00441	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.00441	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00441	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.00441	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.00441	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.00441	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.00441	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.00441	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.00441	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.00441	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.00441	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.00441	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.00441	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.00441	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.00882	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.00441	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.00441	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.00441	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.00441	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.00441	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.00441	mg/kg
78-93-3	2-Butanone	ND	0.00441	mg/kg
95-49-8	2-Chlorotoluene	ND	0.00441	mg/kg
591-78-6	2-Hexanone	ND	0.00441	mg/kg
106-43-4	4-Chlorotoluene	ND	0.00441	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.00441	mg/kg

Sample Results

OT-3 WEST WALL	**Collect Date**	10/20/2015 10:19	**GCAL ID**	21510210508
	Receive Date	10/21/2015 10:11	**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	1	10/22/2015 14:53	CLH	570766

CAS#	Parameter	Result	LOQ	Units
108-10-1	4-Methyl-2-pentanone	ND	0.00441	mg/kg
67-64-1	Acetone	ND	0.022	mg/kg
71-43-2	Benzene	ND	0.00441	mg/kg
108-86-1	Bromobenzene	ND	0.00441	mg/kg
74-97-5	Bromochloromethane	ND	0.00441	mg/kg
75-27-4	Bromodichloromethane	ND	0.00441	mg/kg
75-25-2	Bromoform	ND	0.00441	mg/kg
74-83-9	Bromomethane	ND	0.00441	mg/kg
75-15-0	Carbon disulfide	ND	0.00441	mg/kg
56-23-5	Carbon tetrachloride	ND	0.00441	mg/kg
108-90-7	Chlorobenzene	ND	0.00441	mg/kg
75-00-3	Chloroethane	ND	0.00441	mg/kg
67-66-3	Chloroform	ND	0.00441	mg/kg
74-87-3	Chloromethane	ND	0.00441	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	0.00441	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.00441	mg/kg
124-48-1	Dibromochloromethane	ND	0.00441	mg/kg
74-95-3	Dibromomethane	ND	0.00441	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.00441	mg/kg
100-41-4	Ethylbenzene	ND	0.00441	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.00441	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.00441	mg/kg
136777-61-2	m,p-Xylene	ND	0.00882	mg/kg
74-88-4	Methyl iodide	ND	0.00441	mg/kg
75-09-2	Methylene chloride	ND	0.00882	mg/kg
91-20-3	Naphthalene	ND	0.00441	mg/kg
104-51-8	n-Butylbenzene	ND	0.00441	mg/kg
103-65-1	n-Propylbenzene	ND	0.00441	mg/kg
95-47-6	o-Xylene	ND	0.00441	mg/kg
135-98-8	sec-Butylbenzene	ND	0.00441	mg/kg
100-42-5	Styrene	ND	0.00441	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.00441	mg/kg
98-06-6	tert-Butylbenzene	ND	0.00441	mg/kg
127-18-4	Tetrachloroethene	ND	0.00441	mg/kg
108-88-3	Toluene	ND	0.00441	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.00441	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.00441	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.00441	mg/kg
79-01-6	Trichloroethene	ND	0.00441	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.00441	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.00441	mg/kg
75-01-4	Vinyl chloride	ND	0.00441	mg/kg

Sample Results

OT-3 WEST WALL

Collect Date 10/20/2015 10:19 **GCAL ID** 21510210508
Receive Date 10/21/2015 10:11 **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	1	10/22/2015 14:53	CLH	570766

CAS#	Parameter	Result	LOQ	Units
1330-20-7	Xylene (total)	ND	0.013	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	0.0380	.035	ug/Kg	94	62 - 127
1868-53-7	Dibromofluoromethane	0.0380	.036	ug/Kg	96	65 - 130
2037-26-5	Toluene d8	0.0380	.038	ug/Kg	101	71 - 132
17060-07-0	1,2-Dichloroethane-d4	0.0380	.044	ug/Kg	117	62 - 125

OT-3 SOUTH WALL

Collect Date 10/20/2015 10:22 **GCAL ID** 21510210509
Receive Date 10/21/2015 10:11 **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	10/22/2015 18:08	JCK	570783

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.290	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.290	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.290	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.290	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.290	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.290	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.290	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.290	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.290	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.290	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.290	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.290	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.290	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.290	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.581	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.290	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.290	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.290	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.290	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.290	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.290	mg/kg
78-93-3	2-Butanone	ND	0.290	mg/kg
95-49-8	2-Chlorotoluene	ND	0.290	mg/kg
591-78-6	2-Hexanone	ND	0.290	mg/kg
106-43-4	4-Chlorotoluene	ND	0.290	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.290	mg/kg

Sample Results

OT-3 SOUTH WALL

Collect Date	10/20/2015 10:22	**GCAL ID**	21510210509
Receive Date	10/21/2015 10:11	**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	10/22/2015 18:08	JCK	570783

CAS#	Parameter	Result	LOQ	Units
108-10-1	4-Methyl-2-pentanone	ND	0.290	mg/kg
67-64-1	Acetone	ND	1.45	mg/kg
71-43-2	Benzene	ND	0.290	mg/kg
108-86-1	Bromobenzene	ND	0.290	mg/kg
74-97-5	Bromochloromethane	ND	0.290	mg/kg
75-27-4	Bromodichloromethane	ND	0.290	mg/kg
75-25-2	Bromoform	ND	0.290	mg/kg
74-83-9	Bromomethane	ND	0.290	mg/kg
75-15-0	Carbon disulfide	ND	0.290	mg/kg
56-23-5	Carbon tetrachloride	ND	0.290	mg/kg
108-90-7	Chlorobenzene	ND	0.290	mg/kg
75-00-3	Chloroethane	ND	0.290	mg/kg
67-66-3	Chloroform	ND	0.290	mg/kg
74-87-3	Chloromethane	ND	0.290	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	0.290	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.290	mg/kg
124-48-1	Dibromochloromethane	ND	0.290	mg/kg
74-95-3	Dibromomethane	ND	0.290	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.290	mg/kg
100-41-4	Ethylbenzene	ND	0.290	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.290	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.290	mg/kg
136777-61-2	m,p-Xylene	ND	0.581	mg/kg
74-88-4	Methyl iodide	ND	0.290	mg/kg
75-09-2	Methylene chloride	ND	0.581	mg/kg
91-20-3	Naphthalene	ND	0.290	mg/kg
104-51-8	n-Butylbenzene	ND	0.290	mg/kg
103-65-1	n-Propylbenzene	ND	0.290	mg/kg
95-47-6	o-Xylene	ND	0.290	mg/kg
135-98-8	sec-Butylbenzene	ND	0.290	mg/kg
100-42-5	Styrene	ND	0.290	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.290	mg/kg
98-06-6	tert-Butylbenzene	ND	0.290	mg/kg
127-18-4	**Tetrachloroethene**	**0.672**	**0.290**	**mg/kg**
108-88-3	Toluene	ND	0.290	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.290	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.290	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.290	mg/kg
79-01-6	Trichloroethene	ND	0.290	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.290	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.290	mg/kg
75-01-4	Vinyl chloride	ND	0.290	mg/kg

Sample Results

OT-3 SOUTH WALL

Collect Date 10/20/2015 10:22 **GCAL ID** 21510210509
Receive Date 10/21/2015 10:11 **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	10/22/2015 18:08	JCK	570783

CAS#	Parameter	Result	LOQ	Units
1330-20-7	Xylene (total)	ND	0.871	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2.34	2.54	ug/Kg	109	62 - 127
1868-53-7	Dibromofluoromethane	2.34	2.44	ug/Kg	104	65 - 130
2037-26-5	Toluene d8	2.34	2.18	ug/Kg	93	71 - 132
17060-07-0	1,2-Dichloroethane-d4	2.34	2.46	ug/Kg	105	62 - 125

OT-3 EAST WALL

Collect Date 10/20/2015 10:25 **GCAL ID** 21510210510
Receive Date 10/21/2015 10:11 **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	1	10/22/2015 00:32	CJR	570729

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.00557	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.00557	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00557	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.00557	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.00557	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.00557	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.00557	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.00557	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.00557	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.00557	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.00557	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.00557	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.00557	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.00557	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**0.055**	**0.011**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.00557	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.00557	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.00557	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.00557	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.00557	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.00557	mg/kg
78-93-3	2-Butanone	ND	0.00557	mg/kg
95-49-8	2-Chlorotoluene	ND	0.00557	mg/kg
591-78-6	2-Hexanone	ND	0.00557	mg/kg
106-43-4	4-Chlorotoluene	ND	0.00557	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.00557	mg/kg

Sample Results

OT-3 EAST WALL

Collect Date	10/20/2015 10:25	**GCAL ID**	21510210510
Receive Date	10/21/2015 10:11	**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	1	10/22/2015 00:32	CJR	570729

CAS#	Parameter	Result	LOQ	Units
108-10-1	4-Methyl-2-pentanone	ND	0.00557	mg/kg
67-64-1	Acetone	ND	0.028	mg/kg
71-43-2	Benzene	ND	0.00557	mg/kg
108-86-1	Bromobenzene	ND	0.00557	mg/kg
74-97-5	Bromochloromethane	ND	0.00557	mg/kg
75-27-4	Bromodichloromethane	ND	0.00557	mg/kg
75-25-2	Bromoform	ND	0.00557	mg/kg
74-83-9	Bromomethane	ND	0.00557	mg/kg
75-15-0	Carbon disulfide	ND	0.00557	mg/kg
56-23-5	Carbon tetrachloride	ND	0.00557	mg/kg
108-90-7	Chlorobenzene	ND	0.00557	mg/kg
75-00-3	Chloroethane	ND	0.00557	mg/kg
67-66-3	Chloroform	ND	0.00557	mg/kg
74-87-3	Chloromethane	ND	0.00557	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**0.055**	**0.00557**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.00557	mg/kg
124-48-1	Dibromochloromethane	ND	0.00557	mg/kg
74-95-3	Dibromomethane	ND	0.00557	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.00557	mg/kg
100-41-4	Ethylbenzene	ND	0.00557	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.00557	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.00557	mg/kg
136777-61-2	m,p-Xylene	ND	0.011	mg/kg
74-88-4	Methyl iodide	ND	0.00557	mg/kg
75-09-2	Methylene chloride	ND	0.011	mg/kg
91-20-3	Naphthalene	ND	0.00557	mg/kg
104-51-8	n-Butylbenzene	ND	0.00557	mg/kg
103-65-1	n-Propylbenzene	ND	0.00557	mg/kg
95-47-6	o-Xylene	ND	0.00557	mg/kg
135-98-8	sec-Butylbenzene	ND	0.00557	mg/kg
100-42-5	Styrene	ND	0.00557	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.00557	mg/kg
98-06-6	tert-Butylbenzene	ND	0.00557	mg/kg
127-18-4	**Tetrachloroethene**	**0.109**	**0.00557**	**mg/kg**
108-88-3	Toluene	ND	0.00557	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.00557	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.00557	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.00557	mg/kg
79-01-6	**Trichloroethene**	**0.010**	**0.00557**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.00557	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.00557	mg/kg
75-01-4	Vinyl chloride	ND	0.00557	mg/kg

Sample Results

OT-3 EAST WALL

Collect Date 10/20/2015 10:25 **GCAL ID** 21510210510
Receive Date 10/21/2015 10:11 **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	1	10/22/2015 00:32	CJR	570729

CAS#	Parameter	Result	LOQ	Units
1330-20-7	Xylene (total)	ND	0.017	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	0.0430	.04	ug/Kg	92	62 - 127
1868-53-7	Dibromofluoromethane	0.0430	.042	ug/Kg	98	65 - 130
2037-26-5	Toluene d8	0.0430	.042	ug/Kg	98	71 - 132
17060-07-0	1,2-Dichloroethane-d4	0.0430	.05	ug/Kg	115	62 - 125

TRIP BLANK

Collect Date 10/20/2015 00:01 **GCAL ID** 21510210511
Receive Date 10/21/2015 10:11 **Matrix** Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/21/2015 16:00	JCK	570694

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

Sample Results

TRIP BLANK

Collect Date	10/20/2015 00:01	**GCAL ID**	21510210511
Receive Date	10/21/2015 10:11	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/21/2015 16:00	JCK	570694

CAS#	Parameter	Result	LOQ	Units
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
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	5.00	ug/L

Sample Results

TRIP BLANK

Collect Date	10/20/2015 00:01	**GCAL ID**	21510210511
Receive Date	10/21/2015 10:11	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/21/2015 16:00	JCK	570694

CAS#	Parameter	Result	LOQ	Units
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	54.6	ug/L	109	78 - 130
1868-53-7	Dibromofluoromethane	50	49.3	ug/L	99	77 - 127
2037-26-5	Toluene d8	50	52.3	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	46.8	ug/L	94	71 - 127

GC/MS Volatiles QC Summary

Analytical Batch 570729	Client ID	MB570729		LCS570729				LCSD570729				
	GCAL ID	1501428		1501429				1501430				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/21/2015 18:24		10/21/2015 17:02				10/21/2015 17:22				
	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	0.00500	0.050	0.050	100	77 - 122	0.050	0.048	97	4	30
1,1,1-Trichloroethane	71-55-6	ND	0.00500	0.050	0.057	113	70 - 130	0.050	0.055	110	4	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.00500	0.050	0.056	112	66 - 129	0.050	0.055	109	2	30
1,1,2-Trichloroethane	79-00-5	ND	0.00500	0.050	0.051	102	74 - 120	0.050	0.050	100	2	30
1,1-Dichloroethane	75-34-3	ND	0.00500	0.050	0.056	112	71 - 126	0.050	0.053	106	6	30
1,1-Dichloroethene	75-35-4	ND	0.00500	0.050	0.057	115	68 - 129	0.050	0.049	98	15	20
1,1-Dichloropropene	563-58-6	ND	0.00500	0.050	0.060	119	70 - 138	0.050	0.054	108	11	30
1,2,3-Trichloropropane	96-18-4	ND	0.00500	0.050	0.058	115	63 - 132	0.050	0.055	110	5	30
1,2,4-Trichlorobenzene	120-82-1	ND	0.00500	0.050	0.053	105	64 - 135	0.050	0.053	105	0	30
1,2,4-Trimethylbenzene	95-63-6	ND	0.00500	0.050	0.062	124	75 - 130	0.050	0.059	119	5	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.00500	0.050	0.046	92	60 - 123	0.050	0.048	96	4	30
1,2-Dibromoethane	106-93-4	ND	0.00500	0.050	0.051	101	74 - 122	0.050	0.050	100	2	30
1,2-Dichlorobenzene	95-50-1	ND	0.00500	0.050	0.054	109	76 - 125	0.050	0.054	109	0	30
1,2-Dichloroethane	107-06-2	ND	0.00500	0.050	0.051	101	68 - 126	0.050	0.049	99	4	30
1,2-Dichloroethene(Total)	540-59-0	ND	0.010	0.100	0.111	111	72 - 129	0.100	0.104	104	7	30
1,2-Dichloropropane	78-87-5	ND	0.00500	0.050	0.053	107	72 - 129	0.050	0.051	101	4	30
1,3,5-Trimethylbenzene	108-67-8	ND	0.00500	0.050	0.056	111	74 - 136	0.050	0.053	105	6	30
1,3-Dichlorobenzene	541-73-1	ND	0.00500	0.050	0.057	114	77 - 127	0.050	0.055	110	4	30
1,3-Dichloropropane	142-28-9	ND	0.00500	0.050	0.052	103	77 - 121	0.050	0.051	101	2	30
1,4-Dichlorobenzene	106-46-7	ND	0.00500	0.050	0.056	112	74 - 123	0.050	0.055	110	2	30
2,2-Dichloropropane	594-20-7	ND	0.00500	0.050	0.059	118	74 - 129	0.050	0.055	111	7	30
2-Butanone	78-93-3	ND	0.00500	0.050	0.045	90	47 - 142	0.050	0.046	91	2	30
2-Chlorotoluene	95-49-8	ND	0.00500	0.050	0.060	120	75 - 132	0.050	0.056	112	7	30
2-Hexanone	591-78-6	ND	0.00500	0.050	0.045	91	47 - 137	0.050	0.046	92	2	30
4-Chlorotoluene	106-43-4	ND	0.00500	0.050	0.061	123	74 - 133	0.050	0.058	116	5	30
4-Isopropyltoluene	99-87-6	ND	0.00500	0.050	0.056	113	71 - 136	0.050	0.054	108	4	30
4-Methyl-2-pentanone	108-10-1	ND	0.00500	0.050	0.047	94	52 - 136	0.050	0.046	92	2	30
Acetone	67-64-1	ND	0.025	0.050	0.046	92	38 - 152	0.050	0.047	93	2	30
Benzene	71-43-2	ND	0.00500	0.050	0.057	114	73 - 128	0.050	0.055	109	4	20
Bromobenzene	108-86-1	ND	0.00500	0.050	0.058	116	73 - 124	0.050	0.055	110	5	30
Bromochloromethane	74-97-5	ND	0.00500	0.050	0.048	96	73 - 127	0.050	0.046	92	4	30
Bromodichloromethane	75-27-4	ND	0.00500	0.050	0.052	103	74 - 126	0.050	0.049	98	6	30
Bromoform	75-25-2	ND	0.00500	0.050	0.046	92	67 - 122	0.050	0.048	95	4	30
Bromomethane	74-83-9	ND	0.00500	0.050	0.059	117	48 - 139	0.050	0.052	104	13	30
Carbon disulfide	75-15-0	ND	0.00500	0.050	0.058	116	68 - 133	0.050	0.042	84	32*	30
Carbon tetrachloride	56-23-5	ND	0.00500	0.050	0.055	109	71 - 133	0.050	0.051	103	8	30
Chlorobenzene	108-90-7	ND	0.00500	0.050	0.055	110	75 - 121	0.050	0.053	106	4	20
Chloroethane	75-00-3	ND	0.00500	0.050	0.055	110	57 - 144	0.050	0.053	105	4	30
Chloroform	67-66-3	ND	0.00500	0.050	0.053	106	74 - 124	0.050	0.051	103	4	30
Chloromethane	74-87-3	ND	0.00500	0.050	0.059	118	61 - 130	0.050	0.057	115	3	30
cis-1,2-Dichloroethene	156-59-2	ND	0.00500	0.050	0.054	108	72 - 130	0.050	0.051	102	6	30
cis-1,3-Dichloropropene	10061-01-5	ND	0.00500	0.050	0.052	103	72 - 129	0.050	0.051	102	2	30
Dibromochloromethane	124-48-1	ND	0.00500	0.050	0.046	92	74 - 122	0.050	0.045	90	2	30
Dibromomethane	74-95-3	ND	0.00500	0.050	0.048	95	72 - 125	0.050	0.047	94	2	30
Dichlorodifluoromethane	75-71-8	ND	0.00500	0.050	0.056	111	59 - 138	0.050	0.051	103	9	30
Ethylbenzene	100-41-4	ND	0.00500	0.050	0.056	113	74 - 130	0.050	0.054	107	4	30
Hexachlorobutadiene	87-68-3	ND	0.00500	0.050	0.051	102	71 - 140	0.050	0.051	101	0	30
Isopropylbenzene (Cumene)	98-82-8	ND	0.00500	0.050	0.053	106	74 - 125	0.050	0.052	104	2	30
m,p-Xylene	136777-61-2	ND	0.010	0.100	0.116	116	72 - 128	0.100	0.113	113	3	30
Methyl iodide	74-88-4	ND	0.00500	0.050	0.049	99	54 - 140	0.050	0.046	92	6	30
Methylene chloride	75-09-2	ND	0.010	0.050	0.048	97	66 - 130	0.050	0.047	94	2	30
Naphthalene	91-20-3	ND	0.00500	0.050	0.052	105	54 - 132	0.050	0.055	110	6	35
n-Butylbenzene	104-51-8	ND	0.00500	0.050	0.059	117	68 - 144	0.050	0.057	113	3	30
n-Propylbenzene	103-65-1	ND	0.00500	0.050	0.065	129	73 - 137	0.050	0.059	118	10	30
o-Xylene	95-47-6	ND	0.00500	0.050	0.053	106	69 - 133	0.050	0.052	104	2	30
sec-Butylbenzene	135-98-8	ND	0.00500	0.050	0.057	114	72 - 141	0.050	0.054	108	5	30
Styrene	100-42-5	ND	0.00500	0.050	0.056	111	72 - 128	0.050	0.056	113	0	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	0.00500	0.050	0.052	104	69 - 126	0.050	0.050	101	4	30

GC/MS Volatiles QC Summary

Analytical Batch 570729	Client ID	MB570729		LCS570729				LCSD570729				
	GCAL ID	1501428		1501429				1501430				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/21/2015 18:24		10/21/2015 17:02				10/21/2015 17:22				
	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	0.00500	0.050	0.061	122	72 - 136	0.050	0.058	116	5	30
Tetrachloroethene	127-18-4	ND	0.00500	0.050	0.054	107	70 - 127	0.050	0.050	100	8	30
Toluene	108-88-3	ND	0.00500	0.050	0.058	116	74 - 121	0.050	0.054	107	7	20
trans-1,2-Dichloroethene	156-60-5	ND	0.00500	0.050	0.057	114	67 - 134	0.050	0.053	106	7	30
trans-1,3-Dichloropropene	10061-02-6	ND	0.00500	0.050	0.050	99	72 - 126	0.050	0.049	99	2	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.00500	0.050	0.059	119	44 - 146	0.050	0.056	112	5	30
Trichloroethene	79-01-6	ND	0.00500	0.050	0.052	104	78 - 127	0.050	0.050	99	4	20
Trichlorofluoromethane	75-69-4	ND	0.00500	0.050	0.059	119	64 - 141	0.050	0.055	111	7	30
Trichlorotrifluoroethane	76-13-1	ND	0.00500	0.050	0.059	117	66 - 139	0.050	0.044	89	29	30
Vinyl chloride	75-01-4	ND	0.00500	0.050	0.059	118	67 - 131	0.050	0.057	114	3	30
Xylene (total)	1330-20-7	ND	0.015	0.150	0.169	113	71 - 129	0.150	0.164	109	3	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	.0521	104	.05	.0512	102	62 - 125	.05	.0519	104	1	NA
4-Bromofluorobenzene	460-00-4	.0443	89	.05	.0463	93	62 - 127	.05	.0495	99	7	NA
Dibromofluoromethane	1868-53-7	.0475	95	.05	.0481	96	65 - 130	.05	.0486	97	1	NA
Toluene d8	2037-26-5	.0516	103	.05	.0504	101	71 - 132	.05	.049	98	3	NA

Analytical Batch 570766	Client ID	MB570766		LCS570766				LCSD570766				
	GCAL ID	1501535		1501536				1501537				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/22/2015 14:33		10/22/2015 09:21				10/22/2015 09:41				
	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	0.00500	0.050	0.044	88	77 - 122	0.050	0.049	98	11	30
1,1,1-Trichloroethane	71-55-6	ND	0.00500	0.050	0.049	98	70 - 130	0.050	0.054	108	10	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.00500	0.050	0.056	112	66 - 129	0.050	0.061	122	9	30
1,1,2-Trichloroethane	79-00-5	ND	0.00500	0.050	0.048	96	74 - 120	0.050	0.052	105	8	30
1,1-Dichloroethane	75-34-3	ND	0.00500	0.050	0.050	100	71 - 126	0.050	0.055	109	10	30
1,1-Dichloroethene	75-35-4	ND	0.00500	0.050	0.052	104	68 - 129	0.050	0.056	111	7	20
1,1-Dichloropropene	563-58-6	ND	0.00500	0.050	0.052	104	70 - 138	0.050	0.056	112	7	30
1,2,3-Trichloropropane	96-18-4	ND	0.00500	0.050	0.055	111	63 - 132	0.050	0.061	122	10	30
1,2,4-Trichlorobenzene	120-82-1	ND	0.00500	0.050	0.048	96	64 - 135	0.050	0.052	105	8	30
1,2,4-Trimethylbenzene	95-63-6	ND	0.00500	0.050	0.056	112	75 - 130	0.050	0.061	122	9	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.00500	0.050	0.045	90	60 - 123	0.050	0.051	102	13	30
1,2-Dibromoethane	106-93-4	ND	0.00500	0.050	0.047	93	74 - 122	0.050	0.051	102	8	30
1,2-Dichlorobenzene	95-50-1	ND	0.00500	0.050	0.051	102	76 - 125	0.050	0.055	110	8	30
1,2-Dichloroethane	107-06-2	ND	0.00500	0.050	0.046	93	68 - 126	0.050	0.053	105	14	30
1,2-Dichloroethene(Total)	540-59-0	ND	0.010	0.100	0.101	101	72 - 129	0.100	0.107	107	6	30
1,2-Dichloropropane	78-87-5	ND	0.00500	0.050	0.048	95	72 - 129	0.050	0.053	105	10	30
1,3,5-Trimethylbenzene	108-67-8	ND	0.00500	0.050	0.049	99	74 - 136	0.050	0.053	106	8	30
1,3-Dichlorobenzene	541-73-1	ND	0.00500	0.050	0.051	102	77 - 127	0.050	0.055	111	8	30
1,3-Dichloropropane	142-28-9	ND	0.00500	0.050	0.049	97	77 - 121	0.050	0.052	104	6	30
1,4-Dichlorobenzene	106-46-7	ND	0.00500	0.050	0.051	103	74 - 123	0.050	0.055	110	8	30
2,2-Dichloropropane	594-20-7	ND	0.00500	0.050	0.051	102	74 - 129	0.050	0.054	108	6	30
2-Butanone	78-93-3	ND	0.00500	0.050	0.048	95	47 - 142	0.050	0.053	105	10	30
2-Chlorotoluene	95-49-8	ND	0.00500	0.050	0.054	109	75 - 132	0.050	0.058	116	7	30
2-Hexanone	591-78-6	ND	0.00500	0.050	0.046	92	47 - 137	0.050	0.049	97	6	30
4-Chlorotoluene	106-43-4	ND	0.00500	0.050	0.055	109	74 - 133	0.050	0.060	120	9	30
4-Isopropyltoluene	99-87-6	ND	0.00500	0.050	0.051	101	71 - 136	0.050	0.054	109	6	30
4-Methyl-2-pentanone	108-10-1	ND	0.00500	0.050	0.045	91	52 - 136	0.050	0.050	101	11	30
Acetone	67-64-1	ND	0.025	0.050	0.051	101	38 - 152	0.050	0.057	115	11	30
Benzene	71-43-2	ND	0.00500	0.050	0.050	101	73 - 128	0.050	0.055	110	10	20
Bromobenzene	108-86-1	ND	0.00500	0.050	0.054	108	73 - 124	0.050	0.058	116	7	30
Bromochloromethane	74-97-5	ND	0.00500	0.050	0.041	82	73 - 127	0.050	0.048	95	16	30
Bromodichloromethane	75-27-4	ND	0.00500	0.050	0.044	88	74 - 126	0.050	0.051	101	15	30

GC/MS Volatiles QC Summary

Analytical Batch 570766	Client ID	MB570766		LCS570766				LCSD570766				
	GCAL ID	1501535		1501536				1501537				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/22/2015 14:33		10/22/2015 09:21				10/22/2015 09:41				
	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
Bromoform	75-25-2	ND	0.00500	0.050	0.042	84	67 - 122	0.050	0.048	95	13	30
Bromomethane	74-83-9	ND	0.00500	0.050	0.048	97	48 - 139	0.050	0.056	112	15	30
Carbon disulfide	75-15-0	ND	0.00500	0.050	0.051	103	68 - 133	0.050	0.056	111	9	30
Carbon tetrachloride	56-23-5	ND	0.00500	0.050	0.048	95	71 - 133	0.050	0.052	103	8	30
Chlorobenzene	108-90-7	ND	0.00500	0.050	0.049	98	75 - 121	0.050	0.052	104	6	20
Chloroethane	75-00-3	ND	0.00500	0.050	0.051	102	57 - 144	0.050	0.053	106	4	30
Chloroform	67-66-3	ND	0.00500	0.050	0.048	96	74 - 124	0.050	0.052	104	8	30
Chloromethane	74-87-3	ND	0.00500	0.050	0.052	104	61 - 130	0.050	0.057	113	9	30
cis-1,2-Dichloroethene	156-59-2	ND	0.00500	0.050	0.049	97	72 - 130	0.050	0.053	105	8	30
cis-1,3-Dichloropropene	10061-01-5	ND	0.00500	0.050	0.047	93	72 - 129	0.050	0.052	104	10	30
Dibromochloromethane	124-48-1	ND	0.00500	0.050	0.041	82	74 - 122	0.050	0.046	92	11	30
Dibromomethane	74-95-3	ND	0.00500	0.050	0.044	87	72 - 125	0.050	0.050	99	13	30
Dichlorodifluoromethane	75-71-8	ND	0.00500	0.050	0.051	102	59 - 138	0.050	0.052	103	2	30
Ethylbenzene	100-41-4	ND	0.00500	0.050	0.048	96	74 - 130	0.050	0.051	103	6	30
Hexachlorobutadiene	87-68-3	ND	0.00500	0.050	0.044	87	71 - 140	0.050	0.053	105	19	30
Isopropylbenzene (Cumene)	98-82-8	ND	0.00500	0.050	0.047	93	74 - 125	0.050	0.049	97	4	30
m,p-Xylene	136777-61-2	ND	0.010	0.100	0.100	100	72 - 128	0.100	0.107	107	7	30
Methyl iodide	74-88-4	ND	0.00500	0.050	0.040	80	54 - 140	0.050	0.048	96	18	30
Methylene chloride	75-09-2	ND	0.010	0.050	0.045	89	66 - 130	0.050	0.048	96	6	30
Naphthalene	91-20-3	ND	0.00500	0.050	0.052	105	54 - 132	0.050	0.057	115	9	35
n-Butylbenzene	104-51-8	ND	0.00500	0.050	0.052	105	68 - 144	0.050	0.056	112	7	30
n-Propylbenzene	103-65-1	ND	0.00500	0.050	0.058	115	73 - 137	0.050	0.062	124	7	30
o-Xylene	95-47-6	ND	0.00500	0.050	0.046	92	69 - 133	0.050	0.050	99	8	30
sec-Butylbenzene	135-98-8	ND	0.00500	0.050	0.051	102	72 - 141	0.050	0.054	108	6	30
Styrene	100-42-5	ND	0.00500	0.050	0.050	100	72 - 128	0.050	0.055	109	10	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	0.00500	0.050	0.048	97	69 - 126	0.050	0.054	107	12	30
tert-Butylbenzene	98-06-6	ND	0.00500	0.050	0.054	107	72 - 136	0.050	0.058	117	7	30
Tetrachloroethene	127-18-4	ND	0.00500	0.050	0.047	93	70 - 127	0.050	0.049	98	4	30
Toluene	108-88-3	ND	0.00500	0.050	0.051	102	74 - 121	0.050	0.055	109	8	20
trans-1,2-Dichloroethene	156-60-5	ND	0.00500	0.050	0.052	104	67 - 134	0.050	0.054	108	4	30
trans-1,3-Dichloropropene	10061-02-6	ND	0.00500	0.050	0.044	88	72 - 126	0.050	0.050	100	13	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.00500	0.050	0.056	113	44 - 146	0.050	0.064	127	13	30
Trichloroethene	79-01-6	ND	0.00500	0.050	0.045	91	78 - 127	0.050	0.050	100	11	20
Trichlorofluoromethane	75-69-4	ND	0.00500	0.050	0.053	105	64 - 141	0.050	0.057	113	7	30
Trichlorotrifluoroethane	76-13-1	ND	0.00500	0.050	0.058	116	66 - 139	0.050	0.063	125	8	30
Vinyl chloride	75-01-4	ND	0.00500	0.050	0.053	105	67 - 131	0.050	0.055	110	4	30
Xylene (total)	1330-20-7	ND	0.015	0.150	0.146	97	71 - 129	0.150	0.156	104	7	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	.0495	99	.05	.0521	104	62 - 125	.05	.0535	107	3	NA
4-Bromofluorobenzene	460-00-4	.0453	91	.05	.0459	92	62 - 127	.05	.0458	92	0	NA
Dibromofluoromethane	1868-53-7	.0464	93	.05	.0472	94	65 - 130	.05	.0482	96	2	NA
Toluene d8	2037-26-5	.0531	106	.05	.05	100	71 - 132	.05	.0496	99	1	NA

Analytical Batch 570783	Client ID	MB570783		LCS570783				LCSD570783				
	GCAL ID	1501661		1501662				1501663				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/22/2015 12:35		10/22/2015 10:53				10/22/2015 11:14				
	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	2.46	98	77 - 122	2.50	2.51	100	2	30
1,1,1-Trichloroethane	71-55-6	ND	0.250	2.50	2.58	103	70 - 130	2.50	2.51	100	3	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.250	2.50	2.54	102	66 - 129	2.50	2.62	105	3	30
1,1,2-Trichloroethane	79-00-5	ND	0.250	2.50	2.31	92	74 - 120	2.50	2.38	95	3	30
1,1-Dichloroethane	75-34-3	ND	0.250	2.50	2.35	94	71 - 126	2.50	2.39	96	2	30
1,1-Dichloroethene	75-35-4	ND	0.250	2.50	2.34	94	68 - 129	2.50	2.38	95	2	20

GC/MS Volatiles QC Summary

Analytical Batch 570783	Client ID	MB570783		LCS570783				LCSD570783				
	GCAL ID	1501661		1501662				1501663				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/22/2015 12:35		10/22/2015 10:53				10/22/2015 11:14				
	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-Dichloropropene	563-58-6	ND	0.250	2.50	2.57	103	70 - 138	2.50	2.53	101	2	30
1,2,3-Trichloropropane	96-18-4	ND	0.250	2.50	2.17	87	63 - 132	2.50	2.27	91	5	30
1,2,4-Trichlorobenzene	120-82-1	ND	0.250	2.50	1.95	78	64 - 135	2.50	2.08	83	6	30
1,2,4-Trimethylbenzene	95-63-6	ND	0.250	2.50	2.51	100	75 - 130	2.50	2.55	102	2	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.250	2.50	2.05	82	60 - 123	2.50	2.40	96	16	30
1,2-Dibromoethane	106-93-4	ND	0.250	2.50	2.47	99	74 - 122	2.50	2.50	100	1	30
1,2-Dichlorobenzene	95-50-1	ND	0.250	2.50	2.48	99	76 - 125	2.50	2.47	99	0	30
1,2-Dichloroethane	107-06-2	ND	0.250	2.50	2.53	101	68 - 126	2.50	2.55	102	1	30
1,2-Dichloroethene(Total)	540-59-0	ND	0.500	5.00	4.73	95	72 - 129	5.00	4.84	97	2	30
1,2-Dichloropropane	78-87-5	ND	0.250	2.50	2.55	102	72 - 129	2.50	2.53	101	1	30
1,3,5-Trimethylbenzene	108-67-8	ND	0.250	2.50	2.41	96	74 - 136	2.50	2.43	97	1	30
1,3-Dichlorobenzene	541-73-1	ND	0.250	2.50	2.43	97	77 - 127	2.50	2.41	96	1	30
1,3-Dichloropropane	142-28-9	ND	0.250	2.50	2.38	95	77 - 121	2.50	2.45	98	3	30
1,4-Dichlorobenzene	106-46-7	ND	0.250	2.50	2.34	94	74 - 123	2.50	2.36	94	1	30
2,2-Dichloropropane	594-20-7	ND	0.250	2.50	2.53	101	74 - 129	2.50	2.58	103	2	30
2-Butanone	78-93-3	ND	0.250	2.50	2.51	100	47 - 142	2.50	2.33	93	7	30
2-Chlorotoluene	95-49-8	ND	0.250	2.50	2.30	92	75 - 132	2.50	2.32	93	1	30
2-Hexanone	591-78-6	ND	0.250	2.50	2.34	94	47 - 137	2.50	2.55	102	9	30
4-Chlorotoluene	106-43-4	ND	0.250	2.50	2.40	96	74 - 133	2.50	2.37	95	1	30
4-Isopropyltoluene	99-87-6	ND	0.250	2.50	2.58	103	71 - 136	2.50	2.56	102	1	30
4-Methyl-2-pentanone	108-10-1	ND	0.250	2.50	2.44	98	52 - 136	2.50	2.63	105	7	30
Acetone	67-64-1	ND	1.25	2.50	2.08	83	38 - 152	2.50	3.20	128	42*	30
Benzene	71-43-2	ND	0.250	2.50	2.52	101	73 - 128	2.50	2.47	99	2	20
Bromobenzene	108-86-1	ND	0.250	2.50	2.51	100	73 - 124	2.50	2.58	103	3	30
Bromochloromethane	74-97-5	ND	0.250	2.50	2.68	107	73 - 127	2.50	2.62	105	2	30
Bromodichloromethane	75-27-4	ND	0.250	2.50	2.77	111	74 - 126	2.50	2.73	109	1	30
Bromoform	75-25-2	ND	0.250	2.50	2.48	99	67 - 122	2.50	2.55	102	3	30
Bromomethane	74-83-9	ND	0.250	2.50	2.16	86	48 - 139	2.50	2.34	94	8	30
Carbon disulfide	75-15-0	ND	0.250	2.50	2.35	94	68 - 133	2.50	2.50	100	6	30
Carbon tetrachloride	56-23-5	ND	0.250	2.50	2.40	96	71 - 133	2.50	2.43	97	1	30
Chlorobenzene	108-90-7	ND	0.250	2.50	2.46	98	75 - 121	2.50	2.39	96	3	20
Chloroethane	75-00-3	ND	0.250	2.50	2.51	100	57 - 144	2.50	2.65	106	5	30
Chloroform	67-66-3	ND	0.250	2.50	2.50	100	74 - 124	2.50	2.51	100	0	30
Chloromethane	74-87-3	ND	0.250	2.50	2.33	93	61 - 130	2.50	2.48	99	6	30
cis-1,2-Dichloroethene	156-59-2	ND	0.250	2.50	2.44	98	72 - 130	2.50	2.53	101	4	30
cis-1,3-Dichloropropene	10061-01-5	ND	0.250	2.50	2.76	110	72 - 129	2.50	2.72	109	1	30
Dibromochloromethane	124-48-1	ND	0.250	2.50	2.61	104	74 - 122	2.50	2.56	102	2	30
Dibromomethane	74-95-3	ND	0.250	2.50	2.52	101	72 - 125	2.50	2.56	102	2	30
Dichlorodifluoromethane	75-71-8	ND	0.250	2.50	2.42	97	59 - 138	2.50	2.37	95	2	30
Ethylbenzene	100-41-4	ND	0.250	2.50	2.51	100	74 - 130	2.50	2.42	97	4	30
Hexachlorobutadiene	87-68-3	ND	0.250	2.50	2.23	89	71 - 140	2.50	2.28	91	2	30
Isopropylbenzene (Cumene)	98-82-8	ND	0.250	2.50	2.63	105	74 - 125	2.50	2.55	102	3	30
m,p-Xylene	136777-61-2	ND	0.500	5.00	5.10	102	72 - 128	5.00	5.04	101	1	30
Methyl iodide	74-88-4	ND	0.250	2.50	2.18	87	54 - 140	2.50	2.32	93	6	30
Methylene chloride	75-09-2	ND	0.500	2.50	2.31	92	66 - 130	2.50	2.42	97	5	30
Naphthalene	91-20-3	ND	0.250	2.50	1.82	73	54 - 132	2.50	2.13	85	16	35
n-Butylbenzene	104-51-8	ND	0.250	2.50	2.39	96	68 - 144	2.50	2.36	94	1	30
n-Propylbenzene	103-65-1	ND	0.250	2.50	2.27	91	73 - 137	2.50	2.27	91	0	30
o-Xylene	95-47-6	ND	0.250	2.50	2.59	104	69 - 133	2.50	2.48	99	4	30
sec-Butylbenzene	135-98-8	ND	0.250	2.50	2.42	97	72 - 141	2.50	2.42	97	0	30
Styrene	100-42-5	ND	0.250	2.50	2.70	108	72 - 128	2.50	2.65	106	2	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	0.250	2.50	2.46	98	69 - 126	2.50	2.65	106	7	30
tert-Butylbenzene	98-06-6	ND	0.250	2.50	2.33	93	72 - 136	2.50	2.35	94	1	30
Tetrachloroethene	127-18-4	ND	0.250	2.50	2.38	95	70 - 127	2.50	2.35	94	1	30
Toluene	108-88-3	ND	0.250	2.50	2.45	98	74 - 121	2.50	2.37	95	3	20
trans-1,2-Dichloroethene	156-60-5	ND	0.250	2.50	2.30	92	67 - 134	2.50	2.32	93	1	30
trans-1,3-Dichloropropene	10061-02-6	ND	0.250	2.50	2.73	109	72 - 126	2.50	2.83	113	4	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.250	2.50	2.48	99	44 - 146	2.50	2.53	101	2	30

GC/MS Volatiles QC Summary

Analytical Batch 570783	Client ID	MB570783		LCS570783				LCSD570783				
	GCAL ID	1501661		1501662				1501663				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/22/2015 12:35		10/22/2015 10:53				10/22/2015 11:14				
	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	2.55	102	78 - 127	2.50	2.53	101	1	20
Trichlorofluoromethane	75-69-4	ND	0.250	2.50	2.59	104	64 - 141	2.50	2.51	100	3	30
Trichlorotrifluoroethane	76-13-1	ND	0.250	2.50	2.30	92	66 - 139	2.50	2.36	94	3	30
Vinyl chloride	75-01-4	ND	0.250	2.50	2.27	91	67 - 131	2.50	2.33	93	3	30
Xylene (total)	1330-20-7	ND	0.750	7.50	7.69	103	71 - 129	7.50	7.52	100	2	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	2.69	108	2.5	2.58	103	62 - 125	2.5	2.72	109	5	NA
4-Bromofluorobenzene	460-00-4	2.57	103	2.5	2.61	104	62 - 127	2.5	2.53	101	3	NA
Dibromofluoromethane	1868-53-7	2.61	104	2.5	2.57	103	65 - 130	2.5	2.64	106	3	NA
Toluene d8	2037-26-5	2.42	97	2.5	2.42	97	71 - 132	2.5	2.45	98	1	NA

Analytical Batch 570694	Client ID	MB570694		LCS570694				LCSD570694				
	GCAL ID	1501250		1501251				1501252				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/21/2015 14:03		10/21/2015 12:09				10/21/2015 12:32				
	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	50.8	102	75 - 124	50.0	51.1	102	1	30
1,1,1-Trichloroethane	71-55-6	ND	5.00	50.0	46.3	93	76 - 126	50.0	45.6	91	2	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	5.00	50.0	43.2	86	70 - 122	50.0	44.1	88	2	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	44.4	89	74 - 127	50.0	45.8	92	3	30
1,1-Dichloroethene	75-35-4	ND	5.00	50.0	47.4	95	69 - 129	50.0	47.7	95	1	20
1,1-Dichloropropene	563-58-6	ND	5.00	50.0	50.6	101	72 - 131	50.0	50.8	102	0	30
1,2,3-Trichloropropane	96-18-4	ND	5.00	50.0	43.5	87	70 - 120	50.0	45.7	91	5	30
1,2,4-Trichlorobenzene	120-82-1	ND	5.00	50.0	57.3	115	61 - 135	50.0	57.9	116	1	30
1,2,4-Trimethylbenzene	95-63-6	ND	5.00	50.0	50.1	100	74 - 125	50.0	49.7	99	1	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	5.00	50.0	49.1	98	57 - 121	50.0	51.3	103	4	30
1,2-Dibromoethane	106-93-4	ND	5.00	50.0	49.3	99	70 - 124	50.0	51.3	103	4	30
1,2-Dichlorobenzene	95-50-1	ND	5.00	50.0	49.2	98	71 - 126	50.0	49.0	98	0	30
1,2-Dichloroethane	107-06-2	ND	5.00	50.0	45.9	92	71 - 129	50.0	45.8	92	0	30
1,2-Dichloroethene(Total)	540-59-0	ND	10.0	100	96.9	97	74 - 128	100	98.6	99	2	30
1,2-Dichloropropane	78-87-5	ND	5.00	50.0	44.2	88	72 - 128	50.0	45.5	91	3	30
1,3,5-Trimethylbenzene	108-67-8	ND	5.00	50.0	49.2	98	71 - 132	50.0	49.1	98	0	30
1,3-Dichlorobenzene	541-73-1	ND	5.00	50.0	50.4	101	74 - 126	50.0	49.1	98	3	30
1,3-Dichloropropane	142-28-9	ND	5.00	50.0	49.2	98	74 - 122	50.0	49.8	100	1	30
1,4-Dichlorobenzene	106-46-7	ND	5.00	50.0	45.5	91	72 - 122	50.0	46.2	92	2	30
2,2-Dichloropropane	594-20-7	ND	5.00	50.0	49.0	98	77 - 124	50.0	49.4	99	1	30
2-Butanone	78-93-3	ND	5.00	50.0	40.6	81	58 - 137	50.0	44.0	88	8	30
2-Chlorotoluene	95-49-8	ND	5.00	50.0	46.5	93	72 - 127	50.0	46.4	93	0	30
2-Hexanone	591-78-6	ND	5.00	50.0	47.9	96	50 - 135	50.0	49.4	99	3	30
4-Chlorotoluene	106-43-4	ND	5.00	50.0	46.7	93	75 - 126	50.0	47.0	94	1	30
4-Isopropyltoluene	99-87-6	ND	5.00	50.0	51.2	102	71 - 129	50.0	51.1	102	0	30
4-Methyl-2-pentanone	108-10-1	ND	5.00	50.0	42.7	85	57 - 132	50.0	44.6	89	4	30
Acetone	67-64-1	ND	5.00	50.0	48.7	97	44 - 156	50.0	53.2	106	9	30
Benzene	71-43-2	ND	5.00	50.0	47.1	94	70 - 129	50.0	48.4	97	3	20
Bromobenzene	108-86-1	ND	5.00	50.0	43.7	87	71 - 120	50.0	42.5	85	3	30
Bromochloromethane	74-97-5	ND	5.00	50.0	52.1	104	76 - 130	50.0	52.6	105	1	30
Bromodichloromethane	75-27-4	ND	5.00	50.0	45.8	92	74 - 125	50.0	48.1	96	5	30
Bromoform	75-25-2	ND	5.00	50.0	53.1	106	64 - 122	50.0	54.7	109	3	30
Bromomethane	74-83-9	ND	5.00	50.0	46.5	93	47 - 138	50.0	59.4	119	24	30
Carbon disulfide	75-15-0	ND	5.00	50.0	51.8	104	69 - 136	50.0	52.9	106	2	30
Carbon tetrachloride	56-23-5	ND	5.00	50.0	51.1	102	76 - 128	50.0	51.1	102	0	30
Chlorobenzene	108-90-7	ND	5.00	50.0	51.9	104	74 - 123	50.0	51.4	103	1	20
Chloroethane	75-00-3	ND	5.00	50.0	44.4	89	62 - 141	50.0	49.3	99	10	30

GC/MS Volatiles QC Summary

Analytical Batch 570694	Client ID	MB570694		LCS570694				LCSD570694				
	GCAL ID	1501250		1501251				1501252				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/21/2015 14:03		10/21/2015 12:09				10/21/2015 12:32				
	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
Chloroform	67-66-3	ND	5.00	50.0	46.2	92	75 - 122	50.0	47.6	95	3	30
Chloromethane	74-87-3	ND	5.00	50.0	38.8	78	59 - 132	50.0	43.1	86	11	30
cis-1,2-Dichloroethene	156-59-2	ND	5.00	50.0	47.2	94	73 - 130	50.0	48.4	97	3	30
cis-1,3-Dichloropropene	10061-01-5	ND	5.00	50.0	51.3	103	71 - 132	50.0	51.5	103	0	30
Dibromochloromethane	124-48-1	ND	5.00	50.0	55.8	112	71 - 123	50.0	54.7	109	2	30
Dibromomethane	74-95-3	ND	5.00	50.0	49.7	99	72 - 129	50.0	53.6	107	8	30
Dichlorodifluoromethane	75-71-8	ND	5.00	50.0	45.7	91	58 - 140	50.0	47.7	95	4	30
Ethylbenzene	100-41-4	ND	5.00	50.0	52.9	106	74 - 126	50.0	52.4	105	1	30
Hexachlorobutadiene	87-68-3	ND	5.00	50.0	52.4	105	61 - 144	50.0	52.2	104	0	30
Isopropylbenzene (Cumene)	98-82-8	ND	5.00	50.0	54.2	108	71 - 125	50.0	53.1	106	2	30
m,p-Xylene	136777-61-2	ND	10.0	100	110	110	74 - 126	100	109	109	1	30
Methyl iodide	74-88-4	ND	5.00	50.0	65.0	130	57 - 141	50.0	70.0	140	7	30
Methylene chloride	75-09-2	ND	5.00	50.0	44.8	90	68 - 132	50.0	48.3	97	8	30
Naphthalene	91-20-3	ND	5.00	50.0	47.1	94	57 - 138	50.0	49.7	99	5	35
n-Butylbenzene	104-51-8	ND	5.00	50.0	51.5	103	69 - 134	50.0	49.5	99	4	30
n-Propylbenzene	103-65-1	ND	5.00	50.0	46.5	93	75 - 129	50.0	46.2	92	1	30
o-Xylene	95-47-6	ND	5.00	50.0	57.8	116	73 - 130	50.0	58.3	117	1	30
sec-Butylbenzene	135-98-8	ND	5.00	50.0	50.5	101	70 - 136	50.0	49.0	98	3	30
Styrene	100-42-5	ND	5.00	50.0	55.8	112	71 - 127	50.0	56.0	112	0	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	5.00	50.0	47.0	94	71 - 125	50.0	48.8	98	4	30
tert-Butylbenzene	98-06-6	ND	5.00	50.0	47.9	96	72 - 126	50.0	48.0	96	0	30
Tetrachloroethene	127-18-4	ND	5.00	50.0	55.5	111	68 - 128	50.0	55.6	111	0	30
Toluene	108-88-3	ND	5.00	50.0	51.8	104	72 - 120	50.0	51.3	103	1	20
trans-1,2-Dichloroethene	156-60-5	ND	5.00	50.0	49.8	100	69 - 132	50.0	50.1	100	1	30
trans-1,3-Dichloropropene	10061-02-6	ND	5.00	50.0	49.5	99	71 - 131	50.0	51.7	103	4	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	5.00	50.0	40.1	80	56 - 132	50.0	44.2	88	10	30
Trichloroethene	79-01-6	ND	5.00	50.0	50.7	101	76 - 129	50.0	52.6	105	4	20
Trichlorofluoromethane	75-69-4	ND	5.00	50.0	48.5	97	72 - 136	50.0	49.1	98	1	30
Trichlorotrifluoroethane	76-13-1	ND	5.00	50.0	54.4	109	72 - 136	50.0	55.6	111	2	30
Vinyl chloride	75-01-4	ND	5.00	50.0	45.3	91	68 - 132	50.0	49.3	99	8	30
Xylene (total)	1330-20-7	ND	15.0	150	167	111	74 - 127	150	167	111	0	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	44.9	90	50	48.5	97	71 - 127	50	50.1	100	3	NA
4-Bromofluorobenzene	460-00-4	55.3	111	50	56.7	113	78 - 130	50	56	112	1	NA
Dibromofluoromethane	1868-53-7	49.2	98	50	51	102	77 - 127	50	50.7	101	1	NA
Toluene d8	2037-26-5	53.8	108	50	51.8	104	76 - 134	50	52.1	104	1	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: 215102105
PM: SAK

Report to:	Bill to:
Client: Clearwater Environmental Resources	Client: Same
Address: 3870 Peachtree Industrial Blvd Ste. 340139, Duluth, GA 30096	Address:
Contact: Jack Wintle	Contact:
Phone: 678-491-4601	Phone:
E-mail: jack.wintle@clearwaterenv.net	E-mail:

P.O. Number: —
Project Name/Number: Rayloc Excavations
Sampled By: Matthew R. Howe

Analytical Requests & Method

GCAL use only:
Custody Seal used ☐ yes ☐ no intact ☐ yes ☐ no
Temperature °C 1.8 EZY

☐ Dissolved Analysis Requested
☐ Field filtered
☐ Lab filtered

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	No Containers	EPA method 8360B - VOCs (No preservative needed)	GPA Method 8360E - VOCs (HCl)	Preservative
S	10/19/15	1700		X	AST- Floor	4	X		1
		1703			AST- West wall				2
		1706			AST- South wall				3
		1709			AST- North wall				4
		1712			AST- East wall				5
	10/20/15	1013			OT-3 - Floor				6
		1016			OT-3 - North wall				7
		1019			OT-3 - West wall				8
		1022			OT-3 South wall				9
		1025			OT-3 - East wall				10
W		—	—	—	Trip Blank	3		X	11

Air Bill No: 7747 8191 7037

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

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	10/20/15	1340	[signature]	10/20/15	1340
[signature]	10/20/15	1415	Fedex		
Fedex	10-21-15	1011	[signature]	10-21-15	1011

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

* 2 1 5 1 0 2 1 0 5 *

SAMPLE DELIVERY GROUP 215102105	
Client PM SAK 4912 - Clearwater Environmental Resources	**Transport Method** FEDEX
Profile Number 259985	**Received By** Saucier, Charlotte M.
Line Item(s) 3 - VOC 2 day 4 - Soils 2-Day Lead only	**Receive Date(s)** 10/21/15

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 VOA vials received with no 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: E24	Temp(°C)
7747 8191 7037	1.8

DISCREPANCIES

None

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 10/26/2015

GCAL Report 215102205

Project Rayloc Excavation

Deliver To	***Report cc***
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 215102205

Case Narrative

Client: Clearwater Environmental Resources **Report:** 215102205

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, sample 21510220505 (OT-S FLOOR) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument. The dilution is reflected in elevated detection limits.

In the EPA 8260B analysis for analytical batch 570841, the LCS and/or LCSD recoveries are above the upper control limit for Methyl iodide. This compound was not detected in the associated samples.

In the EPA 8260B analysis for analytical batch 570873, the LCS/LCSD RPD is above the control limit for Carbon disulfide and Trichlorotrifluoroethane.

Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21510220501	OT-S WEST WALL	Solid	10/20/2015 14:00	10/22/2015 09:49
21510220502	OT-S EAST WALL	Solid	10/20/2015 14:03	10/22/2015 09:49
21510220503	OT-S NORTH WALL	Solid	10/20/2015 14:06	10/22/2015 09:49
21510220504	OT-S SOUTH WALL	Solid	10/20/2015 14:09	10/22/2015 09:49
21510220505	OT-S FLOOR	Solid	10/20/2015 13:57	10/22/2015 09:49
21510220506	TRIP BLANK	Water	10/21/2015 00:01	10/22/2015 09:49

Summary of Compounds Detected

OT-S WEST WALL

Collect Date 10/20/2015 14:00 **GCAL ID** 21510220501
Receive Date 10/22/2015 09:49 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	0.136	0.012	mg/kg
156-59-2	cis-1,2-Dichloroethene	0.136	0.00590	mg/kg
127-18-4	Tetrachloroethene	0.141	0.00590	mg/kg
79-01-6	Trichloroethene	0.032	0.00590	mg/kg

OT-S EAST WALL

Collect Date 10/20/2015 14:03 **GCAL ID** 21510220502
Receive Date 10/22/2015 09:49 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
591-78-6	2-Hexanone	0.00711	0.00683	mg/kg

OT-S NORTH WALL

Collect Date 10/20/2015 14:06 **GCAL ID** 21510220503
Receive Date 10/22/2015 09:49 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	0.011	0.00926	mg/kg
156-59-2	cis-1,2-Dichloroethene	0.011	0.00463	mg/kg
127-18-4	Tetrachloroethene	0.079	0.00463	mg/kg

OT-S SOUTH WALL

Collect Date 10/20/2015 14:09 **GCAL ID** 21510220504
Receive Date 10/22/2015 09:49 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
156-59-2	cis-1,2-Dichloroethene	0.00712	0.00602	mg/kg

Summary of Compounds Detected

OT-S FLOOR	**Collect Date**	10/20/2015 13:57	**GCAL ID**	21510220505
	Receive Date	10/22/2015 09:49	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
156-59-2	cis-1,2-Dichloroethene	0.427	0.365	mg/kg
127-18-4	Tetrachloroethene	1.64	0.365	mg/kg

Sample Results

OT-S WEST WALL	**Collect Date**	10/20/2015 14:00	**GCAL ID**	21510220501
	Receive Date	10/22/2015 09:49	**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	1	10/23/2015 15:51	BMC2	570873

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.00590	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.00590	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00590	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.00590	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.00590	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.00590	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.00590	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.00590	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.00590	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.00590	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.00590	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.00590	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.00590	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.00590	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**0.136**	**0.012**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.00590	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.00590	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.00590	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.00590	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.00590	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.00590	mg/kg
78-93-3	2-Butanone	ND	0.00590	mg/kg
95-49-8	2-Chlorotoluene	ND	0.00590	mg/kg
591-78-6	2-Hexanone	ND	0.00590	mg/kg
106-43-4	4-Chlorotoluene	ND	0.00590	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.00590	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.00590	mg/kg
67-64-1	Acetone	ND	0.030	mg/kg
71-43-2	Benzene	ND	0.00590	mg/kg
108-86-1	Bromobenzene	ND	0.00590	mg/kg
74-97-5	Bromochloromethane	ND	0.00590	mg/kg
75-27-4	Bromodichloromethane	ND	0.00590	mg/kg
75-25-2	Bromoform	ND	0.00590	mg/kg
74-83-9	Bromomethane	ND	0.00590	mg/kg
75-15-0	Carbon disulfide	ND	0.00590	mg/kg
56-23-5	Carbon tetrachloride	ND	0.00590	mg/kg
108-90-7	Chlorobenzene	ND	0.00590	mg/kg
75-00-3	Chloroethane	ND	0.00590	mg/kg
67-66-3	Chloroform	ND	0.00590	mg/kg
74-87-3	Chloromethane	ND	0.00590	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**0.136**	**0.00590**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.00590	mg/kg
124-48-1	Dibromochloromethane	ND	0.00590	mg/kg
74-95-3	Dibromomethane	ND	0.00590	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.00590	mg/kg
100-41-4	Ethylbenzene	ND	0.00590	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.00590	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.00590	mg/kg

Sample Results

OT-S WEST WALL

Collect Date 10/20/2015 14:00 **GCAL ID** 21510220501
Receive Date 10/22/2015 09:49 **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	1	10/23/2015 15:51	BMC2	570873

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.012	mg/kg
74-88-4	Methyl iodide	ND	0.00590	mg/kg
75-09-2	Methylene chloride	ND	0.012	mg/kg
91-20-3	Naphthalene	ND	0.00590	mg/kg
104-51-8	n-Butylbenzene	ND	0.00590	mg/kg
103-65-1	n-Propylbenzene	ND	0.00590	mg/kg
95-47-6	o-Xylene	ND	0.00590	mg/kg
135-98-8	sec-Butylbenzene	ND	0.00590	mg/kg
100-42-5	Styrene	ND	0.00590	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.00590	mg/kg
98-06-6	tert-Butylbenzene	ND	0.00590	mg/kg
127-18-4	**Tetrachloroethene**	**0.141**	**0.00590**	**mg/kg**
108-88-3	Toluene	ND	0.00590	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.00590	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.00590	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.00590	mg/kg
79-01-6	**Trichloroethene**	**0.032**	**0.00590**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.00590	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.00590	mg/kg
75-01-4	Vinyl chloride	ND	0.00590	mg/kg
1330-20-7	Xylene (total)	ND	0.018	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	0.0420	.04	ug/Kg	95	62 - 127
1868-53-7	Dibromofluoromethane	0.0420	.04	ug/Kg	94	65 - 130
2037-26-5	Toluene d8	0.0420	.044	ug/Kg	104	71 - 132
17060-07-0	1,2-Dichloroethane-d4	0.0420	.047	ug/Kg	111	62 - 125

OT-S EAST WALL

Collect Date 10/20/2015 14:03 **GCAL ID** 21510220502
Receive Date 10/22/2015 09:49 **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	1	10/23/2015 16:17	BMC2	570873

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.00683	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.00683	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00683	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.00683	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.00683	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.00683	mg/kg

Sample Results

OT-S EAST WALL	**Collect Date**	10/20/2015 14:03	**GCAL ID**	21510220502
	Receive Date	10/22/2015 09:49	**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	1	10/23/2015 16:17	BMC2	570873

CAS#	Parameter	Result	LOQ	Units
563-58-6	1,1-Dichloropropene	ND	0.00683	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.00683	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.00683	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.00683	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.00683	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.00683	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.00683	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.00683	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.014	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.00683	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.00683	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.00683	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.00683	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.00683	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.00683	mg/kg
78-93-3	2-Butanone	ND	0.00683	mg/kg
95-49-8	2-Chlorotoluene	ND	0.00683	mg/kg
591-78-6	**2-Hexanone**	**0.00711**	**0.00683**	**mg/kg**
106-43-4	4-Chlorotoluene	ND	0.00683	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.00683	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.00683	mg/kg
67-64-1	Acetone	ND	0.034	mg/kg
71-43-2	Benzene	ND	0.00683	mg/kg
108-86-1	Bromobenzene	ND	0.00683	mg/kg
74-97-5	Bromochloromethane	ND	0.00683	mg/kg
75-27-4	Bromodichloromethane	ND	0.00683	mg/kg
75-25-2	Bromoform	ND	0.00683	mg/kg
74-83-9	Bromomethane	ND	0.00683	mg/kg
75-15-0	Carbon disulfide	ND	0.00683	mg/kg
56-23-5	Carbon tetrachloride	ND	0.00683	mg/kg
108-90-7	Chlorobenzene	ND	0.00683	mg/kg
75-00-3	Chloroethane	ND	0.00683	mg/kg
67-66-3	Chloroform	ND	0.00683	mg/kg
74-87-3	Chloromethane	ND	0.00683	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	0.00683	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.00683	mg/kg
124-48-1	Dibromochloromethane	ND	0.00683	mg/kg
74-95-3	Dibromomethane	ND	0.00683	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.00683	mg/kg
100-41-4	Ethylbenzene	ND	0.00683	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.00683	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.00683	mg/kg
136777-61-2	m,p-Xylene	ND	0.014	mg/kg
74-88-4	Methyl iodide	ND	0.00683	mg/kg
75-09-2	Methylene chloride	ND	0.014	mg/kg
91-20-3	Naphthalene	ND	0.00683	mg/kg
104-51-8	n-Butylbenzene	ND	0.00683	mg/kg
103-65-1	n-Propylbenzene	ND	0.00683	mg/kg

Sample Results

OT-S EAST WALL

Collect Date 10/20/2015 14:03 **GCAL ID** 21510220502
Receive Date 10/22/2015 09:49 **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	1	10/23/2015 16:17	BMC2	570873

CAS#	Parameter	Result	LOQ	Units
95-47-6	o-Xylene	ND	0.00683	mg/kg
135-98-8	sec-Butylbenzene	ND	0.00683	mg/kg
100-42-5	Styrene	ND	0.00683	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.00683	mg/kg
98-06-6	tert-Butylbenzene	ND	0.00683	mg/kg
127-18-4	Tetrachloroethene	ND	0.00683	mg/kg
108-88-3	Toluene	ND	0.00683	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.00683	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.00683	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.00683	mg/kg
79-01-6	Trichloroethene	ND	0.00683	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.00683	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.00683	mg/kg
75-01-4	Vinyl chloride	ND	0.00683	mg/kg
1330-20-7	Xylene (total)	ND	0.021	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	0.0480	.045	ug/Kg	92	62 - 127
1868-53-7	Dibromofluoromethane	0.0480	.047	ug/Kg	96	65 - 130
2037-26-5	Toluene d8	0.0480	.049	ug/Kg	102	71 - 132
17060-07-0	1,2-Dichloroethane-d4	0.0480	.056	ug/Kg	116	62 - 125

OT-S NORTH WALL

Collect Date 10/20/2015 14:06 **GCAL ID** 21510220503
Receive Date 10/22/2015 09:49 **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	1	10/23/2015 17:26	BMC2	570873

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.00463	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.00463	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00463	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.00463	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.00463	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.00463	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.00463	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.00463	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.00463	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.00463	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.00463	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.00463	mg/kg

Sample Results

OT-S NORTH WALL

Collect Date	10/20/2015 14:06	**GCAL ID**	21510220503
Receive Date	10/22/2015 09:49	**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	1	10/23/2015 17:26	BMC2	570873

CAS#	Parameter	Result	LOQ	Units
95-50-1	1,2-Dichlorobenzene	ND	0.00463	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.00463	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**0.011**	**0.00926**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.00463	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.00463	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.00463	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.00463	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.00463	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.00463	mg/kg
78-93-3	2-Butanone	ND	0.00463	mg/kg
95-49-8	2-Chlorotoluene	ND	0.00463	mg/kg
591-78-6	2-Hexanone	ND	0.00463	mg/kg
106-43-4	4-Chlorotoluene	ND	0.00463	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.00463	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.00463	mg/kg
67-64-1	Acetone	ND	0.023	mg/kg
71-43-2	Benzene	ND	0.00463	mg/kg
108-86-1	Bromobenzene	ND	0.00463	mg/kg
74-97-5	Bromochloromethane	ND	0.00463	mg/kg
75-27-4	Bromodichloromethane	ND	0.00463	mg/kg
75-25-2	Bromoform	ND	0.00463	mg/kg
74-83-9	Bromomethane	ND	0.00463	mg/kg
75-15-0	Carbon disulfide	ND	0.00463	mg/kg
56-23-5	Carbon tetrachloride	ND	0.00463	mg/kg
108-90-7	Chlorobenzene	ND	0.00463	mg/kg
75-00-3	Chloroethane	ND	0.00463	mg/kg
67-66-3	Chloroform	ND	0.00463	mg/kg
74-87-3	Chloromethane	ND	0.00463	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**0.011**	**0.00463**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.00463	mg/kg
124-48-1	Dibromochloromethane	ND	0.00463	mg/kg
74-95-3	Dibromomethane	ND	0.00463	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.00463	mg/kg
100-41-4	Ethylbenzene	ND	0.00463	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.00463	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.00463	mg/kg
136777-61-2	m,p-Xylene	ND	0.00926	mg/kg
74-88-4	Methyl iodide	ND	0.00463	mg/kg
75-09-2	Methylene chloride	ND	0.00926	mg/kg
91-20-3	Naphthalene	ND	0.00463	mg/kg
104-51-8	n-Butylbenzene	ND	0.00463	mg/kg
103-65-1	n-Propylbenzene	ND	0.00463	mg/kg
95-47-6	o-Xylene	ND	0.00463	mg/kg
135-98-8	sec-Butylbenzene	ND	0.00463	mg/kg
100-42-5	Styrene	ND	0.00463	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.00463	mg/kg
98-06-6	tert-Butylbenzene	ND	0.00463	mg/kg
127-18-4	**Tetrachloroethene**	**0.079**	**0.00463**	**mg/kg**

Sample Results

OT-S NORTH WALL

Collect Date 10/20/2015 14:06 **GCAL ID** 21510220503
Receive Date 10/22/2015 09:49 **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	1	10/23/2015 17:26	BMC2	570873

CAS#	Parameter	Result	LOQ	Units
108-88-3	Toluene	ND	0.00463	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.00463	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.00463	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.00463	mg/kg
79-01-6	Trichloroethene	ND	0.00463	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.00463	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.00463	mg/kg
75-01-4	Vinyl chloride	ND	0.00463	mg/kg
1330-20-7	Xylene (total)	ND	0.014	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	0.0370	.034	ug/Kg	92	62 - 127
1868-53-7	Dibromofluoromethane	0.0370	.035	ug/Kg	96	65 - 130
2037-26-5	Toluene d8	0.0370	.038	ug/Kg	103	71 - 132
17060-07-0	1,2-Dichloroethane-d4	0.0370	.04	ug/Kg	111	62 - 125

OT-S SOUTH WALL

Collect Date 10/20/2015 14:09 **GCAL ID** 21510220504
Receive Date 10/22/2015 09:49 **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	1	10/23/2015 17:46	BMC2	570873

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.00602	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.00602	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00602	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.00602	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.00602	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.00602	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.00602	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.00602	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.00602	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.00602	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.00602	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.00602	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.00602	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.00602	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.012	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.00602	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.00602	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.00602	mg/kg

Sample Results

OT-S SOUTH WALL

Collect Date	10/20/2015 14:09	**GCAL ID**	21510220504
Receive Date	10/22/2015 09:49	**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	1	10/23/2015 17:46	BMC2	570873

CAS#	Parameter	Result	LOQ	Units
142-28-9	1,3-Dichloropropane	ND	0.00602	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.00602	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.00602	mg/kg
78-93-3	2-Butanone	ND	0.00602	mg/kg
95-49-8	2-Chlorotoluene	ND	0.00602	mg/kg
591-78-6	2-Hexanone	ND	0.00602	mg/kg
106-43-4	4-Chlorotoluene	ND	0.00602	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.00602	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.00602	mg/kg
67-64-1	Acetone	ND	0.030	mg/kg
71-43-2	Benzene	ND	0.00602	mg/kg
108-86-1	Bromobenzene	ND	0.00602	mg/kg
74-97-5	Bromochloromethane	ND	0.00602	mg/kg
75-27-4	Bromodichloromethane	ND	0.00602	mg/kg
75-25-2	Bromoform	ND	0.00602	mg/kg
74-83-9	Bromomethane	ND	0.00602	mg/kg
75-15-0	Carbon disulfide	ND	0.00602	mg/kg
56-23-5	Carbon tetrachloride	ND	0.00602	mg/kg
108-90-7	Chlorobenzene	ND	0.00602	mg/kg
75-00-3	Chloroethane	ND	0.00602	mg/kg
67-66-3	Chloroform	ND	0.00602	mg/kg
74-87-3	Chloromethane	ND	0.00602	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**0.00712**	**0.00602**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.00602	mg/kg
124-48-1	Dibromochloromethane	ND	0.00602	mg/kg
74-95-3	Dibromomethane	ND	0.00602	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.00602	mg/kg
100-41-4	Ethylbenzene	ND	0.00602	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.00602	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.00602	mg/kg
136777-61-2	m,p-Xylene	ND	0.012	mg/kg
74-88-4	Methyl iodide	ND	0.00602	mg/kg
75-09-2	Methylene chloride	ND	0.012	mg/kg
91-20-3	Naphthalene	ND	0.00602	mg/kg
104-51-8	n-Butylbenzene	ND	0.00602	mg/kg
103-65-1	n-Propylbenzene	ND	0.00602	mg/kg
95-47-6	o-Xylene	ND	0.00602	mg/kg
135-98-8	sec-Butylbenzene	ND	0.00602	mg/kg
100-42-5	Styrene	ND	0.00602	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.00602	mg/kg
98-06-6	tert-Butylbenzene	ND	0.00602	mg/kg
127-18-4	Tetrachloroethene	ND	0.00602	mg/kg
108-88-3	Toluene	ND	0.00602	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.00602	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.00602	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.00602	mg/kg
79-01-6	Trichloroethene	ND	0.00602	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.00602	mg/kg

Sample Results

OT-S SOUTH WALL

Collect Date 10/20/2015 14:09 **GCAL ID** 21510220504
Receive Date 10/22/2015 09:49 **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	1	10/23/2015 17:46	BMC2	570873

CAS#	Parameter	Result	LOQ	Units
76-13-1	Trichlorotrifluoroethane	ND	0.00602	mg/kg
75-01-4	Vinyl chloride	ND	0.00602	mg/kg
1330-20-7	Xylene (total)	ND	0.018	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	0.0450	.042	ug/Kg	93	62 - 127
1868-53-7	Dibromofluoromethane	0.0450	.044	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	0.0450	.044	ug/Kg	97	71 - 132
17060-07-0	1,2-Dichloroethane-d4	0.0450	.05	ug/Kg	110	62 - 125

OT-S FLOOR

Collect Date 10/20/2015 13:57 **GCAL ID** 21510220505
Receive Date 10/22/2015 09:49 **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	10/23/2015 23:32	CLH	570911

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.365	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.365	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.365	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.365	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.365	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.365	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.365	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.365	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.365	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.365	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.365	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.365	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.365	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.365	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.730	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.365	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.365	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.365	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.365	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.365	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.365	mg/kg
78-93-3	2-Butanone	ND	0.365	mg/kg
95-49-8	2-Chlorotoluene	ND	0.365	mg/kg
591-78-6	2-Hexanone	ND	0.365	mg/kg

Sample Results

OT-S FLOOR

Collect Date	10/20/2015 13:57	**GCAL ID**	21510220505
Receive Date	10/22/2015 09:49	**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	10/23/2015 23:32	CLH	570911

CAS#	Parameter	Result	LOQ	Units
106-43-4	4-Chlorotoluene	ND	0.365	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.365	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.365	mg/kg
67-64-1	Acetone	ND	1.82	mg/kg
71-43-2	Benzene	ND	0.365	mg/kg
108-86-1	Bromobenzene	ND	0.365	mg/kg
74-97-5	Bromochloromethane	ND	0.365	mg/kg
75-27-4	Bromodichloromethane	ND	0.365	mg/kg
75-25-2	Bromoform	ND	0.365	mg/kg
74-83-9	Bromomethane	ND	0.365	mg/kg
75-15-0	Carbon disulfide	ND	0.365	mg/kg
56-23-5	Carbon tetrachloride	ND	0.365	mg/kg
108-90-7	Chlorobenzene	ND	0.365	mg/kg
75-00-3	Chloroethane	ND	0.365	mg/kg
67-66-3	Chloroform	ND	0.365	mg/kg
74-87-3	Chloromethane	ND	0.365	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**0.427**	**0.365**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.365	mg/kg
124-48-1	Dibromochloromethane	ND	0.365	mg/kg
74-95-3	Dibromomethane	ND	0.365	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.365	mg/kg
100-41-4	Ethylbenzene	ND	0.365	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.365	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.365	mg/kg
136777-61-2	m,p-Xylene	ND	0.730	mg/kg
74-88-4	Methyl iodide	ND	0.365	mg/kg
75-09-2	Methylene chloride	ND	0.730	mg/kg
91-20-3	Naphthalene	ND	0.365	mg/kg
104-51-8	n-Butylbenzene	ND	0.365	mg/kg
103-65-1	n-Propylbenzene	ND	0.365	mg/kg
95-47-6	o-Xylene	ND	0.365	mg/kg
135-98-8	sec-Butylbenzene	ND	0.365	mg/kg
100-42-5	Styrene	ND	0.365	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.365	mg/kg
98-06-6	tert-Butylbenzene	ND	0.365	mg/kg
127-18-4	**Tetrachloroethene**	**1.64**	**0.365**	**mg/kg**
108-88-3	Toluene	ND	0.365	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.365	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.365	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.365	mg/kg
79-01-6	Trichloroethene	ND	0.365	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.365	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.365	mg/kg
75-01-4	Vinyl chloride	ND	0.365	mg/kg

Sample Results

OT-S FLOOR

Collect Date	10/20/2015 13:57	**GCAL ID**	21510220505
Receive Date	10/22/2015 09:49	**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	10/23/2015 23:32	CLH	570911

CAS#	Parameter	Result	LOQ	Units
1330-20-7	Xylene (total)	ND	1.09	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2.81	2.94	ug/Kg	105	62 - 127
1868-53-7	Dibromofluoromethane	2.81	3.04	ug/Kg	108	65 - 130
2037-26-5	Toluene d8	2.81	2.69	ug/Kg	96	71 - 132
17060-07-0	1,2-Dichloroethane-d4	2.81	3.07	ug/Kg	109	62 - 125

TRIP BLANK

Collect Date	10/21/2015 00:01	**GCAL ID**	21510220506
Receive Date	10/22/2015 09:49	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2015 13:28	LBH	570841

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

Sample Results

TRIP BLANK

Collect Date	10/21/2015 00:01	**GCAL ID**	21510220506
Receive Date	10/22/2015 09:49	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2015 13:28	LBH	570841

CAS#	Parameter	Result	LOQ	Units
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
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

Sample Results

TRIP BLANK

Collect Date	10/21/2015 00:01	**GCAL ID**	21510220506
Receive Date	10/22/2015 09:49	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/23/2015 13:28	LBH	570841

CAS#	Parameter	Result	LOQ	Units
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	51.8	ug/L	104	78 - 130
1868-53-7	Dibromofluoromethane	50	48.1	ug/L	96	77 - 127
2037-26-5	Toluene d8	50	52	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	46.5	ug/L	93	71 - 127

GC/MS Volatiles QC Summary

Analytical Batch 570873	Client ID	MB570873		LCS570873				LCSD570873				
	GCAL ID	1502177		1502178				1502179				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/23/2015 14:26		10/23/2015 12:09				10/23/2015 13:11				
	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	0.00500	0.050	0.051	103	77 - 122	0.050	0.052	103	2	30
1,1,1-Trichloroethane	71-55-6	ND	0.00500	0.050	0.050	100	70 - 130	0.050	0.054	107	8	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.00500	0.050	0.062	123	66 - 129	0.050	0.058	117	7	30
1,1,2-Trichloroethane	79-00-5	ND	0.00500	0.050	0.054	108	74 - 120	0.050	0.053	105	2	30
1,1-Dichloroethane	75-34-3	ND	0.00500	0.050	0.052	104	71 - 126	0.050	0.054	109	4	30
1,1-Dichloroethene	75-35-4	ND	0.00500	0.050	0.049	98	68 - 129	0.050	0.055	109	12	20
1,1-Dichloropropene	563-58-6	ND	0.00500	0.050	0.050	100	70 - 138	0.050	0.055	110	10	30
1,2,3-Trichloropropane	96-18-4	ND	0.00500	0.050	0.060	119	63 - 132	0.050	0.058	116	3	30
1,2,4-Trichlorobenzene	120-82-1	ND	0.00500	0.050	0.053	107	64 - 135	0.050	0.055	111	4	30
1,2,4-Trimethylbenzene	95-63-6	ND	0.00500	0.050	0.060	120	75 - 130	0.050	0.062	124	3	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.00500	0.050	0.050	99	60 - 123	0.050	0.049	98	2	30
1,2-Dibromoethane	106-93-4	ND	0.00500	0.050	0.054	108	74 - 122	0.050	0.052	105	4	30
1,2-Dichlorobenzene	95-50-1	ND	0.00500	0.050	0.057	114	76 - 125	0.050	0.058	116	2	30
1,2-Dichloroethane	107-06-2	ND	0.00500	0.050	0.051	103	68 - 126	0.050	0.051	102	0	30
1,2-Dichloroethene(Total)	540-59-0	ND	0.010	0.100	0.101	101	72 - 129	0.100	0.107	107	6	30
1,2-Dichloropropane	78-87-5	ND	0.00500	0.050	0.053	105	72 - 129	0.050	0.053	105	0	30
1,3,5-Trimethylbenzene	108-67-8	ND	0.00500	0.050	0.052	104	74 - 136	0.050	0.055	110	6	30
1,3-Dichlorobenzene	541-73-1	ND	0.00500	0.050	0.056	112	77 - 127	0.050	0.058	117	4	30
1,3-Dichloropropane	142-28-9	ND	0.00500	0.050	0.054	108	77 - 121	0.050	0.052	105	4	30
1,4-Dichlorobenzene	106-46-7	ND	0.00500	0.050	0.056	113	74 - 123	0.050	0.058	115	4	30
2,2-Dichloropropane	594-20-7	ND	0.00500	0.050	0.051	102	74 - 129	0.050	0.055	110	8	30
2-Butanone	78-93-3	ND	0.00500	0.050	0.054	109	47 - 142	0.050	0.051	101	6	30
2-Chlorotoluene	95-49-8	ND	0.00500	0.050	0.058	116	75 - 132	0.050	0.060	120	3	30
2-Hexanone	591-78-6	ND	0.00500	0.050	0.052	104	47 - 137	0.050	0.050	100	4	30
4-Chlorotoluene	106-43-4	ND	0.00500	0.050	0.060	119	74 - 133	0.050	0.061	123	2	30
4-Isopropyltoluene	99-87-6	ND	0.00500	0.050	0.053	105	71 - 136	0.050	0.057	114	7	30
4-Methyl-2-pentanone	108-10-1	ND	0.00500	0.050	0.049	98	52 - 136	0.050	0.047	95	4	30
Acetone	67-64-1	ND	0.025	0.050	0.058	116	38 - 152	0.050	0.056	112	4	30
Benzene	71-43-2	ND	0.00500	0.050	0.054	107	73 - 128	0.050	0.056	113	4	20
Bromobenzene	108-86-1	ND	0.00500	0.050	0.059	117	73 - 124	0.050	0.058	117	2	30
Bromochloromethane	74-97-5	ND	0.00500	0.050	0.049	97	73 - 127	0.050	0.050	100	2	30
Bromodichloromethane	75-27-4	ND	0.00500	0.050	0.052	104	74 - 126	0.050	0.053	105	2	30
Bromoform	75-25-2	ND	0.00500	0.050	0.050	101	67 - 122	0.050	0.049	98	2	30
Bromomethane	74-83-9	ND	0.00500	0.050	0.063	126	48 - 139	0.050	0.062	124	2	30
Carbon disulfide	75-15-0	ND	0.00500	0.050	0.040	80	68 - 133	0.050	0.055	111	32*	30
Carbon tetrachloride	56-23-5	ND	0.00500	0.050	0.047	94	71 - 133	0.050	0.052	104	10	30
Chlorobenzene	108-90-7	ND	0.00500	0.050	0.055	109	75 - 121	0.050	0.056	112	2	20
Chloroethane	75-00-3	ND	0.00500	0.050	0.053	106	57 - 144	0.050	0.050	101	6	30
Chloroform	67-66-3	ND	0.00500	0.050	0.051	102	74 - 124	0.050	0.053	106	4	30
Chloromethane	74-87-3	ND	0.00500	0.050	0.052	104	61 - 130	0.050	0.058	116	11	30
cis-1,2-Dichloroethene	156-59-2	ND	0.00500	0.050	0.051	102	72 - 130	0.050	0.053	106	4	30
cis-1,3-Dichloropropene	10061-01-5	ND	0.00500	0.050	0.052	103	72 - 129	0.050	0.053	105	2	30
Dibromochloromethane	124-48-1	ND	0.00500	0.050	0.048	96	74 - 122	0.050	0.048	95	0	30
Dibromomethane	74-95-3	ND	0.00500	0.050	0.050	99	72 - 125	0.050	0.049	99	2	30
Dichlorodifluoromethane	75-71-8	ND	0.00500	0.050	0.042	83	59 - 138	0.050	0.047	94	11	30
Ethylbenzene	100-41-4	ND	0.00500	0.050	0.052	104	74 - 130	0.050	0.056	112	7	30
Hexachlorobutadiene	87-68-3	ND	0.00500	0.050	0.051	102	71 - 140	0.050	0.056	111	9	30
Isopropylbenzene (Cumene)	98-82-8	ND	0.00500	0.050	0.050	100	74 - 125	0.050	0.054	107	8	30
m,p-Xylene	136777-61-2	ND	0.010	0.100	0.109	109	72 - 128	0.100	0.116	116	6	30
Methyl iodide	74-88-4	ND	0.00500	0.050	0.048	96	54 - 140	0.050	0.052	104	8	30
Methylene chloride	75-09-2	ND	0.010	0.050	0.050	101	66 - 130	0.050	0.050	100	0	30
Naphthalene	91-20-3	ND	0.00500	0.050	0.055	111	54 - 132	0.050	0.056	113	2	35
n-Butylbenzene	104-51-8	ND	0.00500	0.050	0.054	107	68 - 144	0.050	0.059	118	9	30
n-Propylbenzene	103-65-1	ND	0.00500	0.050	0.060	119	73 - 137	0.050	0.064	128	6	30
o-Xylene	95-47-6	ND	0.00500	0.050	0.051	103	69 - 133	0.050	0.054	108	6	30
sec-Butylbenzene	135-98-8	ND	0.00500	0.050	0.053	106	72 - 141	0.050	0.056	112	6	30
Styrene	100-42-5	ND	0.00500	0.050	0.056	113	72 - 128	0.050	0.059	118	5	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	0.00500	0.050	0.053	106	69 - 126	0.050	0.050	100	6	30

GC/MS Volatiles QC Summary

Analytical Batch 570873	Client ID	MB570873		LCS570873				LCSD570873				
	GCAL ID	1502177		1502178				1502179				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/23/2015 14:26		10/23/2015 12:09				10/23/2015 13:11				
	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
tert-Butylbenzene	98-06-6	ND	0.00500	0.050	0.056	112	72 - 136	0.050	0.060	120	7	30
Tetrachloroethene	127-18-4	ND	0.00500	0.050	0.049	98	70 - 127	0.050	0.052	105	6	30
Toluene	108-88-3	ND	0.00500	0.050	0.055	110	74 - 121	0.050	0.056	113	2	20
trans-1,2-Dichloroethene	156-60-5	ND	0.00500	0.050	0.050	101	67 - 134	0.050	0.055	109	10	30
trans-1,3-Dichloropropene	10061-02-6	ND	0.00500	0.050	0.050	99	72 - 126	0.050	0.049	98	2	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.00500	0.050	0.056	112	44 - 146	0.050	0.056	113	0	30
Trichloroethene	79-01-6	ND	0.00500	0.050	0.048	96	78 - 127	0.050	0.052	104	8	20
Trichlorofluoromethane	75-69-4	ND	0.00500	0.050	0.050	100	64 - 141	0.050	0.054	107	8	30
Trichlorotrifluoroethane	76-13-1	ND	0.00500	0.050	0.041	82	66 - 139	0.050	0.058	115	34*	30
Vinyl chloride	75-01-4	ND	0.00500	0.050	0.051	101	67 - 131	0.050	0.054	108	6	30
Xylene (total)	1330-20-7	ND	0.015	0.150	0.161	107	71 - 129	0.150	0.170	113	5	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	.0515	103	.05	.0511	102	62 - 125	.05	.0512	102	0	NA
4-Bromofluorobenzene	460-00-4	.0458	92	.05	.0477	95	62 - 127	.05	.0477	95	0	NA
Dibromofluoromethane	1868-53-7	.0478	96	.05	.0483	97	65 - 130	.05	.0482	96	0	NA
Toluene d8	2037-26-5	.051	102	.05	.0505	101	71 - 132	.05	.0491	98	3	NA

Analytical Batch 570911	Client ID	MB570911		LCS570911				LCSD570911				
	GCAL ID	1502353		1502354				1502355				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/23/2015 20:33		10/23/2015 18:42				10/23/2015 19:04				
	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	2.32	93	77 - 122	2.50	2.25	90	3	30
1,1,1-Trichloroethane	71-55-6	ND	0.250	2.50	2.38	95	70 - 130	2.50	2.28	91	4	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.250	2.50	2.66	106	66 - 129	2.50	2.55	102	4	30
1,1,2-Trichloroethane	79-00-5	ND	0.250	2.50	2.45	98	74 - 120	2.50	2.44	98	0	30
1,1-Dichloroethane	75-34-3	ND	0.250	2.50	2.01	80	71 - 126	2.50	1.96	78	3	30
1,1-Dichloroethene	75-35-4	ND	0.250	2.50	2.35	94	68 - 129	2.50	2.26	90	4	20
1,1-Dichloropropene	563-58-6	ND	0.250	2.50	2.39	96	70 - 138	2.50	2.26	90	6	30
1,2,3-Trichloropropane	96-18-4	ND	0.250	2.50	2.35	94	63 - 132	2.50	2.32	93	1	30
1,2,4-Trichlorobenzene	120-82-1	ND	0.250	2.50	2.49	100	64 - 135	2.50	2.42	97	3	30
1,2,4-Trimethylbenzene	95-63-6	ND	0.250	2.50	2.38	95	75 - 130	2.50	2.28	91	4	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.250	2.50	2.90	116	60 - 123	2.50	2.82	113	3	30
1,2-Dibromoethane	106-93-4	ND	0.250	2.50	2.47	99	74 - 122	2.50	2.51	100	2	30
1,2-Dichlorobenzene	95-50-1	ND	0.250	2.50	2.46	98	76 - 125	2.50	2.38	95	3	30
1,2-Dichloroethane	107-06-2	ND	0.250	2.50	2.39	96	68 - 126	2.50	2.36	94	1	30
1,2-Dichloroethene(Total)	540-59-0	ND	0.500	5.00	4.43	89	72 - 129	5.00	4.28	86	3	30
1,2-Dichloropropane	78-87-5	ND	0.250	2.50	2.44	98	72 - 129	2.50	2.42	97	1	30
1,3,5-Trimethylbenzene	108-67-8	ND	0.250	2.50	2.27	91	74 - 136	2.50	2.14	86	6	30
1,3-Dichlorobenzene	541-73-1	ND	0.250	2.50	2.32	93	77 - 127	2.50	2.26	90	3	30
1,3-Dichloropropane	142-28-9	ND	0.250	2.50	2.45	98	77 - 121	2.50	2.46	98	0	30
1,4-Dichlorobenzene	106-46-7	ND	0.250	2.50	2.42	97	74 - 123	2.50	2.32	93	4	30
2,2-Dichloropropane	594-20-7	ND	0.250	2.50	2.39	96	74 - 129	2.50	2.28	91	5	30
2-Butanone	78-93-3	ND	0.250	2.50	2.86	114	47 - 142	2.50	2.91	116	2	30
2-Chlorotoluene	95-49-8	ND	0.250	2.50	2.19	88	75 - 132	2.50	2.08	83	5	30
2-Hexanone	591-78-6	ND	0.250	2.50	2.61	104	47 - 137	2.50	2.69	108	3	30
4-Chlorotoluene	106-43-4	ND	0.250	2.50	2.23	89	74 - 133	2.50	2.14	86	4	30
4-Isopropyltoluene	99-87-6	ND	0.250	2.50	2.33	93	71 - 136	2.50	2.22	89	5	30
4-Methyl-2-pentanone	108-10-1	ND	0.250	2.50	2.71	108	52 - 136	2.50	2.79	112	3	30
Acetone	67-64-1	ND	1.25	2.50	2.41	96	38 - 152	2.50	2.25	90	7	30
Benzene	71-43-2	ND	0.250	2.50	2.40	96	73 - 128	2.50	2.32	93	3	20
Bromobenzene	108-86-1	ND	0.250	2.50	2.38	95	73 - 124	2.50	2.33	93	2	30
Bromochloromethane	74-97-5	ND	0.250	2.50	2.29	92	73 - 127	2.50	2.25	90	2	30
Bromodichloromethane	75-27-4	ND	0.250	2.50	2.40	96	74 - 126	2.50	2.37	95	1	30

GC/MS Volatiles QC Summary

Analytical Batch 570911	Client ID	MB570911		LCS570911				LCSD570911				
	GCAL ID	1502353		1502354				1502355				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/23/2015 20:33		10/23/2015 18:42				10/23/2015 19:04				
	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	2.60	104	67 - 122	2.50	2.60	104	0	30
Bromomethane	74-83-9	ND	0.250	2.50	2.30	92	48 - 139	2.50	2.19	88	5	30
Carbon disulfide	75-15-0	ND	0.250	2.50	2.37	95	68 - 133	2.50	2.25	90	5	30
Carbon tetrachloride	56-23-5	ND	0.250	2.50	2.23	89	71 - 133	2.50	2.14	86	4	30
Chlorobenzene	108-90-7	ND	0.250	2.50	2.31	92	75 - 121	2.50	2.27	91	2	20
Chloroethane	75-00-3	ND	0.250	2.50	2.57	103	57 - 144	2.50	2.54	102	1	30
Chloroform	67-66-3	ND	0.250	2.50	2.34	94	74 - 124	2.50	2.28	91	3	30
Chloromethane	74-87-3	ND	0.250	2.50	2.22	89	61 - 130	2.50	2.17	87	2	30
cis-1,2-Dichloroethene	156-59-2	ND	0.250	2.50	2.35	94	72 - 130	2.50	2.24	90	5	30
cis-1,3-Dichloropropene	10061-01-5	ND	0.250	2.50	2.40	96	72 - 129	2.50	2.34	94	3	30
Dibromochloromethane	124-48-1	ND	0.250	2.50	2.40	96	74 - 122	2.50	2.46	98	2	30
Dibromomethane	74-95-3	ND	0.250	2.50	2.47	99	72 - 125	2.50	2.40	96	3	30
Dichlorodifluoromethane	75-71-8	ND	0.250	2.50	2.41	96	59 - 138	2.50	2.25	90	7	30
Ethylbenzene	100-41-4	ND	0.250	2.50	2.28	91	74 - 130	2.50	2.26	90	1	30
Hexachlorobutadiene	87-68-3	ND	0.250	2.50	2.40	96	71 - 140	2.50	2.29	92	5	30
Isopropylbenzene (Cumene)	98-82-8	ND	0.250	2.50	2.30	92	74 - 125	2.50	2.24	90	3	30
m,p-Xylene	136777-61-2	ND	0.500	5.00	4.90	98	72 - 128	5.00	4.80	96	2	30
Methyl iodide	74-88-4	ND	0.250	2.50	2.38	95	54 - 140	2.50	2.35	94	1	30
Methylene chloride	75-09-2	ND	0.500	2.50	1.82	73	66 - 130	2.50	1.84	74	1	30
Naphthalene	91-20-3	ND	0.250	2.50	3.27	131	54 - 132	2.50	3.29	132	1	35
n-Butylbenzene	104-51-8	ND	0.250	2.50	2.35	94	68 - 144	2.50	2.27	91	3	30
n-Propylbenzene	103-65-1	ND	0.250	2.50	2.16	86	73 - 137	2.50	2.03	81	6	30
o-Xylene	95-47-6	ND	0.250	2.50	2.43	97	69 - 133	2.50	2.41	96	1	30
sec-Butylbenzene	135-98-8	ND	0.250	2.50	2.36	94	72 - 141	2.50	2.22	89	6	30
Styrene	100-42-5	ND	0.250	2.50	2.32	93	72 - 128	2.50	2.32	93	0	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	0.250	2.50	2.38	95	69 - 126	2.50	2.40	96	1	30
tert-Butylbenzene	98-06-6	ND	0.250	2.50	2.19	88	72 - 136	2.50	2.10	84	4	30
Tetrachloroethene	127-18-4	ND	0.250	2.50	2.35	94	70 - 127	2.50	2.26	90	4	30
Toluene	108-88-3	ND	0.250	2.50	2.33	93	74 - 121	2.50	2.26	90	3	20
trans-1,2-Dichloroethene	156-60-5	ND	0.250	2.50	2.08	83	67 - 134	2.50	2.04	82	2	30
trans-1,3-Dichloropropene	10061-02-6	ND	0.250	2.50	2.56	102	72 - 126	2.50	2.58	103	1	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.250	2.50	2.69	108	44 - 146	2.50	2.71	108	1	30
Trichloroethene	79-01-6	ND	0.250	2.50	2.36	94	78 - 127	2.50	2.34	94	1	20
Trichlorofluoromethane	75-69-4	ND	0.250	2.50	2.30	92	64 - 141	2.50	2.23	89	3	30
Trichlorotrifluoroethane	76-13-1	ND	0.250	2.50	2.47	99	66 - 139	2.50	2.32	93	6	30
Vinyl chloride	75-01-4	ND	0.250	2.50	2.40	96	67 - 131	2.50	2.32	93	3	30
Xylene (total)	1330-20-7	ND	0.750	7.50	7.33	98	71 - 129	7.50	7.22	96	2	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	2.68	107	2.5	2.57	103	62 - 125	2.5	2.56	102	0	NA
4-Bromofluorobenzene	460-00-4	2.8	112	2.5	2.6	104	62 - 127	2.5	2.66	106	2	NA
Dibromofluoromethane	1868-53-7	2.65	106	2.5	2.49	100	65 - 130	2.5	2.52	101	1	NA
Toluene d8	2037-26-5	2.47	99	2.5	2.47	99	71 - 132	2.5	2.5	100	1	NA

Analytical Batch 570841	Client ID	MB570841		LCS570841				LCSD570841				
	GCAL ID	1501871		1501872				1501873				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/23/2015 10:49		10/23/2015 08:56				10/23/2015 09:18				
	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	46.8	94	75 - 124	50.0	47.0	94	0	30
1,1,1-Trichloroethane	71-55-6	ND	5.00	50.0	42.6	85	76 - 126	50.0	41.4	83	3	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	5.00	50.0	39.7	79	70 - 122	50.0	40.6	81	2	30
1,1,2-Trichloroethane	79-00-5	ND	5.00	50.0	43.6	87	72 - 121	50.0	44.4	89	2	30
1,1-Dichloroethane	75-34-3	ND	5.00	50.0	44.6	89	74 - 127	50.0	44.4	89	0	30
1,1-Dichloroethene	75-35-4	ND	5.00	50.0	47.9	96	69 - 129	50.0	48.1	96	0	20

GC/MS Volatiles QC Summary

Analytical Batch 570841	Client ID	MB570841		LCS570841				LCSD570841				
	GCAL ID	1501871		1501872				1501873				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/23/2015 10:49		10/23/2015 08:56				10/23/2015 09:18				
	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-Dichloropropene	563-58-6	ND	5.00	50.0	45.2	90	72 - 131	50.0	47.1	94	4	30
1,2,3-Trichloropropane	96-18-4	ND	5.00	50.0	39.8	80	70 - 120	50.0	40.1	80	1	30
1,2,4-Trichlorobenzene	120-82-1	ND	5.00	50.0	51.0	102	61 - 135	50.0	51.9	104	2	30
1,2,4-Trimethylbenzene	95-63-6	ND	5.00	50.0	46.2	92	74 - 125	50.0	47.1	94	2	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	5.00	50.0	44.7	89	57 - 121	50.0	48.9	98	9	30
1,2-Dibromoethane	106-93-4	ND	5.00	50.0	47.8	96	70 - 124	50.0	45.6	91	5	30
1,2-Dichlorobenzene	95-50-1	ND	5.00	50.0	44.6	89	71 - 126	50.0	45.5	91	2	30
1,2-Dichloroethane	107-06-2	ND	5.00	50.0	41.7	83	71 - 129	50.0	40.9	82	2	30
1,2-Dichloroethene(Total)	540-59-0	ND	10.0	100	95.8	96	74 - 128	100	95.4	95	0	30
1,2-Dichloropropane	78-87-5	ND	5.00	50.0	40.8	82	72 - 128	50.0	45.0	90	10	30
1,3,5-Trimethylbenzene	108-67-8	ND	5.00	50.0	45.5	91	71 - 132	50.0	44.1	88	3	30
1,3-Dichlorobenzene	541-73-1	ND	5.00	50.0	45.9	92	74 - 126	50.0	46.0	92	0	30
1,3-Dichloropropane	142-28-9	ND	5.00	50.0	45.9	92	74 - 122	50.0	46.1	92	0	30
1,4-Dichlorobenzene	106-46-7	ND	5.00	50.0	42.7	85	72 - 122	50.0	44.2	88	3	30
2,2-Dichloropropane	594-20-7	ND	5.00	50.0	46.6	93	77 - 124	50.0	44.0	88	6	30
2-Butanone	78-93-3	ND	5.00	50.0	40.3	81	58 - 137	50.0	39.2	78	3	30
2-Chlorotoluene	95-49-8	ND	5.00	50.0	42.9	86	72 - 127	50.0	42.4	85	1	30
2-Hexanone	591-78-6	ND	5.00	50.0	43.9	88	50 - 135	50.0	46.8	94	6	30
4-Chlorotoluene	106-43-4	ND	5.00	50.0	44.0	88	75 - 126	50.0	41.5	83	6	30
4-Isopropyltoluene	99-87-6	ND	5.00	50.0	45.9	92	71 - 129	50.0	46.4	93	1	30
4-Methyl-2-pentanone	108-10-1	ND	5.00	50.0	40.6	81	57 - 132	50.0	40.9	82	1	30
Acetone	67-64-1	ND	5.00	50.0	61.0	122	44 - 156	50.0	60.8	122	0	30
Benzene	71-43-2	ND	5.00	50.0	45.1	90	70 - 129	50.0	46.4	93	3	20
Bromobenzene	108-86-1	ND	5.00	50.0	39.7	79	71 - 120	50.0	37.7	75	5	30
Bromochloromethane	74-97-5	ND	5.00	50.0	51.3	103	76 - 130	50.0	51.0	102	1	30
Bromodichloromethane	75-27-4	ND	5.00	50.0	41.4	83	74 - 125	50.0	45.9	92	10	30
Bromoform	75-25-2	ND	5.00	50.0	50.0	100	64 - 122	50.0	50.5	101	1	30
Bromomethane	74-83-9	ND	5.00	50.0	59.1	118	47 - 138	50.0	67.0	134	13	30
Carbon disulfide	75-15-0	ND	5.00	50.0	49.7	99	69 - 136	50.0	51.2	102	3	30
Carbon tetrachloride	56-23-5	ND	5.00	50.0	47.5	95	76 - 128	50.0	45.2	90	5	30
Chlorobenzene	108-90-7	ND	5.00	50.0	48.6	97	74 - 123	50.0	48.2	96	1	20
Chloroethane	75-00-3	ND	5.00	50.0	44.6	89	62 - 141	50.0	46.6	93	4	30
Chloroform	67-66-3	ND	5.00	50.0	44.5	89	75 - 122	50.0	43.4	87	3	30
Chloromethane	74-87-3	ND	5.00	50.0	39.4	79	59 - 132	50.0	43.7	87	10	30
cis-1,2-Dichloroethene	156-59-2	ND	5.00	50.0	46.0	92	73 - 130	50.0	44.3	89	4	30
cis-1,3-Dichloropropene	10061-01-5	ND	5.00	50.0	46.2	92	71 - 132	50.0	50.4	101	9	30
Dibromochloromethane	124-48-1	ND	5.00	50.0	51.0	102	71 - 123	50.0	50.8	102	0	30
Dibromomethane	74-95-3	ND	5.00	50.0	46.3	93	72 - 129	50.0	50.2	100	8	30
Dichlorodifluoromethane	75-71-8	ND	5.00	50.0	39.2	78	58 - 140	50.0	40.0	80	2	30
Ethylbenzene	100-41-4	ND	5.00	50.0	50.1	100	74 - 126	50.0	49.0	98	2	30
Hexachlorobutadiene	87-68-3	ND	5.00	50.0	49.0	98	61 - 144	50.0	47.2	94	4	30
Isopropylbenzene (Cumene)	98-82-8	ND	5.00	50.0	50.1	100	71 - 125	50.0	48.8	98	3	30
m,p-Xylene	136777-61-2	ND	10.0	100	103	103	74 - 126	100	102	102	1	30
Methyl iodide	74-88-4	ND	5.00	50.0	80.6	**161***	57 - 141	50.0	90.3	**181***	11	30
Methylene chloride	75-09-2	ND	5.00	50.0	46.3	93	68 - 132	50.0	47.3	95	2	30
Naphthalene	91-20-3	ND	5.00	50.0	43.3	87	57 - 138	50.0	45.7	91	5	35
n-Butylbenzene	104-51-8	ND	5.00	50.0	45.7	91	69 - 134	50.0	46.7	93	2	30
n-Propylbenzene	103-65-1	ND	5.00	50.0	43.4	87	75 - 129	50.0	41.1	82	5	30
o-Xylene	95-47-6	ND	5.00	50.0	54.2	108	73 - 130	50.0	54.6	109	1	30
sec-Butylbenzene	135-98-8	ND	5.00	50.0	45.4	91	70 - 136	50.0	46.0	92	1	30
Styrene	100-42-5	ND	5.00	50.0	53.1	106	71 - 127	50.0	53.2	106	0	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	5.00	50.0	47.5	95	71 - 125	50.0	48.5	97	2	30
tert-Butylbenzene	98-06-6	ND	5.00	50.0	43.7	87	72 - 126	50.0	44.7	89	2	30
Tetrachloroethene	127-18-4	ND	5.00	50.0	51.5	103	68 - 128	50.0	50.2	100	3	30
Toluene	108-88-3	ND	5.00	50.0	49.4	99	72 - 120	50.0	48.0	96	3	20
trans-1,2-Dichloroethene	156-60-5	ND	5.00	50.0	49.8	100	69 - 132	50.0	51.1	102	3	30
trans-1,3-Dichloropropene	10061-02-6	ND	5.00	50.0	43.9	88	71 - 131	50.0	45.5	91	4	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	5.00	50.0	37.7	75	56 - 132	50.0	38.7	77	3	30

GC/MS Volatiles QC Summary

Analytical Batch 570841	Client ID	MB570841		LCS570841				LCSD570841				
	GCAL ID	1501871		1501872				1501873				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/23/2015 10:49		10/23/2015 08:56				10/23/2015 09:18				
	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	47.1	94	76 - 129	50.0	47.5	95	1	20
Trichlorofluoromethane	75-69-4	ND	5.00	50.0	45.7	91	72 - 136	50.0	46.0	92	1	30
Trichlorotrifluoroethane	76-13-1	ND	5.00	50.0	52.6	105	72 - 136	50.0	51.8	104	2	30
Vinyl chloride	75-01-4	ND	2.00	50.0	44.4	89	68 - 132	50.0	47.8	96	7	30
Xylene (total)	1330-20-7	ND	15.0	150	157	105	74 - 127	150	157	105	0	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	47	94	50	47.4	95	71 - 127	50	46.4	93	2	NA
4-Bromofluorobenzene	460-00-4	52.4	105	50	58.8	118	78 - 130	50	53.9	108	9	NA
Dibromofluoromethane	1868-53-7	50.5	101	50	52.2	104	77 - 127	50	48.8	98	7	NA
Toluene d8	2037-26-5	52.4	105	50	51.8	104	76 - 134	50	49.9	100	4	NA

CHAIN OF CUSTODY RECORD

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

Client ID: 4912 - Clearwater Environmental Resources
SDG: 215102205
PM: SAK

Report to:	Bill to:
Client: Clearwater Envil Resources	Client: Same
Address: 3870 Peachtree Ind. Blvd Ste 340134, Duluth, GA 30096	Address:
Contact: Jack Wintle	Contact:
Phone: 678-491-4601	Phone:
E-mail: jack.wintle@clearwaterenv.net	E-mail:

P.O. Number: —
Project Name/Number: Raylac Excavation
Sampled By: Jack A. Wintle

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	No Containers	EPA Method 8260B-VOCs	VOCs – 8260B	HCl	Preservative
S	10/20/15	1400		X	OT-S West Wall	4	X			
		1403			OT-S East Wall					
		1406			OT-S North Wall					
		1409			OT-S South Wall					
		1357			OT-S Floor					
W	10/21/15	—			Trip Blank	3		X		

Analytical Requests & Method

GCAL use only:
Custody Seal used ☐ yes ☐ no intact ☐ yes ☐ no
Temperature °C 1.6 EDT

☐ Dissolved Analysis Requested
☐ Field filtered
☐ Lab filtered

Air Bill No: 7747 9131 7546

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]	10/20	14:51	[signature]	10/20/15	14:51
[signature]	10/21	0730	[signature]	10/21/15	0730
[signature]	10/21/15	0845	[signature]		

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.

FedEx 10/22/15 0949 Nate Sitton 10-22-15 0949

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT

GCAL ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIVING CHECKLIST

215102205

SAMPLE DELIVERY GROUP 215102205	
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)*** 10/22/15

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 VOA vials received with no 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: E24	Temp(°C)
7747 9131 7546		1.6

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

Revision 1.4

Page 1 of 1

ANALYTICAL RESULTS

PERFORMED BY

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

Report Date 11/09/2015

GCAL Report 215110613

Project Rayloc

Deliver To	***Report cc***
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 215110613

Case Narrative

Client: Clearwater Environmental Resources **Report:** 215110613

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 21511061301 (OT-3 SOUTH WALL) and 21511061302 (OT-3 NORTH WALL) 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.

Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21511061301	OT-3 SOUTH WALL	Solid	11/03/2015 16:35	11/06/2015 12:30
21511061302	OT-3 NORTH WALL	Solid	11/03/2015 16:40	11/06/2015 12:30
21511061303	OT-5 FLOOR	Solid	11/05/2015 10:45	11/06/2015 12:30
21511061304	TRIP BLANK	Water	11/05/2015 00:01	11/06/2015 12:30

Summary of Compounds Detected

OT-3 SOUTH WALL

Collect Date 11/03/2015 16:35 **GCAL ID** 21511061301
Receive Date 11/06/2015 12:30 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
156-59-2	cis-1,2-Dichloroethene	7.50	5.78	mg/kg
91-20-3	Naphthalene	8.16	5.78	mg/kg
127-18-4	Tetrachloroethene	420	57.8	mg/kg
79-01-6	Trichloroethene	18.6	5.78	mg/kg

OT-3 NORTH WALL

Collect Date 11/03/2015 16:40 **GCAL ID** 21511061302
Receive Date 11/06/2015 12:30 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	0.509	0.265	mg/kg

OT-5 FLOOR

Collect Date 11/05/2015 10:45 **GCAL ID** 21511061303
Receive Date 11/06/2015 12:30 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	0.020	0.00657	mg/kg

Sample Results

OT-3 SOUTH WALL	**Collect Date**	11/03/2015 16:35	**GCAL ID**	21511061301
	Receive Date	11/06/2015 12:30	**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	11/07/2015 15:11	BMC2	571935

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.78	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	5.78	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.78	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	5.78	mg/kg
75-34-3	1,1-Dichloroethane	ND	5.78	mg/kg
75-35-4	1,1-Dichloroethene	ND	5.78	mg/kg
563-58-6	1,1-Dichloropropene	ND	5.78	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	5.78	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	5.78	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	5.78	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.78	mg/kg
106-93-4	1,2-Dibromoethane	ND	5.78	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	5.78	mg/kg
107-06-2	1,2-Dichloroethane	ND	5.78	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	11.6	mg/kg
78-87-5	1,2-Dichloropropane	ND	5.78	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	5.78	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	5.78	mg/kg
142-28-9	1,3-Dichloropropane	ND	5.78	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	5.78	mg/kg
594-20-7	2,2-Dichloropropane	ND	5.78	mg/kg
78-93-3	2-Butanone	ND	5.78	mg/kg
95-49-8	2-Chlorotoluene	ND	5.78	mg/kg
591-78-6	2-Hexanone	ND	5.78	mg/kg
106-43-4	4-Chlorotoluene	ND	5.78	mg/kg
99-87-6	4-Isopropyltoluene	ND	5.78	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	5.78	mg/kg
67-64-1	Acetone	ND	28.9	mg/kg
71-43-2	Benzene	ND	5.78	mg/kg
108-86-1	Bromobenzene	ND	5.78	mg/kg
74-97-5	Bromochloromethane	ND	5.78	mg/kg
75-27-4	Bromodichloromethane	ND	5.78	mg/kg
75-25-2	Bromoform	ND	5.78	mg/kg
74-83-9	Bromomethane	ND	5.78	mg/kg
75-15-0	Carbon disulfide	ND	5.78	mg/kg
56-23-5	Carbon tetrachloride	ND	5.78	mg/kg
108-90-7	Chlorobenzene	ND	5.78	mg/kg
75-00-3	Chloroethane	ND	5.78	mg/kg
67-66-3	Chloroform	ND	5.78	mg/kg
74-87-3	Chloromethane	ND	5.78	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**7.50**	**5.78**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	5.78	mg/kg
124-48-1	Dibromochloromethane	ND	5.78	mg/kg
74-95-3	Dibromomethane	ND	5.78	mg/kg
75-71-8	Dichlorodifluoromethane	ND	5.78	mg/kg
100-41-4	Ethylbenzene	ND	5.78	mg/kg
87-68-3	Hexachlorobutadiene	ND	5.78	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	5.78	mg/kg

Sample Results

OT-3 SOUTH WALL	**Collect Date**	11/03/2015 16:35	**GCAL ID**	21511061301
	Receive Date	11/06/2015 12:30	**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	11/07/2015 15:11	BMC2	571935

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	11.6	mg/kg
74-88-4	Methyl iodide	ND	5.78	mg/kg
75-09-2	Methylene chloride	ND	11.6	mg/kg
91-20-3	**Naphthalene**	**8.16**	**5.78**	**mg/kg**
104-51-8	n-Butylbenzene	ND	5.78	mg/kg
103-65-1	n-Propylbenzene	ND	5.78	mg/kg
95-47-6	o-Xylene	ND	5.78	mg/kg
135-98-8	sec-Butylbenzene	ND	5.78	mg/kg
100-42-5	Styrene	ND	5.78	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	5.78	mg/kg
98-06-6	tert-Butylbenzene	ND	5.78	mg/kg
108-88-3	Toluene	ND	5.78	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	5.78	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	5.78	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	5.78	mg/kg
79-01-6	**Trichloroethene**	**18.6**	**5.78**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	5.78	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	5.78	mg/kg
75-01-4	Vinyl chloride	ND	5.78	mg/kg
1330-20-7	Xylene (total)	ND	17.3	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	43.50	41.4	ug/Kg	95	62 - 127
1868-53-7	Dibromofluoromethane	43.50	43.5	ug/Kg	100	65 - 130
2037-26-5	Toluene d8	43.50	42.9	ug/Kg	99	71 - 132
17060-07-0	1,2-Dichloroethane-d4	43.50	43.9	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	10000	11/07/2015 14:51	BMC2	571935

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**420**	**57.8**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	435	405	ug/Kg	93	62 - 127
1868-53-7	Dibromofluoromethane	435	431	ug/Kg	99	65 - 130
2037-26-5	Toluene d8	435	452	ug/Kg	104	71 - 132
17060-07-0	1,2-Dichloroethane-d4	435	454	ug/Kg	104	62 - 125

Sample Results

OT-3 NORTH WALL	**Collect Date**	11/03/2015 16:40	**GCAL ID**	21511061302
	Receive Date	11/06/2015 12:30	**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	11/07/2015 16:31	BMC2	571935

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.265	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.265	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.265	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.265	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.265	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.265	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.265	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.265	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.265	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.265	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.265	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.265	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.265	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.265	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.530	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.265	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.265	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.265	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.265	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.265	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.265	mg/kg
78-93-3	2-Butanone	ND	0.265	mg/kg
95-49-8	2-Chlorotoluene	ND	0.265	mg/kg
591-78-6	2-Hexanone	ND	0.265	mg/kg
106-43-4	4-Chlorotoluene	ND	0.265	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.265	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.265	mg/kg
67-64-1	Acetone	ND	1.33	mg/kg
71-43-2	Benzene	ND	0.265	mg/kg
108-86-1	Bromobenzene	ND	0.265	mg/kg
74-97-5	Bromochloromethane	ND	0.265	mg/kg
75-27-4	Bromodichloromethane	ND	0.265	mg/kg
75-25-2	Bromoform	ND	0.265	mg/kg
74-83-9	Bromomethane	ND	0.265	mg/kg
75-15-0	Carbon disulfide	ND	0.265	mg/kg
56-23-5	Carbon tetrachloride	ND	0.265	mg/kg
108-90-7	Chlorobenzene	ND	0.265	mg/kg
75-00-3	Chloroethane	ND	0.265	mg/kg
67-66-3	Chloroform	ND	0.265	mg/kg
74-87-3	Chloromethane	ND	0.265	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	0.265	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.265	mg/kg
124-48-1	Dibromochloromethane	ND	0.265	mg/kg
74-95-3	Dibromomethane	ND	0.265	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.265	mg/kg
100-41-4	Ethylbenzene	ND	0.265	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.265	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.265	mg/kg

Sample Results

OT-3 NORTH WALL

Collect Date 11/03/2015 16:40 **GCAL ID** 21511061302
Receive Date 11/06/2015 12:30 **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	11/07/2015 16:31	BMC2	571935

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.530	mg/kg
74-88-4	Methyl iodide	ND	0.265	mg/kg
75-09-2	Methylene chloride	ND	0.530	mg/kg
91-20-3	Naphthalene	ND	0.265	mg/kg
104-51-8	n-Butylbenzene	ND	0.265	mg/kg
103-65-1	n-Propylbenzene	ND	0.265	mg/kg
95-47-6	o-Xylene	ND	0.265	mg/kg
135-98-8	sec-Butylbenzene	ND	0.265	mg/kg
100-42-5	Styrene	ND	0.265	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.265	mg/kg
98-06-6	tert-Butylbenzene	ND	0.265	mg/kg
127-18-4	**Tetrachloroethene**	**0.509**	**0.265**	**mg/kg**
108-88-3	Toluene	ND	0.265	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.265	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.265	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.265	mg/kg
79-01-6	Trichloroethene	ND	0.265	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.265	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.265	mg/kg
75-01-4	Vinyl chloride	ND	0.265	mg/kg
1330-20-7	Xylene (total)	ND	0.796	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2.16	2.26	ug/Kg	104	62 - 127
1868-53-7	Dibromofluoromethane	2.16	2.08	ug/Kg	96	65 - 130
2037-26-5	Toluene d8	2.16	2.16	ug/Kg	100	71 - 132
17060-07-0	1,2-Dichloroethane-d4	2.16	2.26	ug/Kg	104	62 - 125

OT-5 FLOOR

Collect Date 11/05/2015 10:45 **GCAL ID** 21511061303
Receive Date 11/06/2015 12:30 **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	1	11/08/2015 21:02	CLH	571988

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.00657	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.00657	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.00657	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.00657	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.00657	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.00657	mg/kg

Sample Results

OT-5 FLOOR

Collect Date	11/05/2015 10:45	**GCAL ID**	21511061303
Receive Date	11/06/2015 12:30	**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	1	11/08/2015 21:02	CLH	571988

CAS#	Parameter	Result	LOQ	Units
563-58-6	1,1-Dichloropropene	ND	0.00657	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.00657	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.00657	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.00657	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.00657	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.00657	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.00657	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.00657	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.013	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.00657	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.00657	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.00657	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.00657	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.00657	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.00657	mg/kg
78-93-3	2-Butanone	ND	0.00657	mg/kg
95-49-8	2-Chlorotoluene	ND	0.00657	mg/kg
591-78-6	2-Hexanone	ND	0.00657	mg/kg
106-43-4	4-Chlorotoluene	ND	0.00657	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.00657	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.00657	mg/kg
67-64-1	Acetone	ND	0.033	mg/kg
71-43-2	Benzene	ND	0.00657	mg/kg
108-86-1	Bromobenzene	ND	0.00657	mg/kg
74-97-5	Bromochloromethane	ND	0.00657	mg/kg
75-27-4	Bromodichloromethane	ND	0.00657	mg/kg
75-25-2	Bromoform	ND	0.00657	mg/kg
74-83-9	Bromomethane	ND	0.00657	mg/kg
75-15-0	Carbon disulfide	ND	0.00657	mg/kg
56-23-5	Carbon tetrachloride	ND	0.00657	mg/kg
108-90-7	Chlorobenzene	ND	0.00657	mg/kg
75-00-3	Chloroethane	ND	0.00657	mg/kg
67-66-3	Chloroform	ND	0.00657	mg/kg
74-87-3	Chloromethane	ND	0.00657	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	0.00657	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.00657	mg/kg
124-48-1	Dibromochloromethane	ND	0.00657	mg/kg
74-95-3	Dibromomethane	ND	0.00657	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.00657	mg/kg
100-41-4	Ethylbenzene	ND	0.00657	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.00657	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.00657	mg/kg
136777-61-2	m,p-Xylene	ND	0.013	mg/kg
74-88-4	Methyl iodide	ND	0.00657	mg/kg
75-09-2	Methylene chloride	ND	0.013	mg/kg
91-20-3	Naphthalene	ND	0.00657	mg/kg
104-51-8	n-Butylbenzene	ND	0.00657	mg/kg
103-65-1	n-Propylbenzene	ND	0.00657	mg/kg

Sample Results

OT-5 FLOOR

Collect Date 11/05/2015 10:45 **GCAL ID** 21511061303
Receive Date 11/06/2015 12:30 **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	1	11/08/2015 21:02	CLH	571988

CAS#	Parameter	Result	LOQ	Units
95-47-6	o-Xylene	ND	0.00657	mg/kg
135-98-8	sec-Butylbenzene	ND	0.00657	mg/kg
100-42-5	Styrene	ND	0.00657	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.00657	mg/kg
98-06-6	tert-Butylbenzene	ND	0.00657	mg/kg
127-18-4	**Tetrachloroethene**	**0.020**	**0.00657**	**mg/kg**
108-88-3	Toluene	ND	0.00657	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.00657	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.00657	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.00657	mg/kg
79-01-6	Trichloroethene	ND	0.00657	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.00657	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.00657	mg/kg
75-01-4	Vinyl chloride	ND	0.00657	mg/kg
1330-20-7	Xylene (total)	ND	0.020	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	0.05	.05	ug/Kg	100	62 - 127
1868-53-7	Dibromofluoromethane	0.05	.049	ug/Kg	99	65 - 130
2037-26-5	Toluene d8	0.05	.05	ug/Kg	101	71 - 132
17060-07-0	1,2-Dichloroethane-d4	0.05	.055	ug/Kg	110	62 - 125

TRIP BLANK

Collect Date 11/05/2015 00:01 **GCAL ID** 21511061304
Receive Date 11/06/2015 12:30 **Matrix** Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/08/2015 16:01	CLH	571980

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

Sample Results

TRIP BLANK

Collect Date	11/05/2015 00:01	**GCAL ID**	21511061304
Receive Date	11/06/2015 12:30	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/08/2015 16:01	CLH	571980

CAS#	Parameter	Result	LOQ	Units
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
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

Sample Results

TRIP BLANK

Collect Date	11/05/2015 00:01	**GCAL ID**	21511061304
Receive Date	11/06/2015 12:30	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	11/08/2015 16:01	CLH	571980

CAS#	Parameter	Result	LOQ	Units
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	5.00	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	45.2	ug/L	90	78 - 130
1868-53-7	Dibromofluoromethane	50	50	ug/L	100	77 - 127
2037-26-5	Toluene d8	50	49.4	ug/L	99	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	51.5	ug/L	103	71 - 127

GC/MS Volatiles QC Summary

Analytical Batch 571935	Client ID	MB571935		LCS571935				LCSD571935				
	GCAL ID	1507182		1507183				1507184				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	11/07/2015 14:31		11/07/2015 12:51				11/07/2015 13:11				
	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	2.69	108	77 - 122	2.50	2.58	103	4	30
1,1,1-Trichloroethane	71-55-6	ND	0.250	2.50	2.54	102	70 - 130	2.50	2.43	97	4	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.250	2.50	2.51	100	66 - 129	2.50	2.52	101	0	30
1,1,2-Trichloroethane	79-00-5	ND	0.250	2.50	2.57	103	74 - 120	2.50	2.55	102	1	30
1,1-Dichloroethane	75-34-3	ND	0.250	2.50	2.56	102	71 - 126	2.50	2.43	97	5	30
1,1-Dichloroethene	75-35-4	ND	0.250	2.50	2.39	96	68 - 129	2.50	2.22	89	7	20
1,1-Dichloropropene	563-58-6	ND	0.250	2.50	2.60	104	70 - 138	2.50	2.39	96	8	30
1,2,3-Trichloropropane	96-18-4	ND	0.250	2.50	2.42	97	63 - 132	2.50	2.52	101	4	30
1,2,4-Trichlorobenzene	120-82-1	ND	0.250	2.50	2.13	85	64 - 135	2.50	2.12	85	1	30
1,2,4-Trimethylbenzene	95-63-6	ND	0.250	2.50	2.60	104	75 - 130	2.50	2.51	100	4	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.250	2.50	2.27	91	60 - 123	2.50	2.36	94	4	30
1,2-Dibromoethane	106-93-4	ND	0.250	2.50	2.64	106	74 - 122	2.50	2.54	102	4	30
1,2-Dichlorobenzene	95-50-1	ND	0.250	2.50	2.56	102	76 - 125	2.50	2.48	99	3	30
1,2-Dichloroethane	107-06-2	ND	0.250	2.50	2.52	101	68 - 126	2.50	2.45	98	3	30
1,2-Dichloroethene(Total)	540-59-0	ND	0.500	5.00	5.18	104	72 - 129	5.00	4.87	97	6	30
1,2-Dichloropropane	78-87-5	ND	0.250	2.50	2.71	108	72 - 129	2.50	2.61	104	4	30
1,3,5-Trimethylbenzene	108-67-8	ND	0.250	2.50	2.63	105	74 - 136	2.50	2.48	99	6	30
1,3-Dichlorobenzene	541-73-1	ND	0.250	2.50	2.55	102	77 - 127	2.50	2.37	95	7	30
1,3-Dichloropropane	142-28-9	ND	0.250	2.50	2.54	102	77 - 121	2.50	2.52	101	1	30
1,4-Dichlorobenzene	106-46-7	ND	0.250	2.50	2.42	97	74 - 123	2.50	2.35	94	3	30
2,2-Dichloropropane	594-20-7	ND	0.250	2.50	2.55	102	74 - 129	2.50	2.36	94	8	30
2-Butanone	78-93-3	ND	0.250	2.50	2.42	97	47 - 142	2.50	2.39	96	1	30
2-Chlorotoluene	95-49-8	ND	0.250	2.50	2.59	104	75 - 132	2.50	2.44	98	6	30
2-Hexanone	591-78-6	ND	0.250	2.50	2.77	111	47 - 137	2.50	2.88	115	4	30
4-Chlorotoluene	106-43-4	ND	0.250	2.50	2.62	105	74 - 133	2.50	2.48	99	5	30
4-Isopropyltoluene	99-87-6	ND	0.250	2.50	2.62	105	71 - 136	2.50	2.45	98	7	30
4-Methyl-2-pentanone	108-10-1	ND	0.250	2.50	2.61	104	52 - 136	2.50	2.78	111	6	30
Acetone	67-64-1	ND	1.25	2.50	3.11	124	38 - 152	2.50	3.25	130	4	30
Benzene	71-43-2	ND	0.250	2.50	2.61	104	73 - 128	2.50	2.48	99	5	20
Bromobenzene	108-86-1	ND	0.250	2.50	2.52	101	73 - 124	2.50	2.43	97	4	30
Bromochloromethane	74-97-5	ND	0.250	2.50	2.57	103	73 - 127	2.50	2.42	97	6	30
Bromodichloromethane	75-27-4	ND	0.250	2.50	2.64	106	74 - 126	2.50	2.51	100	5	30
Bromoform	75-25-2	ND	0.250	2.50	2.56	102	67 - 122	2.50	2.57	103	0	30
Bromomethane	74-83-9	ND	0.250	2.50	2.17	87	48 - 139	2.50	2.00	80	8	30
Carbon disulfide	75-15-0	ND	0.250	2.50	2.44	98	68 - 133	2.50	2.22	89	9	30
Carbon tetrachloride	56-23-5	ND	0.250	2.50	2.62	105	71 - 133	2.50	2.40	96	9	30
Chlorobenzene	108-90-7	ND	0.250	2.50	2.55	102	75 - 121	2.50	2.43	97	5	20
Chloroethane	75-00-3	ND	0.250	2.50	2.73	109	57 - 144	2.50	2.60	104	5	30
Chloroform	67-66-3	ND	0.250	2.50	2.56	102	74 - 124	2.50	2.38	95	7	30
Chloromethane	74-87-3	ND	0.250	2.50	2.08	83	61 - 130	2.50	2.02	81	3	30
cis-1,2-Dichloroethene	156-59-2	ND	0.250	2.50	2.63	105	72 - 130	2.50	2.48	99	6	30
cis-1,3-Dichloropropene	10061-01-5	ND	0.250	2.50	2.45	98	72 - 129	2.50	2.35	94	4	30
Dibromochloromethane	124-48-1	ND	0.250	2.50	2.66	106	74 - 122	2.50	2.65	106	0	30
Dibromomethane	74-95-3	ND	0.250	2.50	2.53	101	72 - 125	2.50	2.58	103	2	30
Dichlorodifluoromethane	75-71-8	ND	0.250	2.50	2.59	104	59 - 138	2.50	2.34	94	10	30
Ethylbenzene	100-41-4	ND	0.250	2.50	2.60	104	74 - 130	2.50	2.47	99	5	30
Hexachlorobutadiene	87-68-3	ND	0.250	2.50	2.60	104	71 - 140	2.50	2.36	94	10	30
Isopropylbenzene (Cumene)	98-82-8	ND	0.250	2.50	2.70	108	74 - 125	2.50	2.51	100	7	30
m,p-Xylene	136777-61-2	ND	0.500	5.00	5.40	108	72 - 128	5.00	5.01	100	7	30
Methyl iodide	74-88-4	ND	0.250	2.50	1.89	76	54 - 140	2.50	1.78	71	6	30
Methylene chloride	75-09-2	ND	0.500	2.50	2.64	106	66 - 130	2.50	2.51	100	5	30
Naphthalene	91-20-3	ND	0.250	2.50	1.99	80	54 - 132	2.50	2.05	82	3	35
n-Butylbenzene	104-51-8	ND	0.250	2.50	2.67	107	68 - 144	2.50	2.45	98	9	30
n-Propylbenzene	103-65-1	ND	0.250	2.50	2.56	102	73 - 137	2.50	2.39	96	7	30
o-Xylene	95-47-6	ND	0.250	2.50	2.76	110	69 - 133	2.50	2.62	105	5	30
sec-Butylbenzene	135-98-8	ND	0.250	2.50	2.58	103	72 - 141	2.50	2.41	96	7	30
Styrene	100-42-5	ND	0.250	2.50	2.75	110	72 - 128	2.50	2.60	104	6	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	0.250	2.50	2.60	104	69 - 126	2.50	2.59	104	0	30

GC/MS Volatiles QC Summary

Analytical Batch 571935	Client ID	MB571935	LCS571935	LCSD571935
	GCAL ID	1507182	1507183	1507184
	Sample Type	MB	LCS	LCSD
	Prep Date	NA	NA	NA
	Analysis Date	11/07/2015 14:31	11/07/2015 12:51	11/07/2015 13:11
	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
tert-Butylbenzene	98-06-6	ND	0.250	2.50	2.57	103	72 - 136	2.50	2.39	96	7	30
Tetrachloroethene	127-18-4	ND	0.250	2.50	2.51	100	70 - 127	2.50	2.30	92	9	30
Toluene	108-88-3	ND	0.250	2.50	2.56	102	74 - 121	2.50	2.45	98	4	20
trans-1,2-Dichloroethene	156-60-5	ND	0.250	2.50	2.55	102	67 - 134	2.50	2.39	96	6	30
trans-1,3-Dichloropropene	10061-02-6	ND	0.250	2.50	2.43	97	72 - 126	2.50	2.36	94	3	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.250	2.50	2.54	102	44 - 146	2.50	2.66	106	5	30
Trichloroethene	79-01-6	ND	0.250	2.50	2.55	102	78 - 127	2.50	2.42	97	5	20
Trichlorofluoromethane	75-69-4	ND	0.250	2.50	2.55	102	64 - 141	2.50	2.30	92	10	30
Trichlorotrifluoroethane	76-13-1	ND	0.250	2.50	2.41	96	66 - 139	2.50	2.17	87	10	30
Vinyl chloride	75-01-4	ND	0.250	2.50	2.55	102	67 - 131	2.50	2.39	96	6	30
Xylene (total)	1330-20-7	ND	0.750	7.50	8.16	109	71 - 129	7.50	7.63	102	7	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	2.54	102	2.5	2.59	104	62 - 125	2.5	2.58	103	0	NA
4-Bromofluorobenzene	460-00-4	2.56	102	2.5	2.53	101	62 - 127	2.5	2.5	100	1	NA
Dibromofluoromethane	1868-53-7	2.36	94	2.5	2.47	99	65 - 130	2.5	2.58	103	4	NA
Toluene d8	2037-26-5	2.47	99	2.5	2.47	99	71 - 132	2.5	2.46	98	0	NA

Analytical Batch 571988	Client ID	MB571988	LCS571988	LCSD571988
	GCAL ID	1507298	1507299	1507300
	Sample Type	MB	LCS	LCSD
	Prep Date	NA	NA	NA
	Analysis Date	11/08/2015 20:40	11/08/2015 19:11	11/08/2015 19:33
	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	0.00500	0.050	0.051	102	77 - 122	0.050	0.042	84	19	30
1,1,1-Trichloroethane	71-55-6	ND	0.00500	0.050	0.052	104	70 - 130	0.050	0.041	81	23	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.00500	0.050	0.053	105	66 - 129	0.050	0.047	94	11	30
1,1,2-Trichloroethane	79-00-5	ND	0.00500	0.050	0.051	101	74 - 120	0.050	0.044	88	14	30
1,1-Dichloroethane	75-34-3	ND	0.00500	0.050	0.050	99	71 - 126	0.050	0.040	80	21	30
1,1-Dichloroethene	75-35-4	ND	0.00500	0.050	0.054	108	68 - 129	0.050	0.043	86	22*	20
1,1-Dichloropropene	563-58-6	ND	0.00500	0.050	0.052	104	70 - 138	0.050	0.041	81	24	30
1,2,3-Trichloropropane	96-18-4	ND	0.00500	0.050	0.052	104	63 - 132	0.050	0.045	90	14	30
1,2,4-Trichlorobenzene	120-82-1	ND	0.00500	0.050	0.053	105	64 - 135	0.050	0.044	87	18	30
1,2,4-Trimethylbenzene	95-63-6	ND	0.00500	0.050	0.053	107	75 - 130	0.050	0.044	88	19	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.00500	0.050	0.053	106	60 - 123	0.050	0.046	92	14	30
1,2-Dibromoethane	106-93-4	ND	0.00500	0.050	0.054	108	74 - 122	0.050	0.047	94	14	30
1,2-Dichlorobenzene	95-50-1	ND	0.00500	0.050	0.053	106	76 - 125	0.050	0.044	88	18	30
1,2-Dichloroethane	107-06-2	ND	0.00500	0.050	0.047	94	68 - 126	0.050	0.041	82	13	30
1,2-Dichloroethene(Total)	540-59-0	ND	0.010	0.100	0.102	102	72 - 129	0.100	0.084	84	19	30
1,2-Dichloropropane	78-87-5	ND	0.00500	0.050	0.051	101	72 - 129	0.050	0.043	85	16	30
1,3,5-Trimethylbenzene	108-67-8	ND	0.00500	0.050	0.055	110	74 - 136	0.050	0.045	89	20	30
1,3-Dichlorobenzene	541-73-1	ND	0.00500	0.050	0.052	104	77 - 127	0.050	0.043	86	19	30
1,3-Dichloropropane	142-28-9	ND	0.00500	0.050	0.054	108	77 - 121	0.050	0.046	92	16	30
1,4-Dichlorobenzene	106-46-7	ND	0.00500	0.050	0.051	102	74 - 123	0.050	0.043	86	17	30
2,2-Dichloropropane	594-20-7	ND	0.00500	0.050	0.050	101	74 - 129	0.050	0.039	79	26	30
2-Butanone	78-93-3	ND	0.00500	0.050	0.050	101	47 - 142	0.050	0.046	91	9	30
2-Chlorotoluene	95-49-8	ND	0.00500	0.050	0.052	103	75 - 132	0.050	0.042	84	21	30
2-Hexanone	591-78-6	ND	0.00500	0.050	0.058	115	47 - 137	0.050	0.048	96	18	30
4-Chlorotoluene	106-43-4	ND	0.00500	0.050	0.052	105	74 - 133	0.050	0.043	87	20	30
4-Isopropyltoluene	99-87-6	ND	0.00500	0.050	0.055	110	71 - 136	0.050	0.043	85	24	30
4-Methyl-2-pentanone	108-10-1	ND	0.00500	0.050	0.055	110	52 - 136	0.050	0.049	97	12	30
Acetone	67-64-1	ND	0.025	0.050	0.048	96	38 - 152	0.050	0.044	87	8	30
Benzene	71-43-2	ND	0.00500	0.050	0.051	103	73 - 128	0.050	0.042	84	20	20
Bromobenzene	108-86-1	ND	0.00500	0.050	0.050	101	73 - 124	0.050	0.042	85	18	30
Bromochloromethane	74-97-5	ND	0.00500	0.050	0.049	97	73 - 127	0.050	0.043	86	12	30
Bromodichloromethane	75-27-4	ND	0.00500	0.050	0.052	104	74 - 126	0.050	0.043	87	19	30

GC/MS Volatiles QC Summary

Analytical Batch 571988	Client ID	MB571988		LCS571988				LCSD571988				
	GCAL ID	1507298		1507299				1507300				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	11/08/2015 20:40		11/08/2015 19:11				11/08/2015 19:33				
	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	0.00500	0.050	0.054	107	67 - 122	0.050	0.046	92	15	30
Bromomethane	74-83-9	ND	0.00500	0.050	0.052	104	48 - 139	0.050	0.043	86	19	30
Carbon disulfide	75-15-0	ND	0.00500	0.050	0.055	111	68 - 133	0.050	0.044	88	23	30
Carbon tetrachloride	56-23-5	ND	0.00500	0.050	0.051	102	71 - 133	0.050	0.039	79	27	30
Chlorobenzene	108-90-7	ND	0.00500	0.050	0.052	103	75 - 121	0.050	0.043	85	18	20
Chloroethane	75-00-3	ND	0.00500	0.050	0.051	102	57 - 144	0.050	0.041	82	22	30
Chloroform	67-66-3	ND	0.00500	0.050	0.048	96	74 - 124	0.050	0.040	80	18	30
Chloromethane	74-87-3	ND	0.00500	0.050	0.052	104	61 - 130	0.050	0.043	86	19	30
cis-1,2-Dichloroethene	156-59-2	ND	0.00500	0.050	0.051	102	72 - 130	0.050	0.042	85	20	30
cis-1,3-Dichloropropene	10061-01-5	ND	0.00500	0.050	0.055	110	72 - 129	0.050	0.045	91	20	30
Dibromochloromethane	124-48-1	ND	0.00500	0.050	0.052	104	74 - 122	0.050	0.045	89	15	30
Dibromomethane	74-95-3	ND	0.00500	0.050	0.049	97	72 - 125	0.050	0.044	88	10	30
Dichlorodifluoromethane	75-71-8	ND	0.00500	0.050	0.052	104	59 - 138	0.050	0.040	81	26	30
Ethylbenzene	100-41-4	ND	0.00500	0.050	0.053	105	74 - 130	0.050	0.043	85	20	30
Hexachlorobutadiene	87-68-3	ND	0.00500	0.050	0.054	108	71 - 140	0.050	0.041	82	28	30
Isopropylbenzene (Cumene)	98-82-8	ND	0.00500	0.050	0.055	111	74 - 125	0.050	0.044	89	23	30
m,p-Xylene	136777-61-2	ND	0.010	0.100	0.109	109	72 - 128	0.100	0.087	87	22	30
Methyl iodide	74-88-4	ND	0.00500	0.050	0.046	92	54 - 140	0.050	0.039	78	16	30
Methylene chloride	75-09-2	ND	0.010	0.050	0.051	101	66 - 130	0.050	0.042	84	19	30
Naphthalene	91-20-3	ND	0.00500	0.050	0.055	110	54 - 132	0.050	0.047	95	16	35
n-Butylbenzene	104-51-8	ND	0.00500	0.050	0.059	118	68 - 144	0.050	0.045	90	27	30
n-Propylbenzene	103-65-1	ND	0.00500	0.050	0.055	110	73 - 137	0.050	0.044	88	22	30
o-Xylene	95-47-6	ND	0.00500	0.050	0.054	109	69 - 133	0.050	0.045	89	19	30
sec-Butylbenzene	135-98-8	ND	0.00500	0.050	0.056	113	72 - 141	0.050	0.045	89	22	30
Styrene	100-42-5	ND	0.00500	0.050	0.055	110	72 - 128	0.050	0.046	93	18	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	0.00500	0.050	0.054	108	69 - 126	0.050	0.046	92	16	30
tert-Butylbenzene	98-06-6	ND	0.00500	0.050	0.053	105	72 - 136	0.050	0.042	83	22	30
Tetrachloroethene	127-18-4	ND	0.00500	0.050	0.052	104	70 - 127	0.050	0.040	80	26	30
Toluene	108-88-3	ND	0.00500	0.050	0.054	108	74 - 121	0.050	0.044	88	20	20
trans-1,2-Dichloroethene	156-60-5	ND	0.00500	0.050	0.051	101	67 - 134	0.050	0.041	82	21	30
trans-1,3-Dichloropropene	10061-02-6	ND	0.00500	0.050	0.055	109	72 - 126	0.050	0.046	92	17	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.00500	0.050	0.055	110	44 - 146	0.050	0.048	96	13	30
Trichloroethene	79-01-6	ND	0.00500	0.050	0.050	101	78 - 127	0.050	0.040	80	23*	20
Trichlorofluoromethane	75-69-4	ND	0.00500	0.050	0.052	103	64 - 141	0.050	0.040	81	25	30
Trichlorotrifluoroethane	76-13-1	ND	0.00500	0.050	0.054	109	66 - 139	0.050	0.042	83	26	30
Vinyl chloride	75-01-4	ND	0.00500	0.050	0.050	99	67 - 131	0.050	0.040	79	21	30
Xylene (total)	1330-20-7	ND	0.015	0.150	0.163	109	71 - 129	0.150	0.132	88	21	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	.0479	96	.05	.0477	95	62 - 125	.05	.0484	97	1	NA
4-Bromofluorobenzene	460-00-4	.0489	98	.05	.0503	101	62 - 127	.05	.0499	100	1	NA
Dibromofluoromethane	1868-53-7	.048	96	.05	.049	98	65 - 130	.05	.0488	98	0	NA
Toluene d8	2037-26-5	.0516	103	.05	.0508	102	71 - 132	.05	.0508	102	0	NA

Analytical Batch 571980	Client ID	MB571980		LCS571980				LCSD571980				
	GCAL ID	1507292		1507293				1507294				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	11/08/2015 14:04		11/08/2015 11:36				11/08/2015 11:56				
	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	49.0	98	75 - 124	50.0	51.6	103	5	30
1,1,1-Trichloroethane	71-55-6	ND	5.00	50.0	45.6	91	76 - 126	50.0	49.2	98	8	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	5.00	50.0	46.6	93	70 - 122	50.0	49.2	98	5	30
1,1,2-Trichloroethane	79-00-5	ND	5.00	50.0	46.3	93	72 - 121	50.0	47.5	95	3	30
1,1-Dichloroethane	75-34-3	ND	5.00	50.0	46.8	94	74 - 127	50.0	49.6	99	6	30
1,1-Dichloroethene	75-35-4	ND	5.00	50.0	45.9	92	69 - 129	50.0	49.6	99	8	20

GC/MS Volatiles QC Summary

Analytical Batch 571980	Client ID	MB571980	LCS571980	LCSD571980
	GCAL ID	1507292	1507293	1507294
	Sample Type	MB	LCS	LCSD
	Prep Date	NA	NA	NA
	Analysis Date	11/08/2015 14:04	11/08/2015 11:36	11/08/2015 11:56
	Matrix	Water	Water	Water

EPA 8260B		Units	ug/L	Spike	Result	%R	Control	Spike	Result	%R	RPD	RPD
		Result	LOQ	Added			Limits%R	Added				Limit
1,1-Dichloropropene	563-58-6	ND	5.00	50.0	48.6	97	72 - 131	50.0	51.7	103	6	30
1,2,3-Trichloropropane	96-18-4	ND	5.00	50.0	43.5	87	70 - 120	50.0	45.6	91	5	30
1,2,4-Trichlorobenzene	120-82-1	ND	5.00	50.0	46.1	92	61 - 135	50.0	47.7	95	3	30
1,2,4-Trimethylbenzene	95-63-6	ND	5.00	50.0	48.5	97	74 - 125	50.0	50.3	101	4	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	5.00	50.0	45.9	92	57 - 121	50.0	49.9	100	8	30
1,2-Dibromoethane	106-93-4	ND	5.00	50.0	49.3	99	70 - 124	50.0	51.9	104	5	30
1,2-Dichlorobenzene	95-50-1	ND	5.00	50.0	45.6	91	71 - 126	50.0	46.5	93	2	30
1,2-Dichloroethane	107-06-2	ND	5.00	50.0	44.8	90	71 - 129	50.0	46.3	93	3	30
1,2-Dichloroethene(Total)	540-59-0	ND	10.0	100	94.1	94	74 - 128	100	101	101	7	30
1,2-Dichloropropane	78-87-5	ND	5.00	50.0	48.4	97	72 - 128	50.0	51.3	103	6	30
1,3,5-Trimethylbenzene	108-67-8	ND	5.00	50.0	48.0	96	71 - 132	50.0	50.1	100	4	30
1,3-Dichlorobenzene	541-73-1	ND	5.00	50.0	45.6	91	74 - 126	50.0	46.7	93	2	30
1,3-Dichloropropane	142-28-9	ND	5.00	50.0	47.1	94	74 - 122	50.0	49.1	98	4	30
1,4-Dichlorobenzene	106-46-7	ND	5.00	50.0	44.6	89	72 - 122	50.0	44.9	90	1	30
2,2-Dichloropropane	594-20-7	ND	5.00	50.0	47.5	95	77 - 124	50.0	50.6	101	6	30
2-Butanone	78-93-3	ND	5.00	50.0	45.8	92	58 - 137	50.0	50.7	101	10	30
2-Chlorotoluene	95-49-8	ND	5.00	50.0	46.0	92	72 - 127	50.0	47.6	95	3	30
2-Hexanone	591-78-6	ND	5.00	50.0	46.7	93	50 - 135	50.0	52.3	105	11	30
4-Chlorotoluene	106-43-4	ND	5.00	50.0	46.1	92	75 - 126	50.0	48.3	97	5	30
4-Isopropyltoluene	99-87-6	ND	5.00	50.0	49.7	99	71 - 129	50.0	52.0	104	5	30
4-Methyl-2-pentanone	108-10-1	ND	5.00	50.0	43.9	88	57 - 132	50.0	49.3	99	12	30
Acetone	67-64-1	ND	5.00	50.0	45.5	91	44 - 156	50.0	48.5	97	6	30
Benzene	71-43-2	ND	5.00	50.0	46.9	94	70 - 129	50.0	49.8	100	6	20
Bromobenzene	108-86-1	ND	5.00	50.0	44.8	90	71 - 120	50.0	46.5	93	4	30
Bromochloromethane	74-97-5	ND	5.00	50.0	48.2	96	76 - 130	50.0	50.4	101	4	30
Bromodichloromethane	75-27-4	ND	5.00	50.0	49.5	99	74 - 125	50.0	51.5	103	4	30
Bromoform	75-25-2	ND	5.00	50.0	46.8	94	64 - 122	50.0	48.3	97	3	30
Bromomethane	74-83-9	ND	5.00	50.0	52.2	104	47 - 138	50.0	60.1	120	14	30
Carbon disulfide	75-15-0	ND	5.00	50.0	45.0	90	69 - 136	50.0	48.0	96	6	30
Carbon tetrachloride	56-23-5	ND	5.00	50.0	48.6	97	76 - 128	50.0	52.0	104	7	30
Chlorobenzene	108-90-7	ND	5.00	50.0	46.6	93	74 - 123	50.0	47.7	95	2	20
Chloroethane	75-00-3	ND	5.00	50.0	45.8	92	62 - 141	50.0	49.5	99	8	30
Chloroform	67-66-3	ND	5.00	50.0	47.4	95	75 - 122	50.0	50.0	100	5	30
Chloromethane	74-87-3	ND	5.00	50.0	45.2	90	59 - 132	50.0	52.2	104	14	30
cis-1,2-Dichloroethene	156-59-2	ND	5.00	50.0	47.4	95	73 - 130	50.0	51.0	102	7	30
cis-1,3-Dichloropropene	10061-01-5	ND	5.00	50.0	51.3	103	71 - 132	50.0	53.5	107	4	30
Dibromochloromethane	124-48-1	ND	5.00	50.0	47.8	96	71 - 123	50.0	50.4	101	5	30
Dibromomethane	74-95-3	ND	5.00	50.0	48.7	97	72 - 129	50.0	52.8	106	8	30
Dichlorodifluoromethane	75-71-8	ND	5.00	50.0	48.7	97	58 - 140	50.0	53.0	106	8	30
Ethylbenzene	100-41-4	ND	5.00	50.0	48.2	96	74 - 126	50.0	50.8	102	5	30
Hexachlorobutadiene	87-68-3	ND	5.00	50.0	48.6	97	61 - 144	50.0	54.8	110	12	30
Isopropylbenzene (Cumene)	98-82-8	ND	5.00	50.0	49.9	100	71 - 125	50.0	51.8	104	4	30
m,p-Xylene	136777-61-2	ND	10.0	100	97.3	97	74 - 126	100	101	101	4	30
Methyl iodide	74-88-4	ND	5.00	50.0	42.1	84	57 - 141	50.0	47.9	96	13	30
Methylene chloride	75-09-2	ND	5.00	50.0	45.4	91	68 - 132	50.0	47.4	95	4	30
Naphthalene	91-20-3	ND	5.00	50.0	42.7	85	57 - 138	50.0	45.7	91	7	35
n-Butylbenzene	104-51-8	ND	5.00	50.0	50.0	100	69 - 134	50.0	52.7	105	5	30
n-Propylbenzene	103-65-1	ND	5.00	50.0	47.8	96	75 - 129	50.0	50.0	100	4	30
o-Xylene	95-47-6	ND	5.00	50.0	48.7	97	73 - 130	50.0	50.3	101	3	30
sec-Butylbenzene	135-98-8	ND	5.00	50.0	48.4	97	70 - 136	50.0	50.8	102	5	30
Styrene	100-42-5	ND	5.00	50.0	51.8	104	71 - 127	50.0	54.4	109	5	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	5.00	50.0	46.4	93	71 - 125	50.0	49.1	98	6	30
tert-Butylbenzene	98-06-6	ND	5.00	50.0	45.9	92	72 - 126	50.0	48.1	96	5	30
Tetrachloroethene	127-18-4	ND	5.00	50.0	46.9	94	68 - 128	50.0	49.6	99	6	30
Toluene	108-88-3	ND	5.00	50.0	46.5	93	72 - 120	50.0	48.8	98	5	20
trans-1,2-Dichloroethene	156-60-5	ND	5.00	50.0	46.7	93	69 - 132	50.0	50.0	100	7	30
trans-1,3-Dichloropropene	10061-02-6	ND	5.00	50.0	51.6	103	71 - 131	50.0	53.9	108	4	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	5.00	50.0	46.7	93	56 - 132	50.0	50.2	100	7	30

GC/MS Volatiles QC Summary

Analytical Batch 571980	Client ID	MB571980		LCS571980				LCSD571980				
	GCAL ID	1507292		1507293				1507294				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	11/08/2015 14:04		11/08/2015 11:36				11/08/2015 11:56				
	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	47.7	95	76 - 129	50.0	51.0	102	7	20
Trichlorofluoromethane	75-69-4	ND	5.00	50.0	46.0	92	72 - 136	50.0	49.5	99	7	30
Trichlorotrifluoroethane	76-13-1	ND	5.00	50.0	47.2	94	72 - 136	50.0	49.7	99	5	30
Vinyl chloride	75-01-4	ND	5.00	50.0	44.8	90	68 - 132	50.0	50.2	100	11	30
Xylene (total)	1330-20-7	ND	15.0	150	146	97	74 - 127	150	152	101	4	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	50.3	101	50	49.7	99	71 - 127	50	50.6	101	2	NA
4-Bromofluorobenzene	460-00-4	46.3	93	50	50.7	101	78 - 130	50	48.9	98	4	NA
Dibromofluoromethane	1868-53-7	50.2	100	50	50.2	100	77 - 127	50	50.3	101	0	NA
Toluene d8	2037-26-5	50.4	101	50	49.3	99	76 - 134	50	49.4	99	0	NA

Analytical Batch 571980	Client ID	VD-02-200		VD-02-200 MS				VD-02-200 MSD				
	GCAL ID	21511041410		21511041411				21511041412				
	Sample Type	SAMPLE		MS				MSD				
	Prep Date	NA		NA				NA				
	Analysis Date	11/08/2015 14:24		11/08/2015 14:43				11/08/2015 15:02				
	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-Trichloroethane	71-55-6	0.00	5.00	50.0	49.9	100	76 - 126	50.0	48.7	97	2	30
1,1,2,2-Tetrachloroethane	79-34-5	0.00	5.00	50.0	53.7	107	70 - 122	50.0	53.7	107	0	30
1,1,2-Trichloroethane	79-00-5	0.00	5.00	50.0	48.6	97	72 - 121	50.0	47.8	96	2	30
1,1-Dichloroethane	75-34-3	0.00	5.00	50.0	51.1	102	74 - 127	50.0	50.2	100	2	30
1,1-Dichloroethene	75-35-4	0.00	5.00	50.0	49.9	100	69 - 129	50.0	48.0	96	4	20
1,2-Dichloroethane	107-06-2	0.00	5.00	50.0	47.8	96	71 - 129	50.0	47.9	96	0	30
1,2-Dichloropropane	78-87-5	0.00	5.00	50.0	53.0	106	72 - 128	50.0	52.1	104	2	30
2-Butanone	78-93-3	0.00	5.00	50.0	37.6	75	58 - 137	50.0	38.3	77	2	30
2-Hexanone	591-78-6	0.00	5.00	50.0	46.1	92	50 - 135	50.0	45.7	91	1	30
4-Methyl-2-pentanone	108-10-1	0.00	5.00	50.0	50.2	100	57 - 132	50.0	50.8	102	1	30
Acetone	67-64-1	0.00	5.00	50.0	31.7	63	44 - 156	50.0	31.6	63	0	30
Benzene	71-43-2	0.00	5.00	50.0	51.0	102	70 - 129	50.0	49.6	99	3	20
Bromodichloromethane	75-27-4	0.00	5.00	50.0	53.7	107	74 - 125	50.0	52.5	105	2	30
Bromoform	75-25-2	0.00	5.00	50.0	48.6	97	64 - 122	50.0	46.9	94	4	30
Bromomethane	74-83-9	0.00	5.00	50.0	54.9	110	47 - 138	50.0	58.7	117	7	30
Carbon disulfide	75-15-0	0.00	5.00	50.0	48.3	97	69 - 136	50.0	47.5	95	2	30
Carbon tetrachloride	56-23-5	0.00	5.00	50.0	52.4	105	76 - 128	50.0	50.5	101	4	30
Chlorobenzene	108-90-7	0.00	5.00	50.0	47.9	96	74 - 123	50.0	47.2	94	1	20
Chloroethane	75-00-3	0.00	5.00	50.0	48.4	97	62 - 141	50.0	47.8	96	1	30
Chloroform	67-66-3	0.00	5.00	50.0	51.2	102	75 - 122	50.0	51.0	102	0	30
Chloromethane	74-87-3	0.00	5.00	50.0	52.9	106	59 - 132	50.0	49.6	99	6	30
cis-1,2-Dichloroethene	156-59-2	0.00	5.00	50.0	52.5	105	73 - 130	50.0	51.5	103	2	30
cis-1,3-Dichloropropene	10061-01-5	0.00	5.00	50.0	53.1	106	71 - 132	50.0	53.1	106	0	30
Dibromochloromethane	124-48-1	0.00	5.00	50.0	50.1	100	71 - 123	50.0	49.1	98	2	30
Ethylbenzene	100-41-4	0.00	5.00	50.0	50.7	101	74 - 126	50.0	48.9	98	4	30
Methylene chloride	75-09-2	0.00	5.00	50.0	50.0	100	68 - 132	50.0	49.3	99	1	30
Styrene	100-42-5	0.00	5.00	50.0	54.1	108	71 - 127	50.0	52.8	106	2	30
Tetrachloroethene	127-18-4	0.00	5.00	50.0	47.5	95	68 - 128	50.0	46.2	92	3	30
Toluene	108-88-3	0.00	5.00	50.0	48.8	98	72 - 120	50.0	47.5	95	3	20
trans-1,2-Dichloroethene	156-60-5	0.00	5.00	50.0	51.5	103	69 - 132	50.0	49.9	100	3	30
trans-1,3-Dichloropropene	10061-02-6	0.00	5.00	50.0	55.3	111	71 - 131	50.0	54.6	109	1	30
Trichloroethene	79-01-6	0.00	5.00	50.0	50.3	101	76 - 129	50.0	48.4	97	4	20
Vinyl chloride	75-01-4	0.00	5.00	50.0	48.8	98	68 - 132	50.0	49.2	98	1	30
Xylene (total)	1330-20-7	0.00	15.0	150	152	101	74 - 127	150	147	98	3	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	50	101	50	51.1	102	71 - 127	50	51.2	102	0	NA
4-Bromofluorobenzene	460-00-4	46	92	50	47.7	95	78 - 130	50	47.5	95	0	NA
Dibromofluoromethane	1868-53-7	50	99	50	49.9	100	77 - 127	50	50.8	102	2	NA

GC/MS Volatiles QC Summary

Analytical Batch 571980	Client ID	VD-02-200		VD-02-200 MS				VD-02-200 MSD				
	GCAL ID	21511041410		21511041411				21511041412				
	Sample Type	SAMPLE		MS				MSD				
	Prep Date	NA		NA				NA				
	Analysis Date	11/08/2015 14:24		11/08/2015 14:43				11/08/2015 15:02				
	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
Toluene d8	2037-26-5	51	102	50	48.4	97	76 - 134	50	48.2	96	0	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: 215110613
PM: SAK

Report to:
Client: Clearwater Env'l Resources
Address: 3870 Peachtree Ind. Blvd Ste. 340139, Duluth, GA 30096
Contact: Jack Wintle
Phone: 678-491-4601
E-mail: jack.wintlee@clearwaterenv.net

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

P.O. Number: —
Project Name/Number: Raylac Excavation
Sampled By: Matthew R. Howe

GCAL use only:
Custody Seal used ☐ yes ☐ no intact ☐ yes ☐ no
Temperature °C 0.8 EJG

☐ Dissolved Analysis Requested
☐ Field filtered
☐ Lab filtered

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	No Containers	EPA Method 8260B - VOCs (Methanol)	EPA Method 8260B - VOCs (HCl)	Preservative
S	11/3/15	1635		X	OT-3 South Wall	4	X		1
↓	↓	1640		↓	OT-3 North Wall	↓	↓		2
↓	11/5/15	1045		↓	OT-5 Floor	↓	↓		3
W	↓	—	—	—	Trip Blank	3		X	4

Air Bill No: 5749 1028 5700

Turn Around Time (Business Days): ☐ 24h* ☒ 48h* ☐ 3 days* ☐ 1 week* ☐ Standard (Per Contract/Quote) DUE 11/10

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	11/05/15	1330	[signature]	11/05/15	1330
[signature]	11/05/15	1410	[signature]		
Fedex	11-6-15	1230	[signature]	11-6-15	1230

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

215110613

SAMPLE DELIVERY GROUP 215110613	
Client PM SAK 4912 - Clearwater Environmental Resources	**Transport Method** FEDEX
Profile Number 259985	**Received By** Lofton, Katie E.
Line Item(s) 3 - VOC 2 day 4 - Soils 2-Day Lead only	**Receive Date(s)** 11/06/15

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)
7749 1028 5700		0.8

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

Revision 1.4

Page 1 of 1

APPENDIX B
JUNE AND SEPTEMBER 2016
PDA LABORATORY REPORTS

ANALYTICAL RESULTS

PERFORMED BY

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

Report Date 06/20/2016

GCAL Report 216061032

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 216061032

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:** 216061032

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 21606103203 (WD-4 @ 10), 21606103204 (WD-8 @ 5), 21606103205 (WD-11 @ 10), 21606103206 (ADD-1 @ 6), 21606103208 (ADD-2 @ 5), 21606103207 (ADD-1 @ 10) and 21606103209 (ADD-2 @ 10) had to be diluted due to the presence of non-target background. This dilution is reflected in the elevated reporting limits.

In the EPA 8260B analysis, samples 21606103203 (WD-4 @ 10), 21606103204 (WD-8 @ 5), 21606103205 (WD-11 @ 10), 21606103206 (ADD-1 @ 6), 21606103208 (ADD-2 @ 5), 21606103201 (PD-2 @ 10), 21606103202 (WD-2 @ 10), 21606103207 (ADD-1 @ 10) and 21606103209 (ADD-2 @ 10) had to be diluted 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
21606103201	PD-2 @ 10	Solid	06/08/2016 11:44	06/10/2016 10:06
21606103202	WD-2 @ 10	Solid	06/08/2016 12:10	06/10/2016 10:06
21606103203	WD-4 @ 10	Solid	06/08/2016 12:24	06/10/2016 10:06
21606103204	WD-8 @ 5	Solid	06/08/2016 12:17	06/10/2016 10:06
21606103205	WD-11 @ 10	Solid	06/08/2016 11:51	06/10/2016 10:06
21606103206	ADD-1 @ 6	Solid	06/08/2016 12:29	06/10/2016 10:06
21606103207	ADD-1 @ 10	Solid	06/08/2016 12:36	06/10/2016 10:06
21606103208	ADD-2 @ 5	Solid	06/08/2016 12:41	06/10/2016 10:06
21606103209	ADD-2 @ 10	Solid	06/08/2016 12:48	06/10/2016 10:06
21606103210	TRIP BLANK	Water	06/08/2016 00:01	06/10/2016 10:06

Summary of Compounds Detected

PD-2 @ 10

Collect Date 06/08/2016 11:44 **GCAL ID** 21606103201
Receive Date 06/10/2016 10:06 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	0.591	0.374	mg/kg
156-59-2	cis-1,2-Dichloroethene	0.572	0.187	mg/kg
127-18-4	Tetrachloroethene	3.57	0.187	mg/kg
79-01-6	Trichloroethene	0.477	0.187	mg/kg

WD-2 @ 10

Collect Date 06/08/2016 12:10 **GCAL ID** 21606103202
Receive Date 06/10/2016 10:06 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	3.13	0.230	mg/kg

WD-4 @ 10

Collect Date 06/08/2016 12:24 **GCAL ID** 21606103203
Receive Date 06/10/2016 10:06 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	137	21.7	mg/kg
79-01-6	Trichloroethene	2.28	2.17	mg/kg

WD-8 @ 5

Collect Date 06/08/2016 12:17 **GCAL ID** 21606103204
Receive Date 06/10/2016 10:06 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	6.31	0.503	mg/kg
156-59-2	cis-1,2-Dichloroethene	6.28	0.251	mg/kg
127-18-4	Tetrachloroethene	34.8	1.26	mg/kg
79-01-6	Trichloroethene	1.21	0.251	mg/kg

Summary of Compounds Detected

WD-11 @ 10

Collect Date 06/08/2016 11:51 **GCAL ID** 21606103205
Receive Date 06/10/2016 10:06 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	2.21	0.919	mg/kg
156-59-2	cis-1,2-Dichloroethene	2.21	0.460	mg/kg
127-18-4	Tetrachloroethene	68.8	4.60	mg/kg
79-01-6	Trichloroethene	1.26	0.460	mg/kg

ADD-1 @ 6

Collect Date 06/08/2016 12:29 **GCAL ID** 21606103206
Receive Date 06/10/2016 10:06 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	10.4	0.550	mg/kg
156-59-2	cis-1,2-Dichloroethene	10.3	0.275	mg/kg
127-18-4	Tetrachloroethene	44.4	2.75	mg/kg
79-01-6	Trichloroethene	2.67	0.275	mg/kg

ADD-1 @ 10

Collect Date 06/08/2016 12:36 **GCAL ID** 21606103207
Receive Date 06/10/2016 10:06 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	7.12	0.434	mg/kg
156-59-2	cis-1,2-Dichloroethene	6.98	0.217	mg/kg
127-18-4	Tetrachloroethene	29.7	2.17	mg/kg
79-01-6	Trichloroethene	4.92	0.217	mg/kg

ADD-2 @ 5

Collect Date 06/08/2016 12:41 **GCAL ID** 21606103208
Receive Date 06/10/2016 10:06 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	4.70	0.421	mg/kg
156-59-2	cis-1,2-Dichloroethene	4.70	0.210	mg/kg
127-18-4	Tetrachloroethene	39.6	2.10	mg/kg
79-01-6	Trichloroethene	1.63	0.210	mg/kg

Summary of Compounds Detected

ADD-2 @ 10	**Collect Date**	06/08/2016 12:48	**GCAL ID**	21606103209
	Receive Date	06/10/2016 10:06	**Matrix**	Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	7.55	0.415	mg/kg
156-59-2	cis-1,2-Dichloroethene	7.50	0.207	mg/kg
127-18-4	Tetrachloroethene	21.7	1.04	mg/kg
79-01-6	Trichloroethene	3.61	0.207	mg/kg

Sample Results

PD-2 @ 10	**Collect Date**	06/08/2016 11:44	**GCAL ID**	21606103201
	Receive Date	06/10/2016 10:06	**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	06/17/2016 12:27	DTB	588678

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.187	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.187	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.187	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.187	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.187	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.187	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.187	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.187	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.187	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.187	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.187	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.187	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.187	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.187	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**0.591**	**0.374**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.187	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.187	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.187	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.187	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.187	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.187	mg/kg
78-93-3	2-Butanone	ND	0.187	mg/kg
95-49-8	2-Chlorotoluene	ND	0.187	mg/kg
591-78-6	2-Hexanone	ND	0.187	mg/kg
106-43-4	4-Chlorotoluene	ND	0.187	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.187	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.187	mg/kg
67-64-1	Acetone	ND	0.934	mg/kg
71-43-2	Benzene	ND	0.187	mg/kg
108-86-1	Bromobenzene	ND	0.187	mg/kg
74-97-5	Bromochloromethane	ND	0.187	mg/kg
75-27-4	Bromodichloromethane	ND	0.187	mg/kg
75-25-2	Bromoform	ND	0.187	mg/kg
74-83-9	Bromomethane	ND	0.187	mg/kg
75-15-0	Carbon disulfide	ND	0.187	mg/kg
56-23-5	Carbon tetrachloride	ND	0.187	mg/kg
108-90-7	Chlorobenzene	ND	0.187	mg/kg
75-00-3	Chloroethane	ND	0.187	mg/kg
67-66-3	Chloroform	ND	0.187	mg/kg
74-87-3	Chloromethane	ND	0.187	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**0.572**	**0.187**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.187	mg/kg
124-48-1	Dibromochloromethane	ND	0.187	mg/kg
74-95-3	Dibromomethane	ND	0.187	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.187	mg/kg
100-41-4	Ethylbenzene	ND	0.187	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.187	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.187	mg/kg

Sample Results

PD-2 @ 10

Collect Date	06/08/2016 11:44	**GCAL ID**	21606103201
Receive Date	06/10/2016 10:06	**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	06/17/2016 12:27	DTB	588678

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.374	mg/kg
75-09-2	Methylene chloride	ND	0.374	mg/kg
91-20-3	Naphthalene	ND	0.187	mg/kg
104-51-8	n-Butylbenzene	ND	0.187	mg/kg
103-65-1	n-Propylbenzene	ND	0.187	mg/kg
95-47-6	o-Xylene	ND	0.187	mg/kg
135-98-8	sec-Butylbenzene	ND	0.187	mg/kg
100-42-5	Styrene	ND	0.187	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.187	mg/kg
98-06-6	tert-Butylbenzene	ND	0.187	mg/kg
127-18-4	**Tetrachloroethene**	**3.57**	**0.187**	**mg/kg**
108-88-3	Toluene	ND	0.187	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.187	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.187	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.187	mg/kg
79-01-6	**Trichloroethene**	**0.477**	**0.187**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.187	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.187	mg/kg
75-01-4	Vinyl chloride	ND	0.187	mg/kg
1330-20-7	Xylene (total)	ND	0.560	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1.66	1.52	ug/Kg	92	62 - 127
1868-53-7	Dibromofluoromethane	1.66	1.58	ug/Kg	95	65 - 130
2037-26-5	Toluene d8	1.66	1.7	ug/Kg	102	71 - 132
17060-07-0	1,2-Dichloroethane-d4	1.66	1.76	ug/Kg	106	62 - 125

WD-2 @ 10

Collect Date	06/08/2016 12:10	**GCAL ID**	21606103202
Receive Date	06/10/2016 10:06	**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	06/17/2016 13:34	DTB	588678

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.230	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.230	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.230	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.230	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.230	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.230	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.230	mg/kg

Sample Results

WD-2 @ 10	**Collect Date**	06/08/2016 12:10	**GCAL ID**	21606103202
	Receive Date	06/10/2016 10:06	**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	06/17/2016 13:34	DTB	588678

CAS#	Parameter	Result	LOQ	Units
96-18-4	1,2,3-Trichloropropane	ND	0.230	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.230	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.230	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.230	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.230	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.230	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.230	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.460	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.230	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.230	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.230	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.230	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.230	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.230	mg/kg
78-93-3	2-Butanone	ND	0.230	mg/kg
95-49-8	2-Chlorotoluene	ND	0.230	mg/kg
591-78-6	2-Hexanone	ND	0.230	mg/kg
106-43-4	4-Chlorotoluene	ND	0.230	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.230	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.230	mg/kg
67-64-1	Acetone	ND	1.15	mg/kg
71-43-2	Benzene	ND	0.230	mg/kg
108-86-1	Bromobenzene	ND	0.230	mg/kg
74-97-5	Bromochloromethane	ND	0.230	mg/kg
75-27-4	Bromodichloromethane	ND	0.230	mg/kg
75-25-2	Bromoform	ND	0.230	mg/kg
74-83-9	Bromomethane	ND	0.230	mg/kg
75-15-0	Carbon disulfide	ND	0.230	mg/kg
56-23-5	Carbon tetrachloride	ND	0.230	mg/kg
108-90-7	Chlorobenzene	ND	0.230	mg/kg
75-00-3	Chloroethane	ND	0.230	mg/kg
67-66-3	Chloroform	ND	0.230	mg/kg
74-87-3	Chloromethane	ND	0.230	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	0.230	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.230	mg/kg
124-48-1	Dibromochloromethane	ND	0.230	mg/kg
74-95-3	Dibromomethane	ND	0.230	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.230	mg/kg
100-41-4	Ethylbenzene	ND	0.230	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.230	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.230	mg/kg
136777-61-2	m,p-Xylene	ND	0.460	mg/kg
75-09-2	Methylene chloride	ND	0.460	mg/kg
91-20-3	Naphthalene	ND	0.230	mg/kg
104-51-8	n-Butylbenzene	ND	0.230	mg/kg
103-65-1	n-Propylbenzene	ND	0.230	mg/kg
95-47-6	o-Xylene	ND	0.230	mg/kg
135-98-8	sec-Butylbenzene	ND	0.230	mg/kg

Sample Results

WD-2 @ 10

Collect Date	06/08/2016 12:10	**GCAL ID**	21606103202
Receive Date	06/10/2016 10:06	**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	06/17/2016 13:34	DTB	588678

CAS#	Parameter	Result	LOQ	Units
100-42-5	Styrene	ND	0.230	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.230	mg/kg
98-06-6	tert-Butylbenzene	ND	0.230	mg/kg
127-18-4	**Tetrachloroethene**	**3.13**	**0.230**	**mg/kg**
108-88-3	Toluene	ND	0.230	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.230	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.230	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.230	mg/kg
79-01-6	Trichloroethene	ND	0.230	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.230	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.230	mg/kg
75-01-4	Vinyl chloride	ND	0.230	mg/kg
1330-20-7	Xylene (total)	ND	0.690	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2.03	1.87	ug/Kg	92	62 - 127
1868-53-7	Dibromofluoromethane	2.03	1.91	ug/Kg	94	65 - 130
2037-26-5	Toluene d8	2.03	2.07	ug/Kg	102	71 - 132
17060-07-0	1,2-Dichloroethane-d4	2.03	2.16	ug/Kg	107	62 - 125

WD-4 @ 10

Collect Date	06/08/2016 12:24	**GCAL ID**	21606103203
Receive Date	06/10/2016 10:06	**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	500	06/14/2016 13:20	DTB	588494

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.17	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	2.17	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.17	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	2.17	mg/kg
75-34-3	1,1-Dichloroethane	ND	2.17	mg/kg
75-35-4	1,1-Dichloroethene	ND	2.17	mg/kg
563-58-6	1,1-Dichloropropene	ND	2.17	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	2.17	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	2.17	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	2.17	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.17	mg/kg
106-93-4	1,2-Dibromoethane	ND	2.17	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	2.17	mg/kg
107-06-2	1,2-Dichloroethane	ND	2.17	mg/kg

Sample Results

WD-4 @ 10	**Collect Date**	06/08/2016 12:24	**GCAL ID**	21606103203
	Receive Date	06/10/2016 10:06	**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	500	06/14/2016 13:20	DTB	588494

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	ND	4.33	mg/kg
78-87-5	1,2-Dichloropropane	ND	2.17	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	2.17	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	2.17	mg/kg
142-28-9	1,3-Dichloropropane	ND	2.17	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	2.17	mg/kg
594-20-7	2,2-Dichloropropane	ND	2.17	mg/kg
78-93-3	2-Butanone	ND	2.17	mg/kg
95-49-8	2-Chlorotoluene	ND	2.17	mg/kg
591-78-6	2-Hexanone	ND	2.17	mg/kg
106-43-4	4-Chlorotoluene	ND	2.17	mg/kg
99-87-6	4-Isopropyltoluene	ND	2.17	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	2.17	mg/kg
67-64-1	Acetone	ND	10.8	mg/kg
71-43-2	Benzene	ND	2.17	mg/kg
108-86-1	Bromobenzene	ND	2.17	mg/kg
74-97-5	Bromochloromethane	ND	2.17	mg/kg
75-27-4	Bromodichloromethane	ND	2.17	mg/kg
75-25-2	Bromoform	ND	2.17	mg/kg
74-83-9	Bromomethane	ND	2.17	mg/kg
75-15-0	Carbon disulfide	ND	2.17	mg/kg
56-23-5	Carbon tetrachloride	ND	2.17	mg/kg
108-90-7	Chlorobenzene	ND	2.17	mg/kg
75-00-3	Chloroethane	ND	2.17	mg/kg
67-66-3	Chloroform	ND	2.17	mg/kg
74-87-3	Chloromethane	ND	2.17	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	2.17	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	2.17	mg/kg
124-48-1	Dibromochloromethane	ND	2.17	mg/kg
74-95-3	Dibromomethane	ND	2.17	mg/kg
75-71-8	Dichlorodifluoromethane	ND	2.17	mg/kg
100-41-4	Ethylbenzene	ND	2.17	mg/kg
87-68-3	Hexachlorobutadiene	ND	2.17	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	2.17	mg/kg
136777-61-2	m,p-Xylene	ND	4.33	mg/kg
75-09-2	Methylene chloride	ND	4.33	mg/kg
91-20-3	Naphthalene	ND	2.17	mg/kg
104-51-8	n-Butylbenzene	ND	2.17	mg/kg
103-65-1	n-Propylbenzene	ND	2.17	mg/kg
95-47-6	o-Xylene	ND	2.17	mg/kg
135-98-8	sec-Butylbenzene	ND	2.17	mg/kg
100-42-5	Styrene	ND	2.17	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	2.17	mg/kg
98-06-6	tert-Butylbenzene	ND	2.17	mg/kg
108-88-3	Toluene	ND	2.17	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	2.17	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	2.17	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	2.17	mg/kg

Sample Results

WD-4 @ 10

Collect Date	06/08/2016 12:24	**GCAL ID**	21606103203
Receive Date	06/10/2016 10:06	**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	500	06/14/2016 13:20	DTB	588494

CAS#	Parameter	Result	LOQ	Units
79-01-6	**Trichloroethene**	**2.28**	**2.17**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	2.17	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	2.17	mg/kg
75-01-4	Vinyl chloride	ND	2.17	mg/kg
1330-20-7	Xylene (total)	ND	6.50	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	18.50	18.9	ug/Kg	102	62 - 127
1868-53-7	Dibromofluoromethane	18.50	18	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	18.50	18.8	ug/Kg	101	71 - 132
17060-07-0	1,2-Dichloroethane-d4	18.50	18.5	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	5000	06/14/2016 12:58	DTB	588494

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**137**	**21.7**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	185	188	ug/Kg	101	62 - 127
1868-53-7	Dibromofluoromethane	185	180	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	185	195	ug/Kg	105	71 - 132
17060-07-0	1,2-Dichloroethane-d4	185	182	ug/Kg	98	62 - 125

WD-8 @ 5

Collect Date	06/08/2016 12:17	**GCAL ID**	21606103204
Receive Date	06/10/2016 10:06	**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	06/14/2016 14:27	DTB	588494

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.251	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.251	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.251	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.251	mg/kg

Sample Results

WD-8 @ 5	**Collect Date**	06/08/2016 12:17	**GCAL ID**	21606103204
	Receive Date	06/10/2016 10:06	**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	06/14/2016 14:27	DTB	588494

CAS#	Parameter	Result	LOQ	Units
75-34-3	1,1-Dichloroethane	ND	0.251	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.251	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.251	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.251	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.251	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.251	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.251	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.251	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.251	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.251	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**6.31**	**0.503**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.251	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.251	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.251	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.251	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.251	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.251	mg/kg
78-93-3	2-Butanone	ND	0.251	mg/kg
95-49-8	2-Chlorotoluene	ND	0.251	mg/kg
591-78-6	2-Hexanone	ND	0.251	mg/kg
106-43-4	4-Chlorotoluene	ND	0.251	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.251	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.251	mg/kg
67-64-1	Acetone	ND	1.26	mg/kg
71-43-2	Benzene	ND	0.251	mg/kg
108-86-1	Bromobenzene	ND	0.251	mg/kg
74-97-5	Bromochloromethane	ND	0.251	mg/kg
75-27-4	Bromodichloromethane	ND	0.251	mg/kg
75-25-2	Bromoform	ND	0.251	mg/kg
74-83-9	Bromomethane	ND	0.251	mg/kg
75-15-0	Carbon disulfide	ND	0.251	mg/kg
56-23-5	Carbon tetrachloride	ND	0.251	mg/kg
108-90-7	Chlorobenzene	ND	0.251	mg/kg
75-00-3	Chloroethane	ND	0.251	mg/kg
67-66-3	Chloroform	ND	0.251	mg/kg
74-87-3	Chloromethane	ND	0.251	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**6.28**	**0.251**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.251	mg/kg
124-48-1	Dibromochloromethane	ND	0.251	mg/kg
74-95-3	Dibromomethane	ND	0.251	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.251	mg/kg
100-41-4	Ethylbenzene	ND	0.251	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.251	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.251	mg/kg
136777-61-2	m,p-Xylene	ND	0.503	mg/kg
75-09-2	Methylene chloride	ND	0.503	mg/kg
91-20-3	Naphthalene	ND	0.251	mg/kg
104-51-8	n-Butylbenzene	ND	0.251	mg/kg

Sample Results

WD-8 @ 5	**Collect Date**	06/08/2016 12:17	**GCAL ID**	21606103204
	Receive Date	06/10/2016 10:06	**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	06/14/2016 14:27	DTB	588494

CAS#	Parameter	Result	LOQ	Units
103-65-1	n-Propylbenzene	ND	0.251	mg/kg
95-47-6	o-Xylene	ND	0.251	mg/kg
135-98-8	sec-Butylbenzene	ND	0.251	mg/kg
100-42-5	Styrene	ND	0.251	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.251	mg/kg
98-06-6	tert-Butylbenzene	ND	0.251	mg/kg
108-88-3	Toluene	ND	0.251	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.251	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.251	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.251	mg/kg
79-01-6	**Trichloroethene**	**1.21**	**0.251**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.251	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.251	mg/kg
75-01-4	Vinyl chloride	ND	0.251	mg/kg
1330-20-7	Xylene (total)	ND	0.754	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1.92	1.92	ug/Kg	100	62 - 127
1868-53-7	Dibromofluoromethane	1.92	1.86	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	1.92	1.95	ug/Kg	102	71 - 132
17060-07-0	1,2-Dichloroethane-d4	1.92	1.91	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	250	06/14/2016 14:04	DTB	588494

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**34.8**	**1.26**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	9.60	9.81	ug/Kg	102	62 - 127
1868-53-7	Dibromofluoromethane	9.60	9.53	ug/Kg	99	65 - 130
2037-26-5	Toluene d8	9.60	9.88	ug/Kg	103	71 - 132
17060-07-0	1,2-Dichloroethane-d4	9.60	9.72	ug/Kg	101	62 - 125

Sample Results

WD-11 @ 10	**Collect Date**	06/08/2016 11:51	**GCAL ID**	21606103205
	Receive Date	06/10/2016 10:06	**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	06/14/2016 15:34	DTB	588494

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.460	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.460	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.460	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.460	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.460	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.460	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.460	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.460	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.460	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.460	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.460	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.460	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.460	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.460	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**2.21**	**0.919**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.460	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.460	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.460	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.460	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.460	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.460	mg/kg
78-93-3	2-Butanone	ND	0.460	mg/kg
95-49-8	2-Chlorotoluene	ND	0.460	mg/kg
591-78-6	2-Hexanone	ND	0.460	mg/kg
106-43-4	4-Chlorotoluene	ND	0.460	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.460	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.460	mg/kg
67-64-1	Acetone	ND	2.30	mg/kg
71-43-2	Benzene	ND	0.460	mg/kg
108-86-1	Bromobenzene	ND	0.460	mg/kg
74-97-5	Bromochloromethane	ND	0.460	mg/kg
75-27-4	Bromodichloromethane	ND	0.460	mg/kg
75-25-2	Bromoform	ND	0.460	mg/kg
74-83-9	Bromomethane	ND	0.460	mg/kg
75-15-0	Carbon disulfide	ND	0.460	mg/kg
56-23-5	Carbon tetrachloride	ND	0.460	mg/kg
108-90-7	Chlorobenzene	ND	0.460	mg/kg
75-00-3	Chloroethane	ND	0.460	mg/kg
67-66-3	Chloroform	ND	0.460	mg/kg
74-87-3	Chloromethane	ND	0.460	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**2.21**	**0.460**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.460	mg/kg
124-48-1	Dibromochloromethane	ND	0.460	mg/kg
74-95-3	Dibromomethane	ND	0.460	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.460	mg/kg
100-41-4	Ethylbenzene	ND	0.460	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.460	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.460	mg/kg

Sample Results

WD-11 @ 10	**Collect Date**	06/08/2016 11:51	**GCAL ID**	21606103205
	Receive Date	06/10/2016 10:06	**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	06/14/2016 15:34	DTB	588494

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.919	mg/kg
75-09-2	Methylene chloride	ND	0.919	mg/kg
91-20-3	Naphthalene	ND	0.460	mg/kg
104-51-8	n-Butylbenzene	ND	0.460	mg/kg
103-65-1	n-Propylbenzene	ND	0.460	mg/kg
95-47-6	o-Xylene	ND	0.460	mg/kg
135-98-8	sec-Butylbenzene	ND	0.460	mg/kg
100-42-5	Styrene	ND	0.460	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.460	mg/kg
98-06-6	tert-Butylbenzene	ND	0.460	mg/kg
108-88-3	Toluene	ND	0.460	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.460	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.460	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.460	mg/kg
79-01-6	**Trichloroethene**	**1.26**	**0.460**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.460	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.460	mg/kg
75-01-4	Vinyl chloride	ND	0.460	mg/kg
1330-20-7	Xylene (total)	ND	1.38	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	3.91	4.01	ug/Kg	103	62 - 127
1868-53-7	Dibromofluoromethane	3.91	3.94	ug/Kg	101	65 - 130
2037-26-5	Toluene d8	3.91	3.91	ug/Kg	100	71 - 132
17060-07-0	1,2-Dichloroethane-d4	3.91	4	ug/Kg	102	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	06/14/2016 15:11	DTB	588494

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**68.8**	**4.60**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	39.10	39.4	ug/Kg	101	62 - 127
1868-53-7	Dibromofluoromethane	39.10	39.5	ug/Kg	101	65 - 130
2037-26-5	Toluene d8	39.10	41.2	ug/Kg	105	71 - 132
17060-07-0	1,2-Dichloroethane-d4	39.10	39.5	ug/Kg	101	62 - 125

Sample Results

ADD-1 @ 6	**Collect Date**	06/08/2016 12:29	**GCAL ID**	21606103206
	Receive Date	06/10/2016 10:06	**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	06/14/2016 16:41	DTB	588494

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.275	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.275	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.275	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.275	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.275	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.275	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.275	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.275	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.275	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.275	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.275	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.275	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.275	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.275	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**10.4**	**0.550**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.275	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.275	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.275	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.275	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.275	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.275	mg/kg
78-93-3	2-Butanone	ND	0.275	mg/kg
95-49-8	2-Chlorotoluene	ND	0.275	mg/kg
591-78-6	2-Hexanone	ND	0.275	mg/kg
106-43-4	4-Chlorotoluene	ND	0.275	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.275	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.275	mg/kg
67-64-1	Acetone	ND	1.38	mg/kg
71-43-2	Benzene	ND	0.275	mg/kg
108-86-1	Bromobenzene	ND	0.275	mg/kg
74-97-5	Bromochloromethane	ND	0.275	mg/kg
75-27-4	Bromodichloromethane	ND	0.275	mg/kg
75-25-2	Bromoform	ND	0.275	mg/kg
74-83-9	Bromomethane	ND	0.275	mg/kg
75-15-0	Carbon disulfide	ND	0.275	mg/kg
56-23-5	Carbon tetrachloride	ND	0.275	mg/kg
108-90-7	Chlorobenzene	ND	0.275	mg/kg
75-00-3	Chloroethane	ND	0.275	mg/kg
67-66-3	Chloroform	ND	0.275	mg/kg
74-87-3	Chloromethane	ND	0.275	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**10.3**	**0.275**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.275	mg/kg
124-48-1	Dibromochloromethane	ND	0.275	mg/kg
74-95-3	Dibromomethane	ND	0.275	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.275	mg/kg
100-41-4	Ethylbenzene	ND	0.275	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.275	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.275	mg/kg

Sample Results

ADD-1 @ 6	**Collect Date**	06/08/2016 12:29	**GCAL ID**	21606103206
	Receive Date	06/10/2016 10:06	**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	06/14/2016 16:41	DTB	588494

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.550	mg/kg
75-09-2	Methylene chloride	ND	0.550	mg/kg
91-20-3	Naphthalene	ND	0.275	mg/kg
104-51-8	n-Butylbenzene	ND	0.275	mg/kg
103-65-1	n-Propylbenzene	ND	0.275	mg/kg
95-47-6	o-Xylene	ND	0.275	mg/kg
135-98-8	sec-Butylbenzene	ND	0.275	mg/kg
100-42-5	Styrene	ND	0.275	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.275	mg/kg
98-06-6	tert-Butylbenzene	ND	0.275	mg/kg
108-88-3	Toluene	ND	0.275	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.275	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.275	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.275	mg/kg
79-01-6	**Trichloroethene**	**2.67**	**0.275**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.275	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.275	mg/kg
75-01-4	Vinyl chloride	ND	0.275	mg/kg
1330-20-7	Xylene (total)	ND	0.825	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2.33	2.35	ug/Kg	101	62 - 127
1868-53-7	Dibromofluoromethane	2.33	2.31	ug/Kg	99	65 - 130
2037-26-5	Toluene d8	2.33	2.4	ug/Kg	103	71 - 132
17060-07-0	1,2-Dichloroethane-d4	2.33	2.34	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	500	06/14/2016 16:18	DTB	588494

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**44.4**	**2.75**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	23.30	23.3	ug/Kg	100	62 - 127
1868-53-7	Dibromofluoromethane	23.30	23.6	ug/Kg	101	65 - 130
2037-26-5	Toluene d8	23.30	24.1	ug/Kg	104	71 - 132
17060-07-0	1,2-Dichloroethane-d4	23.30	24	ug/Kg	103	62 - 125

Sample Results

ADD-1 @ 10	**Collect Date**	06/08/2016 12:36	**GCAL ID**	21606103207
	Receive Date	06/10/2016 10:06	**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	06/17/2016 14:41	DTB	588678

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.217	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.217	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.217	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.217	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.217	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.217	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.217	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.217	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.217	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.217	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.217	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.217	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.217	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.217	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**7.12**	**0.434**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.217	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.217	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.217	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.217	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.217	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.217	mg/kg
78-93-3	2-Butanone	ND	0.217	mg/kg
95-49-8	2-Chlorotoluene	ND	0.217	mg/kg
591-78-6	2-Hexanone	ND	0.217	mg/kg
106-43-4	4-Chlorotoluene	ND	0.217	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.217	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.217	mg/kg
67-64-1	Acetone	ND	1.09	mg/kg
71-43-2	Benzene	ND	0.217	mg/kg
108-86-1	Bromobenzene	ND	0.217	mg/kg
74-97-5	Bromochloromethane	ND	0.217	mg/kg
75-27-4	Bromodichloromethane	ND	0.217	mg/kg
75-25-2	Bromoform	ND	0.217	mg/kg
74-83-9	Bromomethane	ND	0.217	mg/kg
75-15-0	Carbon disulfide	ND	0.217	mg/kg
56-23-5	Carbon tetrachloride	ND	0.217	mg/kg
108-90-7	Chlorobenzene	ND	0.217	mg/kg
75-00-3	Chloroethane	ND	0.217	mg/kg
67-66-3	Chloroform	ND	0.217	mg/kg
74-87-3	Chloromethane	ND	0.217	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**6.98**	**0.217**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.217	mg/kg
124-48-1	Dibromochloromethane	ND	0.217	mg/kg
74-95-3	Dibromomethane	ND	0.217	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.217	mg/kg
100-41-4	Ethylbenzene	ND	0.217	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.217	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.217	mg/kg

Sample Results

ADD-1 @ 10	**Collect Date**	06/08/2016 12:36	**GCAL ID**	21606103207
	Receive Date	06/10/2016 10:06	**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	06/17/2016 14:41	DTB	588678

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.434	mg/kg
75-09-2	Methylene chloride	ND	0.434	mg/kg
91-20-3	Naphthalene	ND	0.217	mg/kg
104-51-8	n-Butylbenzene	ND	0.217	mg/kg
103-65-1	n-Propylbenzene	ND	0.217	mg/kg
95-47-6	o-Xylene	ND	0.217	mg/kg
135-98-8	sec-Butylbenzene	ND	0.217	mg/kg
100-42-5	Styrene	ND	0.217	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.217	mg/kg
98-06-6	tert-Butylbenzene	ND	0.217	mg/kg
108-88-3	Toluene	ND	0.217	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.217	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.217	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.217	mg/kg
79-01-6	**Trichloroethene**	**4.92**	**0.217**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.217	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.217	mg/kg
75-01-4	Vinyl chloride	ND	0.217	mg/kg
1330-20-7	Xylene (total)	ND	0.651	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1.73	1.6	ug/Kg	92	62 - 127
1868-53-7	Dibromofluoromethane	1.73	1.65	ug/Kg	95	65 - 130
2037-26-5	Toluene d8	1.73	1.77	ug/Kg	102	71 - 132
17060-07-0	1,2-Dichloroethane-d4	1.73	1.84	ug/Kg	106	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	500	06/17/2016 14:19	DTB	588678

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**29.7**	**2.17**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	17.30	15.7	ug/Kg	91	62 - 127
1868-53-7	Dibromofluoromethane	17.30	16.6	ug/Kg	96	65 - 130
2037-26-5	Toluene d8	17.30	18	ug/Kg	104	71 - 132
17060-07-0	1,2-Dichloroethane-d4	17.30	18.6	ug/Kg	107	62 - 125

Sample Results

ADD-2 @ 5

Collect Date	06/08/2016 12:41	**GCAL ID**	21606103208
Receive Date	06/10/2016 10:06	**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	06/14/2016 17:48	DTB	588494

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.210	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.210	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.210	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.210	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.210	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.210	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.210	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.210	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.210	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.210	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.210	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.210	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.210	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.210	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**4.70**	**0.421**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.210	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.210	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.210	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.210	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.210	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.210	mg/kg
78-93-3	2-Butanone	ND	0.210	mg/kg
95-49-8	2-Chlorotoluene	ND	0.210	mg/kg
591-78-6	2-Hexanone	ND	0.210	mg/kg
106-43-4	4-Chlorotoluene	ND	0.210	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.210	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.210	mg/kg
67-64-1	Acetone	ND	1.05	mg/kg
71-43-2	Benzene	ND	0.210	mg/kg
108-86-1	Bromobenzene	ND	0.210	mg/kg
74-97-5	Bromochloromethane	ND	0.210	mg/kg
75-27-4	Bromodichloromethane	ND	0.210	mg/kg
75-25-2	Bromoform	ND	0.210	mg/kg
74-83-9	Bromomethane	ND	0.210	mg/kg
75-15-0	Carbon disulfide	ND	0.210	mg/kg
56-23-5	Carbon tetrachloride	ND	0.210	mg/kg
108-90-7	Chlorobenzene	ND	0.210	mg/kg
75-00-3	Chloroethane	ND	0.210	mg/kg
67-66-3	Chloroform	ND	0.210	mg/kg
74-87-3	Chloromethane	ND	0.210	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**4.70**	**0.210**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.210	mg/kg
124-48-1	Dibromochloromethane	ND	0.210	mg/kg
74-95-3	Dibromomethane	ND	0.210	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.210	mg/kg
100-41-4	Ethylbenzene	ND	0.210	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.210	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.210	mg/kg

Sample Results

ADD-2 @ 5	**Collect Date**	06/08/2016 12:41	**GCAL ID**	21606103208
	Receive Date	06/10/2016 10:06	**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	06/14/2016 17:48	DTB	588494

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.421	mg/kg
75-09-2	Methylene chloride	ND	0.421	mg/kg
91-20-3	Naphthalene	ND	0.210	mg/kg
104-51-8	n-Butylbenzene	ND	0.210	mg/kg
103-65-1	n-Propylbenzene	ND	0.210	mg/kg
95-47-6	o-Xylene	ND	0.210	mg/kg
135-98-8	sec-Butylbenzene	ND	0.210	mg/kg
100-42-5	Styrene	ND	0.210	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.210	mg/kg
98-06-6	tert-Butylbenzene	ND	0.210	mg/kg
108-88-3	Toluene	ND	0.210	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.210	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.210	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.210	mg/kg
79-01-6	**Trichloroethene**	**1.63**	**0.210**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.210	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.210	mg/kg
75-01-4	Vinyl chloride	ND	0.210	mg/kg
1330-20-7	Xylene (total)	ND	0.631	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1.82	1.85	ug/Kg	102	62 - 127
1868-53-7	Dibromofluoromethane	1.82	1.81	ug/Kg	99	65 - 130
2037-26-5	Toluene d8	1.82	1.83	ug/Kg	100	71 - 132
17060-07-0	1,2-Dichloroethane-d4	1.82	1.83	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	500	06/14/2016 17:26	DTB	588494

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**39.6**	**2.10**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	18.20	18.3	ug/Kg	100	62 - 127
1868-53-7	Dibromofluoromethane	18.20	18.4	ug/Kg	101	65 - 130
2037-26-5	Toluene d8	18.20	18.7	ug/Kg	103	71 - 132
17060-07-0	1,2-Dichloroethane-d4	18.20	18.8	ug/Kg	103	62 - 125

Sample Results

ADD-2 @ 10	**Collect Date**	06/08/2016 12:48	**GCAL ID**	21606103209
	Receive Date	06/10/2016 10:06	**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	06/17/2016 15:48	DTB	588678

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.207	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.207	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.207	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.207	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.207	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.207	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.207	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.207	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.207	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.207	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.207	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.207	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.207	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.207	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**7.55**	**0.415**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.207	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.207	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.207	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.207	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.207	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.207	mg/kg
78-93-3	2-Butanone	ND	0.207	mg/kg
95-49-8	2-Chlorotoluene	ND	0.207	mg/kg
591-78-6	2-Hexanone	ND	0.207	mg/kg
106-43-4	4-Chlorotoluene	ND	0.207	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.207	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.207	mg/kg
67-64-1	Acetone	ND	1.04	mg/kg
71-43-2	Benzene	ND	0.207	mg/kg
108-86-1	Bromobenzene	ND	0.207	mg/kg
74-97-5	Bromochloromethane	ND	0.207	mg/kg
75-27-4	Bromodichloromethane	ND	0.207	mg/kg
75-25-2	Bromoform	ND	0.207	mg/kg
74-83-9	Bromomethane	ND	0.207	mg/kg
75-15-0	Carbon disulfide	ND	0.207	mg/kg
56-23-5	Carbon tetrachloride	ND	0.207	mg/kg
108-90-7	Chlorobenzene	ND	0.207	mg/kg
75-00-3	Chloroethane	ND	0.207	mg/kg
67-66-3	Chloroform	ND	0.207	mg/kg
74-87-3	Chloromethane	ND	0.207	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**7.50**	**0.207**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.207	mg/kg
124-48-1	Dibromochloromethane	ND	0.207	mg/kg
74-95-3	Dibromomethane	ND	0.207	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.207	mg/kg
100-41-4	Ethylbenzene	ND	0.207	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.207	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.207	mg/kg

Sample Results

ADD-2 @ 10	**Collect Date**	06/08/2016 12:48	**GCAL ID**	21606103209
	Receive Date	06/10/2016 10:06	**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	06/17/2016 15:48	DTB	588678

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.415	mg/kg
75-09-2	Methylene chloride	ND	0.415	mg/kg
91-20-3	Naphthalene	ND	0.207	mg/kg
104-51-8	n-Butylbenzene	ND	0.207	mg/kg
103-65-1	n-Propylbenzene	ND	0.207	mg/kg
95-47-6	o-Xylene	ND	0.207	mg/kg
135-98-8	sec-Butylbenzene	ND	0.207	mg/kg
100-42-5	Styrene	ND	0.207	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.207	mg/kg
98-06-6	tert-Butylbenzene	ND	0.207	mg/kg
108-88-3	Toluene	ND	0.207	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.207	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.207	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.207	mg/kg
79-01-6	**Trichloroethene**	**3.61**	**0.207**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.207	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.207	mg/kg
75-01-4	Vinyl chloride	ND	0.207	mg/kg
1330-20-7	Xylene (total)	ND	0.622	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1.72	1.6	ug/Kg	93	62 - 127
1868-53-7	Dibromofluoromethane	1.72	1.64	ug/Kg	96	65 - 130
2037-26-5	Toluene d8	1.72	1.71	ug/Kg	100	71 - 132
17060-07-0	1,2-Dichloroethane-d4	1.72	1.83	ug/Kg	107	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	250	06/17/2016 15:26	DTB	588678

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**21.7**	**1.04**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	8.59	7.79	ug/Kg	91	62 - 127
1868-53-7	Dibromofluoromethane	8.59	8.41	ug/Kg	98	65 - 130
2037-26-5	Toluene d8	8.59	8.65	ug/Kg	101	71 - 132
17060-07-0	1,2-Dichloroethane-d4	8.59	9.15	ug/Kg	107	62 - 125

Sample Results

TRIP BLANK	**Collect Date**	06/08/2016 00:01	**GCAL ID**	21606103210
	Receive Date	06/10/2016 10:06	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	06/13/2016 02:51	JCK	588385

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

TRIP BLANK

Collect Date	06/08/2016 00:01	**GCAL ID**	21606103210
Receive Date	06/10/2016 10:06	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	06/13/2016 02:51	JCK	588385

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	10.0	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	49.5	ug/L	99	78 - 130
1868-53-7	Dibromofluoromethane	50	51.6	ug/L	103	77 - 127
2037-26-5	Toluene d8	50	56.9	ug/L	114	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.3	ug/L	99	71 - 127

GC/MS Volatiles QC Summary

Analytical Batch 588494	Client ID	MB588494		LCS588494				LCSD588494				
	GCAL ID	1581356		1581357				1581358				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	06/14/2016 10:17		06/14/2016 08:05				06/14/2016 08:27				
	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	2.58	103	77 - 122	2.50	2.57	103	0	30
1,1,1-Trichloroethane	71-55-6	ND	0.250	2.50	2.58	103	70 - 130	2.50	2.54	102	2	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.250	2.50	2.36	94	66 - 129	2.50	2.45	98	4	30
1,1,2-Trichloroethane	79-00-5	ND	0.250	2.50	2.52	101	74 - 120	2.50	2.54	102	1	30
1,1-Dichloroethane	75-34-3	ND	0.250	2.50	2.44	98	71 - 126	2.50	2.41	96	1	30
1,1-Dichloroethene	75-35-4	ND	0.250	2.50	2.41	96	68 - 129	2.50	2.45	98	2	20
1,1-Dichloropropene	563-58-6	ND	0.250	2.50	2.76	110	70 - 138	2.50	2.68	107	3	30
1,2,3-Trichloropropane	96-18-4	ND	0.250	2.50	2.43	97	63 - 132	2.50	2.53	101	4	30
1,2,4-Trichlorobenzene	120-82-1	ND	0.250	2.50	2.45	98	64 - 135	2.50	2.49	100	2	30
1,2,4-Trimethylbenzene	95-63-6	ND	0.250	2.50	2.91	116	75 - 130	2.50	2.84	114	2	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.250	2.50	2.31	92	60 - 123	2.50	2.47	99	7	30
1,2-Dibromoethane	106-93-4	ND	0.250	2.50	2.65	106	74 - 122	2.50	2.66	106	0	30
1,2-Dichlorobenzene	95-50-1	ND	0.250	2.50	2.60	104	76 - 125	2.50	2.60	104	0	30
1,2-Dichloroethane	107-06-2	ND	0.250	2.50	2.45	98	68 - 126	2.50	2.41	96	2	30
1,2-Dichloroethene(Total)	540-59-0	ND	0.500	5.00	5.07	101	72 - 129	5.00	5.02	100	1	30
1,2-Dichloropropane	78-87-5	ND	0.250	2.50	2.52	101	72 - 129	2.50	2.51	100	0	30
1,3,5-Trimethylbenzene	108-67-8	ND	0.250	2.50	2.82	113	74 - 136	2.50	2.78	111	1	30
1,3-Dichlorobenzene	541-73-1	ND	0.250	2.50	2.64	106	77 - 127	2.50	2.64	106	0	30
1,3-Dichloropropane	142-28-9	ND	0.250	2.50	2.60	104	77 - 121	2.50	2.59	104	0	30
1,4-Dichlorobenzene	106-46-7	ND	0.250	2.50	2.58	103	74 - 123	2.50	2.56	102	1	30
2,2-Dichloropropane	594-20-7	ND	0.250	2.50	2.57	103	74 - 129	2.50	2.53	101	2	30
2-Butanone	78-93-3	ND	0.250	2.50	2.30	92	47 - 142	2.50	2.41	96	5	30
2-Chlorotoluene	95-49-8	ND	0.250	2.50	2.67	107	75 - 132	2.50	2.63	105	2	30
2-Hexanone	591-78-6	ND	0.250	2.50	2.05	82	47 - 137	2.50	2.18	87	6	30
4-Chlorotoluene	106-43-4	ND	0.250	2.50	2.75	110	74 - 133	2.50	2.72	109	1	30
4-Isopropyltoluene	99-87-6	ND	0.250	2.50	2.92	117	71 - 136	2.50	2.84	114	3	30
4-Methyl-2-pentanone	108-10-1	ND	0.250	2.50	2.14	86	52 - 136	2.50	2.29	92	7	30
Acetone	67-64-1	ND	1.25	2.50	2.31	92	38 - 152	2.50	2.41	96	4	30
Benzene	71-43-2	ND	0.250	2.50	2.70	108	73 - 128	2.50	2.64	106	2	20
Bromobenzene	108-86-1	ND	0.250	2.50	2.56	102	73 - 124	2.50	2.52	101	2	30
Bromochloromethane	74-97-5	ND	0.250	2.50	2.49	100	73 - 127	2.50	2.42	97	3	30
Bromodichloromethane	75-27-4	ND	0.250	2.50	2.61	104	74 - 126	2.50	2.56	102	2	30
Bromoform	75-25-2	ND	0.250	2.50	2.51	100	67 - 122	2.50	2.60	104	4	30
Bromomethane	74-83-9	ND	0.250	2.50	2.48	99	48 - 139	2.50	2.52	101	2	30
Carbon disulfide	75-15-0	ND	0.250	2.50	2.37	95	68 - 133	2.50	2.39	96	1	30
Carbon tetrachloride	56-23-5	ND	0.250	2.50	2.56	102	71 - 133	2.50	2.44	98	5	30
Chlorobenzene	108-90-7	ND	0.250	2.50	2.59	104	75 - 121	2.50	2.55	102	2	20
Chloroethane	75-00-3	ND	0.250	2.50	2.60	104	57 - 144	2.50	2.57	103	1	30
Chloroform	67-66-3	ND	0.250	2.50	2.56	102	74 - 124	2.50	2.49	100	3	30
Chloromethane	74-87-3	ND	0.250	2.50	2.21	88	61 - 130	2.50	2.32	93	5	30
cis-1,2-Dichloroethene	156-59-2	ND	0.250	2.50	2.61	104	72 - 130	2.50	2.59	104	1	30
cis-1,3-Dichloropropene	10061-01-5	ND	0.250	2.50	2.54	102	72 - 129	2.50	2.50	100	2	30
Dibromochloromethane	124-48-1	ND	0.250	2.50	2.54	102	74 - 122	2.50	2.57	103	1	30
Dibromomethane	74-95-3	ND	0.250	2.50	2.58	103	72 - 125	2.50	2.55	102	1	30
Dichlorodifluoromethane	75-71-8	ND	0.250	2.50	2.25	90	59 - 138	2.50	2.21	88	2	30
Ethylbenzene	100-41-4	ND	0.250	2.50	2.71	108	74 - 130	2.50	2.68	107	1	30
Hexachlorobutadiene	87-68-3	ND	0.250	2.50	2.80	112	71 - 140	2.50	2.73	109	3	30
Isopropylbenzene (Cumene)	98-82-8	ND	0.250	2.50	2.89	116	74 - 125	2.50	2.85	114	1	30
m,p-Xylene	136777-61-2	ND	0.500	5.00	5.63	113	72 - 128	5.00	5.54	111	2	30
Methylene chloride	75-09-2	ND	0.500	2.50	2.59	104	66 - 130	2.50	2.20	88	16	30
Naphthalene	91-20-3	ND	0.250	2.50	2.27	91	54 - 132	2.50	2.39	96	5	35
n-Butylbenzene	104-51-8	ND	0.250	2.50	2.61	104	68 - 144	2.50	2.55	102	2	30
n-Propylbenzene	103-65-1	ND	0.250	2.50	2.74	110	73 - 137	2.50	2.68	107	2	30
o-Xylene	95-47-6	ND	0.250	2.50	2.85	114	69 - 133	2.50	2.80	112	2	30
sec-Butylbenzene	135-98-8	ND	0.250	2.50	2.84	114	72 - 141	2.50	2.78	111	2	30
Styrene	100-42-5	ND	0.250	2.50	2.63	105	72 - 128	2.50	2.61	104	1	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	0.250	2.50	2.58	103	69 - 126	2.50	2.65	106	3	30
tert-Butylbenzene	98-06-6	ND	0.250	2.50	2.80	112	72 - 136	2.50	2.76	110	1	30

GC/MS Volatiles QC Summary

Analytical Batch 588494	Client ID	MB588494		LCS588494				LCSD588494				
	GCAL ID	1581356		1581357				1581358				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	06/14/2016 10:17		06/14/2016 08:05				06/14/2016 08:27				
	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
Tetrachloroethene	127-18-4	ND	0.250	2.50	2.62	105	70 - 127	2.50	2.58	103	2	30
Toluene	108-88-3	ND	0.250	2.50	2.55	102	74 - 121	2.50	2.50	100	2	20
trans-1,2-Dichloroethene	156-60-5	ND	0.250	2.50	2.47	99	67 - 134	2.50	2.43	97	2	30
trans-1,3-Dichloropropene	10061-02-6	ND	0.250	2.50	2.47	99	72 - 126	2.50	2.48	99	0	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.250	2.50	2.43	97	44 - 146	2.50	2.53	101	4	30
Trichloroethene	79-01-6	ND	0.250	2.50	2.65	106	78 - 127	2.50	2.57	103	3	20
Trichlorofluoromethane	75-69-4	ND	0.250	2.50	2.40	96	64 - 141	2.50	2.39	96	0	30
Trichlorotrifluoroethane	76-13-1	ND	0.250	2.50	2.53	101	66 - 139	2.50	2.48	99	2	30
Vinyl chloride	75-01-4	ND	0.250	2.50	2.32	93	67 - 131	2.50	2.39	96	3	30
Xylene (total)	1330-20-7	ND	0.750	7.50	8.48	113	71 - 129	7.50	8.34	111	2	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	2.5	100	2.5	2.49	100	62 - 125	2.5	2.44	98	NA	NA
4-Bromofluorobenzene	460-00-4	2.6	104	2.5	2.51	100	62 - 127	2.5	2.5	100	NA	NA
Dibromofluoromethane	1868-53-7	2.45	98	2.5	2.52	101	65 - 130	2.5	2.47	99	NA	NA
Toluene d8	2037-26-5	2.67	107	2.5	2.49	100	71 - 132	2.5	2.46	98	NA	NA

Analytical Batch 588678	Client ID	MB588678		LCS588678				LCSD588678				
	GCAL ID	1582426		1582427				1582428				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	06/17/2016 10:59		06/17/2016 09:28				06/17/2016 09:52				
	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	2.29	92	77 - 122	2.50	2.31	92	1	30
1,1,1-Trichloroethane	71-55-6	ND	0.250	2.50	2.53	101	70 - 130	2.50	2.51	100	1	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.250	2.50	2.58	103	66 - 129	2.50	2.64	106	2	30
1,1,2-Trichloroethane	79-00-5	ND	0.250	2.50	2.40	96	74 - 120	2.50	2.38	95	1	30
1,1-Dichloroethane	75-34-3	ND	0.250	2.50	2.68	107	71 - 126	2.50	2.65	106	1	30
1,1-Dichloroethene	75-35-4	ND	0.250	2.50	2.62	105	68 - 129	2.50	2.60	104	1	20
1,1-Dichloropropene	563-58-6	ND	0.250	2.50	2.97	119	70 - 138	2.50	2.85	114	4	30
1,2,3-Trichloropropane	96-18-4	ND	0.250	2.50	2.67	107	63 - 132	2.50	2.81	112	5	30
1,2,4-Trichlorobenzene	120-82-1	ND	0.250	2.50	2.29	92	64 - 135	2.50	2.27	91	1	30
1,2,4-Trimethylbenzene	95-63-6	ND	0.250	2.50	2.99	120	75 - 130	2.50	2.99	120	0	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.250	2.50	2.24	90	60 - 123	2.50	2.42	97	8	30
1,2-Dibromoethane	106-93-4	ND	0.250	2.50	2.43	97	74 - 122	2.50	2.52	101	4	30
1,2-Dichlorobenzene	95-50-1	ND	0.250	2.50	2.56	102	76 - 125	2.50	2.59	104	1	30
1,2-Dichloroethane	107-06-2	ND	0.250	2.50	2.70	108	68 - 126	2.50	2.64	106	2	30
1,2-Dichloroethene(Total)	540-59-0	ND	0.500	5.00	5.54	111	72 - 129	5.00	5.49	110	1	30
1,2-Dichloropropane	78-87-5	ND	0.250	2.50	2.72	109	72 - 129	2.50	2.71	108	0	30
1,3,5-Trimethylbenzene	108-67-8	ND	0.250	2.50	2.96	118	74 - 136	2.50	2.96	118	0	30
1,3-Dichlorobenzene	541-73-1	ND	0.250	2.50	2.60	104	77 - 127	2.50	2.59	104	0	30
1,3-Dichloropropane	142-28-9	ND	0.250	2.50	2.64	106	77 - 121	2.50	2.64	106	0	30
1,4-Dichlorobenzene	106-46-7	ND	0.250	2.50	2.53	101	74 - 123	2.50	2.58	103	2	30
2,2-Dichloropropane	594-20-7	ND	0.250	2.50	2.58	103	74 - 129	2.50	2.54	102	2	30
2-Butanone	78-93-3	ND	0.250	2.50	2.65	106	47 - 142	2.50	2.80	112	6	30
2-Chlorotoluene	95-49-8	ND	0.250	2.50	2.81	112	75 - 132	2.50	2.80	112	0	30
2-Hexanone	591-78-6	ND	0.250	2.50	2.21	88	47 - 137	2.50	2.43	97	9	30
4-Chlorotoluene	106-43-4	ND	0.250	2.50	2.93	117	74 - 133	2.50	2.88	115	2	30
4-Isopropyltoluene	99-87-6	ND	0.250	2.50	3.02	121	71 - 136	2.50	2.98	119	1	30
4-Methyl-2-pentanone	108-10-1	ND	0.250	2.50	2.33	93	52 - 136	2.50	2.50	100	7	30
Acetone	67-64-1	ND	1.25	2.50	2.36	94	38 - 152	2.50	2.48	99	5	30
Benzene	71-43-2	ND	0.250	2.50	2.79	112	73 - 128	2.50	2.73	109	2	20
Bromobenzene	108-86-1	ND	0.250	2.50	2.78	111	73 - 124	2.50	2.76	110	1	30
Bromochloromethane	74-97-5	ND	0.250	2.50	2.39	96	73 - 127	2.50	2.31	92	3	30
Bromodichloromethane	75-27-4	ND	0.250	2.50	2.62	105	74 - 126	2.50	2.55	102	3	30
Bromoform	75-25-2	ND	0.250	2.50	2.16	86	67 - 122	2.50	2.16	86	0	30

GC/MS Volatiles QC Summary

Analytical Batch 588678	Client ID	MB588678		LCS588678				LCSD588678				
	GCAL ID	1582426		1582427				1582428				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	06/17/2016 10:59		06/17/2016 09:28				06/17/2016 09:52				
	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
Bromomethane	74-83-9	ND	0.250	2.50	2.86	114	48 - 139	2.50	2.98	119	4	30
Carbon disulfide	75-15-0	ND	0.250	2.50	2.70	108	68 - 133	2.50	2.68	107	1	30
Carbon tetrachloride	56-23-5	ND	0.250	2.50	2.43	97	71 - 133	2.50	2.41	96	1	30
Chlorobenzene	108-90-7	ND	0.250	2.50	2.44	98	75 - 121	2.50	2.42	97	1	20
Chloroethane	75-00-3	ND	0.250	2.50	2.92	117	57 - 144	2.50	2.98	119	2	30
Chloroform	67-66-3	ND	0.250	2.50	2.56	102	74 - 124	2.50	2.51	100	2	30
Chloromethane	74-87-3	ND	0.250	2.50	2.81	112	61 - 130	2.50	2.89	116	3	30
cis-1,2-Dichloroethene	156-59-2	ND	0.250	2.50	2.85	114	72 - 130	2.50	2.83	113	1	30
cis-1,3-Dichloropropene	10061-01-5	ND	0.250	2.50	2.59	104	72 - 129	2.50	2.56	102	1	30
Dibromochloromethane	124-48-1	ND	0.250	2.50	2.29	92	74 - 122	2.50	2.33	93	2	30
Dibromomethane	74-95-3	ND	0.250	2.50	2.59	104	72 - 125	2.50	2.63	105	2	30
Dichlorodifluoromethane	75-71-8	ND	0.250	2.50	2.58	103	59 - 138	2.50	2.50	100	3	30
Ethylbenzene	100-41-4	ND	0.250	2.50	2.60	104	74 - 130	2.50	2.57	103	1	30
Hexachlorobutadiene	87-68-3	ND	0.250	2.50	2.31	92	71 - 140	2.50	2.23	89	4	30
Isopropylbenzene (Cumene)	98-82-8	ND	0.250	2.50	2.72	109	74 - 125	2.50	2.69	108	1	30
m,p-Xylene	136777-61-2	ND	0.500	5.00	5.34	107	72 - 128	5.00	5.27	105	1	30
Methylene chloride	75-09-2	ND	0.500	2.50	2.53	101	66 - 130	2.50	2.47	99	2	30
Naphthalene	91-20-3	ND	0.250	2.50	2.20	88	54 - 132	2.50	2.31	92	5	35
n-Butylbenzene	104-51-8	ND	0.250	2.50	2.79	112	68 - 144	2.50	2.72	109	3	30
n-Propylbenzene	103-65-1	ND	0.250	2.50	2.89	116	73 - 137	2.50	2.85	114	1	30
o-Xylene	95-47-6	ND	0.250	2.50	2.67	107	69 - 133	2.50	2.65	106	1	30
sec-Butylbenzene	135-98-8	ND	0.250	2.50	2.97	119	72 - 141	2.50	2.93	117	1	30
Styrene	100-42-5	ND	0.250	2.50	2.49	100	72 - 128	2.50	2.48	99	0	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	0.250	2.50	2.58	103	69 - 126	2.50	2.68	107	4	30
tert-Butylbenzene	98-06-6	ND	0.250	2.50	2.98	119	72 - 136	2.50	2.96	118	1	30
Tetrachloroethene	127-18-4	ND	0.250	2.50	2.26	90	70 - 127	2.50	2.20	88	3	30
Toluene	108-88-3	ND	0.250	2.50	2.45	98	74 - 121	2.50	2.41	96	2	20
trans-1,2-Dichloroethene	156-60-5	ND	0.250	2.50	2.70	108	67 - 134	2.50	2.65	106	2	30
trans-1,3-Dichloropropene	10061-02-6	ND	0.250	2.50	2.53	101	72 - 126	2.50	2.50	100	1	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.250	2.50	2.88	115	44 - 146	2.50	2.99	120	4	30
Trichloroethene	79-01-6	ND	0.250	2.50	2.47	99	78 - 127	2.50	2.42	97	2	20
Trichlorofluoromethane	75-69-4	ND	0.250	2.50	2.54	102	64 - 141	2.50	2.53	101	0	30
Trichlorotrifluoroethane	76-13-1	ND	0.250	2.50	2.68	107	66 - 139	2.50	2.61	104	3	30
Vinyl chloride	75-01-4	ND	0.250	2.50	2.67	107	67 - 131	2.50	2.75	110	3	30
Xylene (total)	1330-20-7	ND	0.750	7.50	8.02	107	71 - 129	7.50	7.91	105	1	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	2.75	110	2.5	2.69	108	62 - 125	2.5	2.63	105	NA	NA
4-Bromofluorobenzene	460-00-4	2.23	89	2.5	2.15	86	62 - 127	2.5	2.17	87	NA	NA
Dibromofluoromethane	1868-53-7	2.41	96	2.5	2.48	99	65 - 130	2.5	2.42	97	NA	NA
Toluene d8	2037-26-5	2.6	104	2.5	2.44	98	71 - 132	2.5	2.45	98	NA	NA

Analytical Batch 588385	Client ID	MB588385		LCS588385				LCSD588385				
	GCAL ID	1580903		1580904				1580905				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	06/12/2016 22:48		06/12/2016 22:03				06/12/2016 22:26				
	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	47.1	94	75 - 124	50.0	45.7	91	3	30
1,1,1-Trichloroethane	71-55-6	ND	5.00	50.0	47.7	95	76 - 126	50.0	46.8	94	2	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	5.00	50.0	43.9	88	70 - 122	50.0	44.4	89	1	30
1,1,2-Trichloroethane	79-00-5	ND	5.00	50.0	47.6	95	72 - 121	50.0	47.3	95	1	30
1,1-Dichloroethane	75-34-3	ND	5.00	50.0	45.9	92	74 - 127	50.0	43.8	88	5	30
1,1-Dichloroethene	75-35-4	ND	5.00	50.0	44.6	89	69 - 129	50.0	43.8	88	2	20
1,1-Dichloropropene	563-58-6	ND	5.00	50.0	44.0	88	72 - 131	50.0	42.0	84	5	30
1,2,3-Trichloropropane	96-18-4	ND	5.00	50.0	44.0	88	70 - 120	50.0	45.3	91	3	30

GC/MS Volatiles QC Summary

Analytical Batch 588385	Client ID	MB588385		LCS588385				LCSD588385				
	GCAL ID	1580903		1580904				1580905				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	06/12/2016 22:48		06/12/2016 22:03				06/12/2016 22:26				
	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
1,2,4-Trichlorobenzene	120-82-1	ND	5.00	50.0	44.8	90	61 - 135	50.0	43.7	87	2	30
1,2,4-Trimethylbenzene	95-63-6	ND	5.00	50.0	45.1	90	74 - 125	50.0	44.2	88	2	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	5.00	50.0	42.7	85	57 - 121	50.0	45.1	90	5	30
1,2-Dibromoethane	106-93-4	ND	5.00	50.0	49.1	98	70 - 124	50.0	49.2	98	0	30
1,2-Dichlorobenzene	95-50-1	ND	5.00	50.0	49.6	99	71 - 126	50.0	49.2	98	1	30
1,2-Dichloroethane	107-06-2	ND	5.00	50.0	47.5	95	71 - 129	50.0	45.7	91	4	30
1,2-Dichloroethene(Total)	540-59-0	ND	10.0	100	87.5	88	74 - 128	100	84.7	85	3	30
1,2-Dichloropropane	78-87-5	ND	5.00	50.0	48.5	97	72 - 128	50.0	47.5	95	2	30
1,3,5-Trimethylbenzene	108-67-8	ND	5.00	50.0	44.0	88	71 - 132	50.0	43.2	86	2	30
1,3-Dichlorobenzene	541-73-1	ND	5.00	50.0	50.8	102	74 - 126	50.0	49.7	99	2	30
1,3-Dichloropropane	142-28-9	ND	5.00	50.0	49.9	100	74 - 122	50.0	50.1	100	0	30
1,4-Dichlorobenzene	106-46-7	ND	5.00	50.0	48.5	97	72 - 122	50.0	47.7	95	2	30
2,2-Dichloropropane	594-20-7	ND	5.00	50.0	48.3	97	77 - 124	50.0	46.4	93	4	30
2-Butanone	78-93-3	ND	5.00	50.0	43.1	86	58 - 137	50.0	45.8	92	6	30
2-Chlorotoluene	95-49-8	ND	5.00	50.0	50.9	102	72 - 127	50.0	50.2	100	1	30
2-Hexanone	591-78-6	ND	5.00	50.0	43.1	86	50 - 135	50.0	46.4	93	7	30
4-Chlorotoluene	106-43-4	ND	5.00	50.0	46.4	93	75 - 126	50.0	45.7	91	2	30
4-Isopropyltoluene	99-87-6	ND	5.00	50.0	45.6	91	71 - 129	50.0	44.2	88	3	30
4-Methyl-2-pentanone	108-10-1	ND	5.00	50.0	44.6	89	57 - 132	50.0	47.1	94	5	30
Acetone	67-64-1	ND	5.00	50.0	36.7	73	44 - 156	50.0	41.6	83	13	30
Benzene	71-43-2	ND	5.00	50.0	50.3	101	70 - 129	50.0	48.1	96	4	20
Bromobenzene	108-86-1	ND	5.00	50.0	47.5	95	71 - 120	50.0	47.1	94	1	30
Bromochloromethane	74-97-5	ND	5.00	50.0	49.9	100	76 - 130	50.0	46.9	94	6	30
Bromodichloromethane	75-27-4	ND	5.00	50.0	49.0	98	74 - 125	50.0	48.0	96	2	30
Bromoform	75-25-2	ND	5.00	50.0	46.3	93	64 - 122	50.0	45.7	91	1	30
Bromomethane	74-83-9	ND	5.00	50.0	60.7	121	47 - 138	50.0	56.2	112	8	30
Carbon disulfide	75-15-0	ND	5.00	50.0	45.6	91	69 - 136	50.0	43.7	87	4	30
Carbon tetrachloride	56-23-5	ND	5.00	50.0	48.2	96	76 - 128	50.0	46.9	94	3	30
Chlorobenzene	108-90-7	ND	5.00	50.0	48.9	98	74 - 123	50.0	47.1	94	4	20
Chloroethane	75-00-3	ND	5.00	50.0	43.7	87	62 - 141	50.0	41.5	83	5	30
Chloroform	67-66-3	ND	5.00	50.0	45.2	90	75 - 122	50.0	43.5	87	4	30
Chloromethane	74-87-3	ND	5.00	50.0	49.9	100	59 - 132	50.0	45.5	91	9	30
cis-1,2-Dichloroethene	156-59-2	ND	5.00	50.0	44.7	89	73 - 130	50.0	43.2	86	3	30
cis-1,3-Dichloropropene	10061-01-5	ND	5.00	50.0	43.6	87	71 - 132	50.0	42.0	84	4	30
Dibromochloromethane	124-48-1	ND	5.00	50.0	47.1	94	71 - 123	50.0	47.0	94	0	30
Dibromomethane	74-95-3	ND	5.00	50.0	47.7	95	72 - 129	50.0	47.4	95	1	30
Dichlorodifluoromethane	75-71-8	ND	5.00	50.0	56.7	113	58 - 140	50.0	52.5	105	8	30
Ethylbenzene	100-41-4	ND	5.00	50.0	52.1	104	74 - 126	50.0	50.2	100	4	30
Hexachlorobutadiene	87-68-3	ND	5.00	50.0	52.1	104	61 - 144	50.0	47.9	96	8	30
Isopropylbenzene (Cumene)	98-82-8	ND	5.00	50.0	47.1	94	71 - 125	50.0	44.4	89	6	30
m,p-Xylene	136777-61-2	ND	10.0	100	94.0	94	74 - 126	100	87.8	88	7	30
Methylene chloride	75-09-2	ND	5.00	50.0	42.8	86	68 - 132	50.0	41.3	83	4	30
Naphthalene	91-20-3	ND	5.00	50.0	42.0	84	57 - 138	50.0	43.0	86	2	35
n-Butylbenzene	104-51-8	ND	5.00	50.0	46.0	92	69 - 134	50.0	44.4	89	4	30
n-Propylbenzene	103-65-1	ND	5.00	50.0	51.9	104	75 - 129	50.0	50.2	100	3	30
o-Xylene	95-47-6	ND	5.00	50.0	48.0	96	73 - 130	50.0	45.8	92	5	30
sec-Butylbenzene	135-98-8	ND	5.00	50.0	46.2	92	70 - 136	50.0	44.8	90	3	30
Styrene	100-42-5	ND	5.00	50.0	46.6	93	71 - 127	50.0	44.3	89	5	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	5.00	50.0	57.1	114	71 - 125	50.0	60.8	122	6	30
tert-Butylbenzene	98-06-6	ND	5.00	50.0	46.6	93	72 - 126	50.0	44.8	90	4	30
Tetrachloroethene	127-18-4	ND	5.00	50.0	52.9	106	68 - 128	50.0	48.4	97	9	30
Toluene	108-88-3	ND	5.00	50.0	48.6	97	72 - 120	50.0	46.2	92	5	20
trans-1,2-Dichloroethene	156-60-5	ND	5.00	50.0	42.8	86	69 - 132	50.0	41.5	83	3	30
trans-1,3-Dichloropropene	10061-02-6	ND	5.00	50.0	42.6	85	71 - 131	50.0	40.8	82	4	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	5.00	50.0	42.8	86	56 - 132	50.0	46.2	92	8	30
Trichloroethene	79-01-6	ND	5.00	50.0	47.9	96	76 - 129	50.0	46.5	93	3	20
Trichlorofluoromethane	75-69-4	ND	5.00	50.0	47.6	95	72 - 136	50.0	46.2	92	3	30
Trichlorotrifluoroethane	76-13-1	ND	5.00	50.0	46.4	93	72 - 136	50.0	45.0	90	3	30

GC/MS Volatiles QC Summary

Analytical Batch 588385	Client ID	MB588385		LCS588385				LCSD588385				
	GCAL ID	1580903		1580904				1580905				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	06/12/2016 22:48		06/12/2016 22:03				06/12/2016 22:26				
	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
Vinyl chloride	75-01-4	ND	2.00	50.0	48.8	98	68 - 132	50.0	46.6	93	5	30
Xylene (total)	1330-20-7	ND	15.0	150	142	95	74 - 127	150	134	89	6	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	47.6	95	50	47.8	96	71 - 127	50	48.5	97	NA	NA
4-Bromofluorobenzene	460-00-4	49.9	100	50	51.8	104	78 - 130	50	50.8	102	NA	NA
Dibromofluoromethane	1868-53-7	48.8	98	50	47.5	95	77 - 127	50	47.3	95	NA	NA
Toluene d8	2037-26-5	56	112	50	49.6	99	76 - 134	50	49.8	100	NA	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: 216061032
PM: SAK

Report to:
Client: Clearwater Env. Resources
Address: 3990 P'Tree Ind Blvd Ste 340139, Duluth GA 30096
Contact: Jack Wittle
Phone: 678-491-4601
E-mail: jack.wittle@clearwaterenv.net

Bill to:
Client: As previous.
Address:
Contact:
Phone:
E-mail:

P.O. Number
Project Name/Number: RAYLOC BDA
Sampled By: Perry Frix

Analytical Requests & Method: VOCs via 8260B

GCAL use only:
Custody Seal used ☑ yes ☐ no
intact ☑ yes ☐ no
Temperature °C 2/6 E04
47 cfm

☐ Dissolved Analysis Requested
☐ Field filtered
☐ Lab filtered

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	No Containers	VOCs via 8260B	Preservative
S	6/8/16	1144		X	PD-2 @ 10'	4	X	1
S		1210		X	WD-2 @ 10'	4	X	2
S		1224		X	WD-4 @ 10'	4	X	3
S		1217		X	WD-8 @ 5'	4	X	4
S		1151		X	WD-11 @ 10'	4	X	5
S		1229		X	ADD-1 @ 6'	4	X	6
S		1236		X	ADD-1 @ 10'	4	X	7
S		1241		X	ADD-2 @ 5'	4	X	8
S	V	1248		X	ADD-2 @ 10'	4	X	9
					TRIP BLANK	3		10

Air Bill No: 7764 8128 7039

Turn Around Time (Business Days): ☐ 24h* ☐ 48h* ☐ 3 days* ☐ 1 week* ☐ Standard (Per Contract/Quote) FINAL REPORT DUE 6/17/16 COB

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	6/8/16	1505		6-8-2016	3:10 PM
	6-8-2016	4:20 PM		6/8/2016	1640
	6/9/2016	1310	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

6-10-16 bid

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT

GCAL ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIVING CHECKLIST

216061032

SAMPLE DELIVERY GROUP 216061032	
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)** 06/10/16

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: E24	Temp(°C)
7764 8128 7039		2.6

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

Revision 1.5

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 09/16/2016

GCAL Report 216090905

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
NO	Indicates the sample did not ignite when preliminary test performed for EPA Method 1030
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 216090905

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:** 216090905

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 21609090503 (WD-4 @ 10), 21609090504 (WD-8 @ 5), 21609090506 (ADD-1 @ 6), 21609090507 (ADD-1 @ 10), 21609090508 (ADD-2 @ 5), and 21609090509 (ADD-2 @ 10) had to be diluted due to the presence of non-target background. The dilutions are reflected in elevated reporting limits.

In the EPA 8260B analysis, samples 21609090501 (PD-2 @ 10), 21609090502 (WD-2 @ 10), 21609090503 (WD-4 @ 10), 21609090504 (WD-8 @ 5), 21609090505 (WD-11 @ 10), 21609090506 (ADD-1 @ 6), 21609090507 (ADD-1 @ 10), 21609090508 (ADD-2 @ 5), and 21609090509 (ADD-2 @ 10) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument. The dilutions are reflected in elevated reporting limits.

Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21609090501	PD-2 @ 10	Solid	09/07/2016 14:02	09/09/2016 10:17
21609090502	WD-2 @ 10	Solid	09/07/2016 14:37	09/09/2016 10:17
21609090503	WD-4 @ 10	Solid	09/07/2016 14:52	09/09/2016 10:17
21609090504	WD-8 @ 5	Solid	09/07/2016 14:43	09/09/2016 10:17
21609090505	WD-11 @ 10	Solid	09/07/2016 14:13	09/09/2016 10:17
21609090506	ADD-1 @ 6	Solid	09/07/2016 14:58	09/09/2016 10:17
21609090507	ADD-1 @ 10	Solid	09/07/2016 15:01	09/09/2016 10:17
21609090508	ADD-2 @ 5	Solid	09/07/2016 15:08	09/09/2016 10:17
21609090509	ADD-2 @ 10	Solid	09/07/2016 15:14	09/09/2016 10:17
21609090510	TRIP BLANK	Water	09/07/2016 00:01	09/09/2016 10:17

Summary of Compounds Detected

WD-2 @ 10

Collect Date 09/07/2016 14:37 **GCAL ID** 21609090502
Receive Date 09/09/2016 10:17 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
156-59-2	cis-1,2-Dichloroethene	0.298	0.201	mg/kg
127-18-4	Tetrachloroethene	3.95	0.201	mg/kg

WD-4 @ 10

Collect Date 09/07/2016 14:52 **GCAL ID** 21609090503
Receive Date 09/09/2016 10:17 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
95-63-6	1,2,4-Trimethylbenzene	3.38	0.725	mg/kg
540-59-0	1,2-Dichloroethene(Total)	6.01	1.45	mg/kg
108-67-8	1,3,5-Trimethylbenzene	0.833	0.725	mg/kg
156-59-2	cis-1,2-Dichloroethene	5.74	0.725	mg/kg
127-18-4	Tetrachloroethene	99.2	8.07	mg/kg
79-01-6	Trichloroethene	3.91	0.725	mg/kg

WD-8 @ 5

Collect Date 09/07/2016 14:43 **GCAL ID** 21609090504
Receive Date 09/09/2016 10:17 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	6.50	0.465	mg/kg
156-59-2	cis-1,2-Dichloroethene	6.47	0.232	mg/kg
127-18-4	Tetrachloroethene	29.0	1.16	mg/kg
79-01-6	Trichloroethene	1.25	0.232	mg/kg

WD-11 @ 10

Collect Date 09/07/2016 14:13 **GCAL ID** 21609090505
Receive Date 09/09/2016 10:17 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	10.1	0.282	mg/kg

Summary of Compounds Detected

ADD-1 @ 6

Collect Date 09/07/2016 14:58 **GCAL ID** 21609090506
Receive Date 09/09/2016 10:17 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	12.9	0.385	mg/kg
156-59-2	cis-1,2-Dichloroethene	12.1	1.92	mg/kg
127-18-4	Tetrachloroethene	27.2	1.92	mg/kg
79-01-6	Trichloroethene	3.15	0.192	mg/kg

ADD-1 @ 10

Collect Date 09/07/2016 15:01 **GCAL ID** 21609090507
Receive Date 09/09/2016 10:17 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	1.02	0.553	mg/kg
156-59-2	cis-1,2-Dichloroethene	1.02	0.276	mg/kg
127-18-4	Tetrachloroethene	40.2	2.76	mg/kg
79-01-6	Trichloroethene	1.81	0.276	mg/kg

ADD-2 @ 5

Collect Date 09/07/2016 15:08 **GCAL ID** 21609090508
Receive Date 09/09/2016 10:17 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
156-59-2	cis-1,2-Dichloroethene	10.6	8.77	mg/kg
127-18-4	Tetrachloroethene	1690	87.7	mg/kg
79-01-6	Trichloroethene	22.7	8.77	mg/kg

ADD-2 @ 10

Collect Date 09/07/2016 15:14 **GCAL ID** 21609090509
Receive Date 09/09/2016 10:17 **Matrix** Solid

EPA 8260B *Results Reported on Dry Weight Basis

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	9.92	0.395	mg/kg
156-59-2	cis-1,2-Dichloroethene	9.08	1.98	mg/kg
127-18-4	Tetrachloroethene	11.4	1.98	mg/kg
79-01-6	Trichloroethene	4.26	0.198	mg/kg

Sample Results

PD-2 @ 10	**Collect Date**	09/07/2016 14:02	**GCAL ID**	21609090501
	Receive Date	09/09/2016 10:17	**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	09/15/2016 13:57	JCK	594699

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.396	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.396	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.396	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.396	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.396	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.396	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.396	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.396	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.396	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.396	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.396	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.396	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.396	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.396	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.792	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.396	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.396	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.396	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.396	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.396	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.396	mg/kg
78-93-3	2-Butanone	ND	0.396	mg/kg
95-49-8	2-Chlorotoluene	ND	0.396	mg/kg
591-78-6	2-Hexanone	ND	0.396	mg/kg
106-43-4	4-Chlorotoluene	ND	0.396	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.396	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.396	mg/kg
67-64-1	Acetone	ND	1.98	mg/kg
71-43-2	Benzene	ND	0.396	mg/kg
108-86-1	Bromobenzene	ND	0.396	mg/kg
74-97-5	Bromochloromethane	ND	0.396	mg/kg
75-27-4	Bromodichloromethane	ND	0.396	mg/kg
75-25-2	Bromoform	ND	0.396	mg/kg
74-83-9	Bromomethane	ND	0.396	mg/kg
75-15-0	Carbon disulfide	ND	0.396	mg/kg
56-23-5	Carbon tetrachloride	ND	0.396	mg/kg
108-90-7	Chlorobenzene	ND	0.396	mg/kg
75-00-3	Chloroethane	ND	0.396	mg/kg
67-66-3	Chloroform	ND	0.396	mg/kg
74-87-3	Chloromethane	ND	0.396	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	0.396	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.396	mg/kg
124-48-1	Dibromochloromethane	ND	0.396	mg/kg
74-95-3	Dibromomethane	ND	0.396	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.396	mg/kg
100-41-4	Ethylbenzene	ND	0.396	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.396	mg/kg

Sample Results

PD-2 @ 10

Collect Date	09/07/2016 14:02	**GCAL ID**	21609090501
Receive Date	09/09/2016 10:17	**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	09/15/2016 13:57	JCK	594699

CAS#	Parameter	Result	LOQ	Units
98-82-8	Isopropylbenzene (Cumene)	ND	0.396	mg/kg
136777-61-2	m,p-Xylene	ND	0.792	mg/kg
75-09-2	Methylene chloride	ND	0.792	mg/kg
91-20-3	Naphthalene	ND	0.396	mg/kg
104-51-8	n-Butylbenzene	ND	0.396	mg/kg
103-65-1	n-Propylbenzene	ND	0.396	mg/kg
95-47-6	o-Xylene	ND	0.396	mg/kg
135-98-8	sec-Butylbenzene	ND	0.396	mg/kg
100-42-5	Styrene	ND	0.396	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.396	mg/kg
98-06-6	tert-Butylbenzene	ND	0.396	mg/kg
127-18-4	Tetrachloroethene	ND	0.396	mg/kg
108-88-3	Toluene	ND	0.396	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.396	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.396	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.396	mg/kg
79-01-6	Trichloroethene	ND	0.396	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.396	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.396	mg/kg
75-01-4	Vinyl chloride	ND	0.396	mg/kg
1330-20-7	Xylene (total)	ND	1.19	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	3.62	3.76	ug/Kg	104	62 - 127
1868-53-7	Dibromofluoromethane	3.62	3.7	ug/Kg	102	65 - 130
2037-26-5	Toluene d8	3.62	3.75	ug/Kg	104	71 - 132
17060-07-0	1,2-Dichloroethane-d4	3.62	3.99	ug/Kg	110	62 - 125

WD-2 @ 10

Collect Date	09/07/2016 14:37	**GCAL ID**	21609090502
Receive Date	09/09/2016 10:17	**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	09/12/2016 18:03	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.201	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.201	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.201	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.201	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.201	mg/kg

Sample Results

WD-2 @ 10	Collect Date	09/07/2016 14:37	GCAL ID	21609090502
	Receive Date	09/09/2016 10:17	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	09/12/2016 18:03	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
75-35-4	1,1-Dichloroethene	ND	0.201	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.201	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.201	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.201	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.201	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.201	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.201	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.201	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.201	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.402	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.201	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.201	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.201	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.201	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.201	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.201	mg/kg
78-93-3	2-Butanone	ND	0.201	mg/kg
95-49-8	2-Chlorotoluene	ND	0.201	mg/kg
591-78-6	2-Hexanone	ND	0.201	mg/kg
106-43-4	4-Chlorotoluene	ND	0.201	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.201	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.201	mg/kg
67-64-1	Acetone	ND	1.01	mg/kg
71-43-2	Benzene	ND	0.201	mg/kg
108-86-1	Bromobenzene	ND	0.201	mg/kg
74-97-5	Bromochloromethane	ND	0.201	mg/kg
75-27-4	Bromodichloromethane	ND	0.201	mg/kg
75-25-2	Bromoform	ND	0.201	mg/kg
74-83-9	Bromomethane	ND	0.201	mg/kg
75-15-0	Carbon disulfide	ND	0.201	mg/kg
56-23-5	Carbon tetrachloride	ND	0.201	mg/kg
108-90-7	Chlorobenzene	ND	0.201	mg/kg
75-00-3	Chloroethane	ND	0.201	mg/kg
67-66-3	Chloroform	ND	0.201	mg/kg
74-87-3	Chloromethane	ND	0.201	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**0.298**	**0.201**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.201	mg/kg
124-48-1	Dibromochloromethane	ND	0.201	mg/kg
74-95-3	Dibromomethane	ND	0.201	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.201	mg/kg
100-41-4	Ethylbenzene	ND	0.201	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.201	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.201	mg/kg
136777-61-2	m,p-Xylene	ND	0.402	mg/kg
75-09-2	Methylene chloride	ND	0.402	mg/kg
91-20-3	Naphthalene	ND	0.201	mg/kg
104-51-8	n-Butylbenzene	ND	0.201	mg/kg

Sample Results

WD-2 @ 10

Collect Date	09/07/2016 14:37	**GCAL ID**	21609090502
Receive Date	09/09/2016 10:17	**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	09/12/2016 18:03	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
103-65-1	n-Propylbenzene	ND	0.201	mg/kg
95-47-6	o-Xylene	ND	0.201	mg/kg
135-98-8	sec-Butylbenzene	ND	0.201	mg/kg
100-42-5	Styrene	ND	0.201	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.201	mg/kg
98-06-6	tert-Butylbenzene	ND	0.201	mg/kg
127-18-4	**Tetrachloroethene**	**3.95**	**0.201**	**mg/kg**
108-88-3	Toluene	ND	0.201	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.201	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.201	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.201	mg/kg
79-01-6	Trichloroethene	ND	0.201	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.201	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.201	mg/kg
75-01-4	Vinyl chloride	ND	0.201	mg/kg
1330-20-7	Xylene (total)	ND	0.604	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1.73	1.66	ug/Kg	96	62 - 127
1868-53-7	Dibromofluoromethane	1.73	1.65	ug/Kg	95	65 - 130
2037-26-5	Toluene d8	1.73	1.71	ug/Kg	99	71 - 132
17060-07-0	1,2-Dichloroethane-d4	1.73	1.82	ug/Kg	105	62 - 125

WD-4 @ 10

Collect Date	09/07/2016 14:52	**GCAL ID**	21609090503
Receive Date	09/09/2016 10:17	**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	200	09/12/2016 17:18	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.725	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.725	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.725	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.725	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.725	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.725	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.725	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.725	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.725	mg/kg
95-63-6	**1,2,4-Trimethylbenzene**	**3.38**	**0.725**	**mg/kg**

Sample Results

WD-4 @ 10	**Collect Date**	09/07/2016 14:52	**GCAL ID**	21609090503
	Receive Date	09/09/2016 10:17	**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	200	09/12/2016 17:18	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.725	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.725	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.725	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.725	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**6.01**	**1.45**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.725	mg/kg
108-67-8	**1,3,5-Trimethylbenzene**	**0.833**	**0.725**	**mg/kg**
541-73-1	1,3-Dichlorobenzene	ND	0.725	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.725	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.725	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.725	mg/kg
78-93-3	2-Butanone	ND	0.725	mg/kg
95-49-8	2-Chlorotoluene	ND	0.725	mg/kg
591-78-6	2-Hexanone	ND	0.725	mg/kg
106-43-4	4-Chlorotoluene	ND	0.725	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.725	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.725	mg/kg
67-64-1	Acetone	ND	3.62	mg/kg
71-43-2	Benzene	ND	0.725	mg/kg
108-86-1	Bromobenzene	ND	0.725	mg/kg
74-97-5	Bromochloromethane	ND	0.725	mg/kg
75-27-4	Bromodichloromethane	ND	0.725	mg/kg
75-25-2	Bromoform	ND	0.725	mg/kg
74-83-9	Bromomethane	ND	0.725	mg/kg
75-15-0	Carbon disulfide	ND	0.725	mg/kg
56-23-5	Carbon tetrachloride	ND	0.725	mg/kg
108-90-7	Chlorobenzene	ND	0.725	mg/kg
75-00-3	Chloroethane	ND	0.725	mg/kg
67-66-3	Chloroform	ND	0.725	mg/kg
74-87-3	Chloromethane	ND	0.725	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**5.74**	**0.725**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.725	mg/kg
124-48-1	Dibromochloromethane	ND	0.725	mg/kg
74-95-3	Dibromomethane	ND	0.725	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.725	mg/kg
100-41-4	Ethylbenzene	ND	0.725	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.725	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.725	mg/kg
136777-61-2	m,p-Xylene	ND	1.45	mg/kg
75-09-2	Methylene chloride	ND	1.45	mg/kg
91-20-3	Naphthalene	ND	0.725	mg/kg
104-51-8	n-Butylbenzene	ND	0.725	mg/kg
103-65-1	n-Propylbenzene	ND	0.725	mg/kg
95-47-6	o-Xylene	ND	0.725	mg/kg
135-98-8	sec-Butylbenzene	ND	0.725	mg/kg
100-42-5	Styrene	ND	0.725	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.725	mg/kg

Sample Results

WD-4 @ 10	**Collect Date**	09/07/2016 14:52	**GCAL ID**	21609090503
	Receive Date	09/09/2016 10:17	**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	200	09/12/2016 17:18	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
98-06-6	tert-Butylbenzene	ND	0.725	mg/kg
108-88-3	Toluene	ND	0.725	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.725	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.725	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.725	mg/kg
79-01-6	**Trichloroethene**	**3.91**	**0.725**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.725	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.725	mg/kg
75-01-4	Vinyl chloride	ND	0.725	mg/kg
1330-20-7	Xylene (total)	ND	2.17	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	6.50	6.35	ug/Kg	98	62 - 127
1868-53-7	Dibromofluoromethane	6.50	6.32	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	6.50	6.15	ug/Kg	95	71 - 132
17060-07-0	1,2-Dichloroethane-d4	6.50	6.88	ug/Kg	106	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	2000	09/12/2016 13:33	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**99.2**	**8.07**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	72.40	69.8	ug/Kg	96	62 - 127
1868-53-7	Dibromofluoromethane	72.40	72.5	ug/Kg	100	65 - 130
2037-26-5	Toluene d8	72.40	71.9	ug/Kg	99	71 - 132
17060-07-0	1,2-Dichloroethane-d4	72.40	76.4	ug/Kg	105	62 - 125

Sample Results

WD-8 @ 5

Collect Date	09/07/2016 14:43	**GCAL ID**	21609090504
Receive Date	09/09/2016 10:17	**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	09/12/2016 18:25	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.232	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.232	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.232	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.232	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.232	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.232	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.232	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.232	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.232	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.232	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.232	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.232	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.232	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.232	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**6.50**	**0.465**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.232	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.232	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.232	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.232	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.232	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.232	mg/kg
78-93-3	2-Butanone	ND	0.232	mg/kg
95-49-8	2-Chlorotoluene	ND	0.232	mg/kg
591-78-6	2-Hexanone	ND	0.232	mg/kg
106-43-4	4-Chlorotoluene	ND	0.232	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.232	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.232	mg/kg
67-64-1	Acetone	ND	1.16	mg/kg
71-43-2	Benzene	ND	0.232	mg/kg
108-86-1	Bromobenzene	ND	0.232	mg/kg
74-97-5	Bromochloromethane	ND	0.232	mg/kg
75-27-4	Bromodichloromethane	ND	0.232	mg/kg
75-25-2	Bromoform	ND	0.232	mg/kg
74-83-9	Bromomethane	ND	0.232	mg/kg
75-15-0	Carbon disulfide	ND	0.232	mg/kg
56-23-5	Carbon tetrachloride	ND	0.232	mg/kg
108-90-7	Chlorobenzene	ND	0.232	mg/kg
75-00-3	Chloroethane	ND	0.232	mg/kg
67-66-3	Chloroform	ND	0.232	mg/kg
74-87-3	Chloromethane	ND	0.232	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**6.47**	**0.232**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.232	mg/kg
124-48-1	Dibromochloromethane	ND	0.232	mg/kg
74-95-3	Dibromomethane	ND	0.232	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.232	mg/kg
100-41-4	Ethylbenzene	ND	0.232	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.232	mg/kg

Sample Results

WD-8 @ 5	**Collect Date**	09/07/2016 14:43	**GCAL ID**	21609090504
	Receive Date	09/09/2016 10:17	**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	09/12/2016 18:25	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
98-82-8	Isopropylbenzene (Cumene)	ND	0.232	mg/kg
136777-61-2	m,p-Xylene	ND	0.465	mg/kg
75-09-2	Methylene chloride	ND	0.465	mg/kg
91-20-3	Naphthalene	ND	0.232	mg/kg
104-51-8	n-Butylbenzene	ND	0.232	mg/kg
103-65-1	n-Propylbenzene	ND	0.232	mg/kg
95-47-6	o-Xylene	ND	0.232	mg/kg
135-98-8	sec-Butylbenzene	ND	0.232	mg/kg
100-42-5	Styrene	ND	0.232	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.232	mg/kg
98-06-6	tert-Butylbenzene	ND	0.232	mg/kg
108-88-3	Toluene	ND	0.232	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.232	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.232	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.232	mg/kg
79-01-6	**Trichloroethene**	**1.25**	**0.232**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.232	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.232	mg/kg
75-01-4	Vinyl chloride	ND	0.232	mg/kg
1330-20-7	Xylene (total)	ND	0.697	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1.88	1.76	ug/Kg	94	62 - 127
1868-53-7	Dibromofluoromethane	1.88	1.8	ug/Kg	96	65 - 130
2037-26-5	Toluene d8	1.88	1.84	ug/Kg	98	71 - 132
17060-07-0	1,2-Dichloroethane-d4	1.88	1.96	ug/Kg	104	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	250	09/12/2016 16:33	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**29.0**	**1.16**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	9.38	8.82	ug/Kg	94	62 - 127
1868-53-7	Dibromofluoromethane	9.38	9.19	ug/Kg	98	65 - 130
2037-26-5	Toluene d8	9.38	9.28	ug/Kg	99	71 - 132
17060-07-0	1,2-Dichloroethane-d4	9.38	9.67	ug/Kg	103	62 - 125

Sample Results

WD-11 @ 10	**Collect Date**	09/07/2016 14:13	**GCAL ID**	21609090505
	Receive Date	09/09/2016 10:17	**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	09/12/2016 18:47	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.282	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.282	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.282	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.282	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.282	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.282	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.282	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.282	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.282	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.282	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.282	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.282	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.282	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.282	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	0.563	mg/kg
78-87-5	1,2-Dichloropropane	ND	0.282	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.282	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.282	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.282	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.282	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.282	mg/kg
78-93-3	2-Butanone	ND	0.282	mg/kg
95-49-8	2-Chlorotoluene	ND	0.282	mg/kg
591-78-6	2-Hexanone	ND	0.282	mg/kg
106-43-4	4-Chlorotoluene	ND	0.282	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.282	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.282	mg/kg
67-64-1	Acetone	ND	1.41	mg/kg
71-43-2	Benzene	ND	0.282	mg/kg
108-86-1	Bromobenzene	ND	0.282	mg/kg
74-97-5	Bromochloromethane	ND	0.282	mg/kg
75-27-4	Bromodichloromethane	ND	0.282	mg/kg
75-25-2	Bromoform	ND	0.282	mg/kg
74-83-9	Bromomethane	ND	0.282	mg/kg
75-15-0	Carbon disulfide	ND	0.282	mg/kg
56-23-5	Carbon tetrachloride	ND	0.282	mg/kg
108-90-7	Chlorobenzene	ND	0.282	mg/kg
75-00-3	Chloroethane	ND	0.282	mg/kg
67-66-3	Chloroform	ND	0.282	mg/kg
74-87-3	Chloromethane	ND	0.282	mg/kg
156-59-2	cis-1,2-Dichloroethene	ND	0.282	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.282	mg/kg
124-48-1	Dibromochloromethane	ND	0.282	mg/kg
74-95-3	Dibromomethane	ND	0.282	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.282	mg/kg
100-41-4	Ethylbenzene	ND	0.282	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.282	mg/kg

Sample Results

WD-11 @ 10

Collect Date	09/07/2016 14:13	**GCAL ID**	21609090505
Receive Date	09/09/2016 10:17	**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	09/12/2016 18:47	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
98-82-8	Isopropylbenzene (Cumene)	ND	0.282	mg/kg
136777-61-2	m,p-Xylene	ND	0.563	mg/kg
75-09-2	Methylene chloride	ND	0.563	mg/kg
91-20-3	Naphthalene	ND	0.282	mg/kg
104-51-8	n-Butylbenzene	ND	0.282	mg/kg
103-65-1	n-Propylbenzene	ND	0.282	mg/kg
95-47-6	o-Xylene	ND	0.282	mg/kg
135-98-8	sec-Butylbenzene	ND	0.282	mg/kg
100-42-5	Styrene	ND	0.282	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.282	mg/kg
98-06-6	tert-Butylbenzene	ND	0.282	mg/kg
127-18-4	**Tetrachloroethene**	**10.1**	**0.282**	**mg/kg**
108-88-3	Toluene	ND	0.282	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.282	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.282	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.282	mg/kg
79-01-6	Trichloroethene	ND	0.282	mg/kg
75-69-4	Trichlorofluoromethane	ND	0.282	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.282	mg/kg
75-01-4	Vinyl chloride	ND	0.282	mg/kg
1330-20-7	Xylene (total)	ND	0.845	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2.38	2.26	ug/Kg	95	62 - 127
1868-53-7	Dibromofluoromethane	2.38	2.26	ug/Kg	95	65 - 130
2037-26-5	Toluene d8	2.38	2.31	ug/Kg	97	71 - 132
17060-07-0	1,2-Dichloroethane-d4	2.38	2.46	ug/Kg	103	62 - 125

ADD-1 @ 6

Collect Date	09/07/2016 14:58	**GCAL ID**	21609090506
Receive Date	09/09/2016 10:17	**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	09/12/2016 19:09	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.192	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.192	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.192	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.192	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.192	mg/kg

Sample Results

ADD-1 @ 6

Collect Date	09/07/2016 14:58	**GCAL ID**	21609090506
Receive Date	09/09/2016 10:17	**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	09/12/2016 19:09	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
75-35-4	1,1-Dichloroethene	ND	0.192	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.192	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.192	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.192	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.192	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.192	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.192	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.192	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.192	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**12.9**	**0.385**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.192	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.192	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.192	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.192	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.192	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.192	mg/kg
78-93-3	2-Butanone	ND	0.192	mg/kg
95-49-8	2-Chlorotoluene	ND	0.192	mg/kg
591-78-6	2-Hexanone	ND	0.192	mg/kg
106-43-4	4-Chlorotoluene	ND	0.192	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.192	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.192	mg/kg
67-64-1	Acetone	ND	0.961	mg/kg
71-43-2	Benzene	ND	0.192	mg/kg
108-86-1	Bromobenzene	ND	0.192	mg/kg
74-97-5	Bromochloromethane	ND	0.192	mg/kg
75-27-4	Bromodichloromethane	ND	0.192	mg/kg
75-25-2	Bromoform	ND	0.192	mg/kg
74-83-9	Bromomethane	ND	0.192	mg/kg
75-15-0	Carbon disulfide	ND	0.192	mg/kg
56-23-5	Carbon tetrachloride	ND	0.192	mg/kg
108-90-7	Chlorobenzene	ND	0.192	mg/kg
75-00-3	Chloroethane	ND	0.192	mg/kg
67-66-3	Chloroform	ND	0.192	mg/kg
74-87-3	Chloromethane	ND	0.192	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.192	mg/kg
124-48-1	Dibromochloromethane	ND	0.192	mg/kg
74-95-3	Dibromomethane	ND	0.192	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.192	mg/kg
100-41-4	Ethylbenzene	ND	0.192	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.192	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.192	mg/kg
136777-61-2	m,p-Xylene	ND	0.385	mg/kg
75-09-2	Methylene chloride	ND	0.385	mg/kg
91-20-3	Naphthalene	ND	0.192	mg/kg
104-51-8	n-Butylbenzene	ND	0.192	mg/kg
103-65-1	n-Propylbenzene	ND	0.192	mg/kg

Sample Results

ADD-1 @ 6

Collect Date	09/07/2016 14:58	**GCAL ID**	21609090506
Receive Date	09/09/2016 10:17	**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	09/12/2016 19:09	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
95-47-6	o-Xylene	ND	0.192	mg/kg
135-98-8	sec-Butylbenzene	ND	0.192	mg/kg
100-42-5	Styrene	ND	0.192	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.192	mg/kg
98-06-6	tert-Butylbenzene	ND	0.192	mg/kg
108-88-3	Toluene	ND	0.192	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.192	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.192	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.192	mg/kg
79-01-6	**Trichloroethene**	**3.15**	**0.192**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.192	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.192	mg/kg
75-01-4	Vinyl chloride	ND	0.192	mg/kg
1330-20-7	Xylene (total)	ND	0.577	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1.65	1.53	ug/Kg	92	62 - 127
1868-53-7	Dibromofluoromethane	1.65	1.6	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	1.65	1.61	ug/Kg	97	71 - 132
17060-07-0	1,2-Dichloroethane-d4	1.65	1.74	ug/Kg	105	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	500	09/12/2016 15:49	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
156-59-2	**cis-1,2-Dichloroethene**	**12.1**	**1.92**	**mg/kg**
127-18-4	**Tetrachloroethene**	**27.2**	**1.92**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	16.50	15.7	ug/Kg	95	62 - 127
1868-53-7	Dibromofluoromethane	16.50	16	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	16.50	16.7	ug/Kg	101	71 - 132
17060-07-0	1,2-Dichloroethane-d4	16.50	17	ug/Kg	103	62 - 125

Sample Results

ADD-1 @ 10

Collect Date	09/07/2016 15:01	**GCAL ID**	21609090507
Receive Date	09/09/2016 10:17	**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	09/12/2016 19:31	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.276	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.276	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.276	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.276	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.276	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.276	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.276	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.276	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.276	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.276	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.276	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.276	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.276	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.276	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**1.02**	**0.553**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.276	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.276	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.276	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.276	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.276	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.276	mg/kg
78-93-3	2-Butanone	ND	0.276	mg/kg
95-49-8	2-Chlorotoluene	ND	0.276	mg/kg
591-78-6	2-Hexanone	ND	0.276	mg/kg
106-43-4	4-Chlorotoluene	ND	0.276	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.276	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.276	mg/kg
67-64-1	Acetone	ND	1.38	mg/kg
71-43-2	Benzene	ND	0.276	mg/kg
108-86-1	Bromobenzene	ND	0.276	mg/kg
74-97-5	Bromochloromethane	ND	0.276	mg/kg
75-27-4	Bromodichloromethane	ND	0.276	mg/kg
75-25-2	Bromoform	ND	0.276	mg/kg
74-83-9	Bromomethane	ND	0.276	mg/kg
75-15-0	Carbon disulfide	ND	0.276	mg/kg
56-23-5	Carbon tetrachloride	ND	0.276	mg/kg
108-90-7	Chlorobenzene	ND	0.276	mg/kg
75-00-3	Chloroethane	ND	0.276	mg/kg
67-66-3	Chloroform	ND	0.276	mg/kg
74-87-3	Chloromethane	ND	0.276	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**1.02**	**0.276**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	0.276	mg/kg
124-48-1	Dibromochloromethane	ND	0.276	mg/kg
74-95-3	Dibromomethane	ND	0.276	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.276	mg/kg
100-41-4	Ethylbenzene	ND	0.276	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.276	mg/kg

Sample Results

ADD-1 @ 10

Collect Date	09/07/2016 15:01	**GCAL ID**	21609090507
Receive Date	09/09/2016 10:17	**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	09/12/2016 19:31	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
98-82-8	Isopropylbenzene (Cumene)	ND	0.276	mg/kg
136777-61-2	m,p-Xylene	ND	0.553	mg/kg
75-09-2	Methylene chloride	ND	0.553	mg/kg
91-20-3	Naphthalene	ND	0.276	mg/kg
104-51-8	n-Butylbenzene	ND	0.276	mg/kg
103-65-1	n-Propylbenzene	ND	0.276	mg/kg
95-47-6	o-Xylene	ND	0.276	mg/kg
135-98-8	sec-Butylbenzene	ND	0.276	mg/kg
100-42-5	Styrene	ND	0.276	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.276	mg/kg
98-06-6	tert-Butylbenzene	ND	0.276	mg/kg
108-88-3	Toluene	ND	0.276	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.276	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.276	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.276	mg/kg
79-01-6	**Trichloroethene**	**1.81**	**0.276**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.276	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.276	mg/kg
75-01-4	Vinyl chloride	ND	0.276	mg/kg
1330-20-7	Xylene (total)	ND	0.829	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2.40	2.25	ug/Kg	94	62 - 127
1868-53-7	Dibromofluoromethane	2.40	2.27	ug/Kg	95	65 - 130
2037-26-5	Toluene d8	2.40	2.34	ug/Kg	98	71 - 132
17060-07-0	1,2-Dichloroethane-d4	2.40	2.51	ug/Kg	105	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	500	09/12/2016 15:27	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**40.2**	**2.76**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	24	22.7	ug/Kg	95	62 - 127
1868-53-7	Dibromofluoromethane	24	23.2	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	24	24	ug/Kg	100	71 - 132
17060-07-0	1,2-Dichloroethane-d4	24	24.7	ug/Kg	103	62 - 125

Sample Results

ADD-2 @ 5

Collect Date	09/07/2016 15:08	**GCAL ID**	21609090508
Receive Date	09/09/2016 10:17	**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	2000	09/12/2016 16:56	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	8.77	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	8.77	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	8.77	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	8.77	mg/kg
75-34-3	1,1-Dichloroethane	ND	8.77	mg/kg
75-35-4	1,1-Dichloroethene	ND	8.77	mg/kg
563-58-6	1,1-Dichloropropene	ND	8.77	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	8.77	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	8.77	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	8.77	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	8.77	mg/kg
106-93-4	1,2-Dibromoethane	ND	8.77	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	8.77	mg/kg
107-06-2	1,2-Dichloroethane	ND	8.77	mg/kg
540-59-0	1,2-Dichloroethene(Total)	ND	17.5	mg/kg
78-87-5	1,2-Dichloropropane	ND	8.77	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	8.77	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	8.77	mg/kg
142-28-9	1,3-Dichloropropane	ND	8.77	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	8.77	mg/kg
594-20-7	2,2-Dichloropropane	ND	8.77	mg/kg
78-93-3	2-Butanone	ND	8.77	mg/kg
95-49-8	2-Chlorotoluene	ND	8.77	mg/kg
591-78-6	2-Hexanone	ND	8.77	mg/kg
106-43-4	4-Chlorotoluene	ND	8.77	mg/kg
99-87-6	4-Isopropyltoluene	ND	8.77	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	8.77	mg/kg
67-64-1	Acetone	ND	43.8	mg/kg
71-43-2	Benzene	ND	8.77	mg/kg
108-86-1	Bromobenzene	ND	8.77	mg/kg
74-97-5	Bromochloromethane	ND	8.77	mg/kg
75-27-4	Bromodichloromethane	ND	8.77	mg/kg
75-25-2	Bromoform	ND	8.77	mg/kg
74-83-9	Bromomethane	ND	8.77	mg/kg
75-15-0	Carbon disulfide	ND	8.77	mg/kg
56-23-5	Carbon tetrachloride	ND	8.77	mg/kg
108-90-7	Chlorobenzene	ND	8.77	mg/kg
75-00-3	Chloroethane	ND	8.77	mg/kg
67-66-3	Chloroform	ND	8.77	mg/kg
74-87-3	Chloromethane	ND	8.77	mg/kg
156-59-2	**cis-1,2-Dichloroethene**	**10.6**	**8.77**	**mg/kg**
10061-01-5	cis-1,3-Dichloropropene	ND	8.77	mg/kg
124-48-1	Dibromochloromethane	ND	8.77	mg/kg
74-95-3	Dibromomethane	ND	8.77	mg/kg
75-71-8	Dichlorodifluoromethane	ND	8.77	mg/kg
100-41-4	Ethylbenzene	ND	8.77	mg/kg
87-68-3	Hexachlorobutadiene	ND	8.77	mg/kg

Sample Results

ADD-2 @ 5

Collect Date	09/07/2016 15:08	**GCAL ID**	21609090508
Receive Date	09/09/2016 10:17	**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	2000	09/12/2016 16:56	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
98-82-8	Isopropylbenzene (Cumene)	ND	8.77	mg/kg
136777-61-2	m,p-Xylene	ND	17.5	mg/kg
75-09-2	Methylene chloride	ND	17.5	mg/kg
91-20-3	Naphthalene	ND	8.77	mg/kg
104-51-8	n-Butylbenzene	ND	8.77	mg/kg
103-65-1	n-Propylbenzene	ND	8.77	mg/kg
95-47-6	o-Xylene	ND	8.77	mg/kg
135-98-8	sec-Butylbenzene	ND	8.77	mg/kg
100-42-5	Styrene	ND	8.77	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	8.77	mg/kg
98-06-6	tert-Butylbenzene	ND	8.77	mg/kg
108-88-3	Toluene	ND	8.77	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	8.77	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	8.77	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	8.77	mg/kg
79-01-6	**Trichloroethene**	**22.7**	**8.77**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	8.77	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	8.77	mg/kg
75-01-4	Vinyl chloride	ND	8.77	mg/kg
1330-20-7	Xylene (total)	ND	26.3	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	71.70	67.3	ug/Kg	94	62 - 127
1868-53-7	Dibromofluoromethane	71.70	69.9	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	71.70	68.6	ug/Kg	96	71 - 132
17060-07-0	1,2-Dichloroethane-d4	71.70	73.4	ug/Kg	102	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	20000	09/12/2016 13:11	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**1690**	**87.7**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	717	646	ug/Kg	90	62 - 127
1868-53-7	Dibromofluoromethane	717	707	ug/Kg	99	65 - 130
2037-26-5	Toluene d8	717	714	ug/Kg	100	71 - 132
17060-07-0	1,2-Dichloroethane-d4	717	750	ug/Kg	105	62 - 125

Sample Results

ADD-2 @ 10

Collect Date	09/07/2016 15:14	**GCAL ID**	21609090509
Receive Date	09/09/2016 10:17	**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	09/12/2016 19:54	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.198	mg/kg
71-55-6	1,1,1-Trichloroethane	ND	0.198	mg/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.198	mg/kg
79-00-5	1,1,2-Trichloroethane	ND	0.198	mg/kg
75-34-3	1,1-Dichloroethane	ND	0.198	mg/kg
75-35-4	1,1-Dichloroethene	ND	0.198	mg/kg
563-58-6	1,1-Dichloropropene	ND	0.198	mg/kg
96-18-4	1,2,3-Trichloropropane	ND	0.198	mg/kg
120-82-1	1,2,4-Trichlorobenzene	ND	0.198	mg/kg
95-63-6	1,2,4-Trimethylbenzene	ND	0.198	mg/kg
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.198	mg/kg
106-93-4	1,2-Dibromoethane	ND	0.198	mg/kg
95-50-1	1,2-Dichlorobenzene	ND	0.198	mg/kg
107-06-2	1,2-Dichloroethane	ND	0.198	mg/kg
540-59-0	**1,2-Dichloroethene(Total)**	**9.92**	**0.395**	**mg/kg**
78-87-5	1,2-Dichloropropane	ND	0.198	mg/kg
108-67-8	1,3,5-Trimethylbenzene	ND	0.198	mg/kg
541-73-1	1,3-Dichlorobenzene	ND	0.198	mg/kg
142-28-9	1,3-Dichloropropane	ND	0.198	mg/kg
106-46-7	1,4-Dichlorobenzene	ND	0.198	mg/kg
594-20-7	2,2-Dichloropropane	ND	0.198	mg/kg
78-93-3	2-Butanone	ND	0.198	mg/kg
95-49-8	2-Chlorotoluene	ND	0.198	mg/kg
591-78-6	2-Hexanone	ND	0.198	mg/kg
106-43-4	4-Chlorotoluene	ND	0.198	mg/kg
99-87-6	4-Isopropyltoluene	ND	0.198	mg/kg
108-10-1	4-Methyl-2-pentanone	ND	0.198	mg/kg
67-64-1	Acetone	ND	0.988	mg/kg
71-43-2	Benzene	ND	0.198	mg/kg
108-86-1	Bromobenzene	ND	0.198	mg/kg
74-97-5	Bromochloromethane	ND	0.198	mg/kg
75-27-4	Bromodichloromethane	ND	0.198	mg/kg
75-25-2	Bromoform	ND	0.198	mg/kg
74-83-9	Bromomethane	ND	0.198	mg/kg
75-15-0	Carbon disulfide	ND	0.198	mg/kg
56-23-5	Carbon tetrachloride	ND	0.198	mg/kg
108-90-7	Chlorobenzene	ND	0.198	mg/kg
75-00-3	Chloroethane	ND	0.198	mg/kg
67-66-3	Chloroform	ND	0.198	mg/kg
74-87-3	Chloromethane	ND	0.198	mg/kg
10061-01-5	cis-1,3-Dichloropropene	ND	0.198	mg/kg
124-48-1	Dibromochloromethane	ND	0.198	mg/kg
74-95-3	Dibromomethane	ND	0.198	mg/kg
75-71-8	Dichlorodifluoromethane	ND	0.198	mg/kg
100-41-4	Ethylbenzene	ND	0.198	mg/kg
87-68-3	Hexachlorobutadiene	ND	0.198	mg/kg
98-82-8	Isopropylbenzene (Cumene)	ND	0.198	mg/kg

Sample Results

ADD-2 @ 10

Collect Date	09/07/2016 15:14	**GCAL ID**	21609090509
Receive Date	09/09/2016 10:17	**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	09/12/2016 19:54	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	0.395	mg/kg
75-09-2	Methylene chloride	ND	0.395	mg/kg
91-20-3	Naphthalene	ND	0.198	mg/kg
104-51-8	n-Butylbenzene	ND	0.198	mg/kg
103-65-1	n-Propylbenzene	ND	0.198	mg/kg
95-47-6	o-Xylene	ND	0.198	mg/kg
135-98-8	sec-Butylbenzene	ND	0.198	mg/kg
100-42-5	Styrene	ND	0.198	mg/kg
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	0.198	mg/kg
98-06-6	tert-Butylbenzene	ND	0.198	mg/kg
108-88-3	Toluene	ND	0.198	mg/kg
156-60-5	trans-1,2-Dichloroethene	ND	0.198	mg/kg
10061-02-6	trans-1,3-Dichloropropene	ND	0.198	mg/kg
110-57-6	trans-1,4-Dichloro-2-butene	ND	0.198	mg/kg
79-01-6	**Trichloroethene**	**4.26**	**0.198**	**mg/kg**
75-69-4	Trichlorofluoromethane	ND	0.198	mg/kg
76-13-1	Trichlorotrifluoroethane	ND	0.198	mg/kg
75-01-4	Vinyl chloride	ND	0.198	mg/kg
1330-20-7	Xylene (total)	ND	0.593	mg/kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1.60	1.48	ug/Kg	93	62 - 127
1868-53-7	Dibromofluoromethane	1.60	1.52	ug/Kg	95	65 - 130
2037-26-5	Toluene d8	1.60	1.57	ug/Kg	98	71 - 132
17060-07-0	1,2-Dichloroethane-d4	1.60	1.69	ug/Kg	106	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	500	09/12/2016 16:11	JMC2	594413

CAS#	Parameter	Result	LOQ	Units
156-59-2	**cis-1,2-Dichloroethene**	**9.08**	**1.98**	**mg/kg**
127-18-4	**Tetrachloroethene**	**11.4**	**1.98**	**mg/kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	16	15	ug/Kg	94	62 - 127
1868-53-7	Dibromofluoromethane	16	15.4	ug/Kg	97	65 - 130
2037-26-5	Toluene d8	16	16.1	ug/Kg	101	71 - 132
17060-07-0	1,2-Dichloroethane-d4	16	16.3	ug/Kg	102	62 - 125

Sample Results

TRIP BLANK	**Collect Date**	09/07/2016 00:01	**GCAL ID**	21609090510
	Receive Date	09/09/2016 10:17	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/09/2016 17:48	JCK	594290

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

Sample Results

TRIP BLANK

Collect Date	09/07/2016 00:01	**GCAL ID**	21609090510
Receive Date	09/09/2016 10:17	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/09/2016 17:48	JCK	594290

CAS#	Parameter	Result	LOQ	Units
98-82-8	Isopropylbenzene (Cumene)	ND	5.00	ug/L
136777-61-2	m,p-Xylene	ND	10.0	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	46.9	ug/L	94	78 - 130
1868-53-7	Dibromofluoromethane	50	51.4	ug/L	103	77 - 127
2037-26-5	Toluene d8	50	53.1	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.8	ug/L	100	71 - 127

GC/MS Volatiles QC Summary

Analytical Batch 594413	Client ID	MB594413		LCS594413				LCSD594413				
	GCAL ID	1606972		1606973				1606974				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	09/12/2016 12:49		09/12/2016 10:58				09/12/2016 11:20				
	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	2.43	97	77 - 122	2.50	2.47	99	2	30
1,1,1-Trichloroethane	71-55-6	ND	0.250	2.50	2.53	101	70 - 130	2.50	2.53	101	0	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.250	2.50	2.48	99	66 - 129	2.50	2.58	103	4	30
1,1,2-Trichloroethane	79-00-5	ND	0.250	2.50	2.54	102	74 - 120	2.50	2.61	104	3	30
1,1-Dichloroethane	75-34-3	ND	0.250	2.50	2.57	103	71 - 126	2.50	2.59	104	1	30
1,1-Dichloroethene	75-35-4	ND	0.250	2.50	2.29	92	68 - 129	2.50	2.23	89	3	20
1,1-Dichloropropene	563-58-6	ND	0.250	2.50	2.72	109	70 - 138	2.50	2.72	109	0	30
1,2,3-Trichloropropane	96-18-4	ND	0.250	2.50	2.45	98	63 - 132	2.50	2.57	103	5	30
1,2,4-Trichlorobenzene	120-82-1	ND	0.250	2.50	2.73	109	64 - 135	2.50	2.71	108	1	30
1,2,4-Trimethylbenzene	95-63-6	ND	0.250	2.50	2.79	112	75 - 130	2.50	2.79	112	0	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.250	2.50	2.52	101	60 - 123	2.50	2.72	109	8	30
1,2-Dibromoethane	106-93-4	ND	0.250	2.50	2.56	102	74 - 122	2.50	2.63	105	3	30
1,2-Dichlorobenzene	95-50-1	ND	0.250	2.50	2.53	101	76 - 125	2.50	2.56	102	1	30
1,2-Dichloroethane	107-06-2	ND	0.250	2.50	2.63	105	68 - 126	2.50	2.69	108	2	30
1,2-Dichloroethene(Total)	540-59-0	ND	0.500	5.00	5.34	107	72 - 129	5.00	5.34	107	0	30
1,2-Dichloropropane	78-87-5	ND	0.250	2.50	2.71	108	72 - 129	2.50	2.74	110	1	30
1,3,5-Trimethylbenzene	108-67-8	ND	0.250	2.50	2.69	108	74 - 136	2.50	2.69	108	0	30
1,3-Dichlorobenzene	541-73-1	ND	0.250	2.50	2.56	102	77 - 127	2.50	2.58	103	1	30
1,3-Dichloropropane	142-28-9	ND	0.250	2.50	2.45	98	77 - 121	2.50	2.54	102	4	30
1,4-Dichlorobenzene	106-46-7	ND	0.250	2.50	2.65	106	74 - 123	2.50	2.64	106	0	30
2,2-Dichloropropane	594-20-7	ND	0.250	2.50	2.75	110	74 - 129	2.50	2.71	108	1	30
2-Butanone	78-93-3	ND	0.250	2.50	3.06	122	47 - 142	2.50	3.32	133	8	30
2-Chlorotoluene	95-49-8	ND	0.250	2.50	2.59	104	75 - 132	2.50	2.63	105	2	30
2-Hexanone	591-78-6	ND	0.250	2.50	2.86	114	47 - 137	2.50	3.13	125	9	30
4-Chlorotoluene	106-43-4	ND	0.250	2.50	2.66	106	74 - 133	2.50	2.69	108	1	30
4-Isopropyltoluene	99-87-6	ND	0.250	2.50	2.84	114	71 - 136	2.50	2.78	111	2	30
4-Methyl-2-pentanone	108-10-1	ND	0.250	2.50	2.75	110	52 - 136	2.50	2.98	119	8	30
Acetone	67-64-1	ND	1.25	2.50	2.71	108	38 - 152	2.50	2.86	114	5	30
Benzene	71-43-2	ND	0.250	2.50	2.68	107	73 - 128	2.50	2.69	108	0	20
Bromobenzene	108-86-1	ND	0.250	2.50	2.54	102	73 - 124	2.50	2.57	103	1	30
Bromochloromethane	74-97-5	ND	0.250	2.50	2.61	104	73 - 127	2.50	2.58	103	1	30
Bromodichloromethane	75-27-4	ND	0.250	2.50	2.73	109	74 - 126	2.50	2.73	109	0	30
Bromoform	75-25-2	ND	0.250	2.50	2.36	94	67 - 122	2.50	2.43	97	3	30
Bromomethane	74-83-9	ND	0.250	2.50	2.69	108	48 - 139	2.50	2.65	106	1	30
Carbon disulfide	75-15-0	ND	0.250	2.50	2.51	100	68 - 133	2.50	2.43	97	3	30
Carbon tetrachloride	56-23-5	ND	0.250	2.50	2.51	100	71 - 133	2.50	2.54	102	1	30
Chlorobenzene	108-90-7	ND	0.250	2.50	2.44	98	75 - 121	2.50	2.46	98	1	20
Chloroethane	75-00-3	ND	0.250	2.50	2.59	104	57 - 144	2.50	2.70	108	4	30
Chloroform	67-66-3	ND	0.250	2.50	2.66	106	74 - 124	2.50	2.63	105	1	30
Chloromethane	74-87-3	ND	0.250	2.50	3.06	122	61 - 130	2.50	2.94	118	4	30
cis-1,2-Dichloroethene	156-59-2	ND	0.250	2.50	2.74	110	72 - 130	2.50	2.75	110	0	30
cis-1,3-Dichloropropene	10061-01-5	ND	0.250	2.50	2.62	105	72 - 129	2.50	2.61	104	0	30
Dibromochloromethane	124-48-1	ND	0.250	2.50	2.61	104	74 - 122	2.50	2.68	107	3	30
Dibromomethane	74-95-3	ND	0.250	2.50	2.50	100	72 - 125	2.50	2.56	102	2	30
Dichlorodifluoromethane	75-71-8	ND	0.250	2.50	2.31	92	59 - 138	2.50	2.24	90	3	30
Ethylbenzene	100-41-4	ND	0.250	2.50	2.52	101	74 - 130	2.50	2.52	101	0	30
Hexachlorobutadiene	87-68-3	ND	0.250	2.50	2.65	106	71 - 140	2.50	2.49	100	6	30
Isopropylbenzene (Cumene)	98-82-8	ND	0.250	2.50	2.71	108	74 - 125	2.50	2.71	108	0	30
m,p-Xylene	136777-61-2	ND	0.500	5.00	5.19	104	72 - 128	5.00	5.22	104	1	30
Methylene chloride	75-09-2	ND	0.500	2.50	2.57	103	66 - 130	2.50	2.55	102	1	30
Naphthalene	91-20-3	ND	0.250	2.50	2.50	100	54 - 132	2.50	2.61	104	4	35
n-Butylbenzene	104-51-8	ND	0.250	2.50	2.92	117	68 - 144	2.50	2.82	113	3	30
n-Propylbenzene	103-65-1	ND	0.250	2.50	2.58	103	73 - 137	2.50	2.58	103	0	30
o-Xylene	95-47-6	ND	0.250	2.50	2.66	106	69 - 133	2.50	2.68	107	1	30
sec-Butylbenzene	135-98-8	ND	0.250	2.50	2.72	109	72 - 141	2.50	2.68	107	1	30
Styrene	100-42-5	ND	0.250	2.50	2.80	112	72 - 128	2.50	2.81	112	0	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	0.250	2.50	2.66	106	69 - 126	2.50	2.75	110	3	30
tert-Butylbenzene	98-06-6	ND	0.250	2.50	2.65	106	72 - 136	2.50	2.62	105	1	30

GC/MS Volatiles QC Summary

Analytical Batch 594413	Client ID	MB594413		LCS594413				LCSD594413				
	GCAL ID	1606972		1606973				1606974				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	09/12/2016 12:49		09/12/2016 10:58				09/12/2016 11:20				
	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
Tetrachloroethene	127-18-4	ND	0.250	2.50	2.35	94	70 - 127	2.50	2.34	94	0	30
Toluene	108-88-3	ND	0.250	2.50	2.44	98	74 - 121	2.50	2.46	98	1	20
trans-1,2-Dichloroethene	156-60-5	ND	0.250	2.50	2.60	104	67 - 134	2.50	2.59	104	0	30
trans-1,3-Dichloropropene	10061-02-6	ND	0.250	2.50	2.53	101	72 - 126	2.50	2.53	101	0	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.250	2.50	2.54	102	44 - 146	2.50	2.71	108	6	30
Trichloroethene	79-01-6	ND	0.250	2.50	2.53	101	78 - 127	2.50	2.55	102	1	20
Trichlorofluoromethane	75-69-4	ND	0.250	2.50	2.30	92	64 - 141	2.50	2.23	89	3	30
Trichlorotrifluoroethane	76-13-1	ND	0.250	2.50	2.21	88	66 - 139	2.50	2.13	85	4	30
Vinyl chloride	75-01-4	ND	0.250	2.50	2.60	104	67 - 131	2.50	2.54	102	2	30
Xylene (total)	1330-20-7	ND	0.750	7.50	7.86	105	71 - 129	7.50	7.90	105	1	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	2.67	107	2.5	2.58	103	62 - 125	2.5	2.59	104	NA	NA
4-Bromofluorobenzene	460-00-4	2.34	94	2.5	2.41	96	62 - 127	2.5	2.38	95	NA	NA
Dibromofluoromethane	1868-53-7	2.43	97	2.5	2.51	100	65 - 130	2.5	2.52	101	NA	NA
Toluene d8	2037-26-5	2.51	100	2.5	2.41	96	71 - 132	2.5	2.43	97	NA	NA

Analytical Batch 594699	Client ID	MB594699		LCS594699				LCSD594699				
	GCAL ID	1608233		1608234				1608235				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	09/15/2016 13:34		09/15/2016 08:52				09/15/2016 09:15				
	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	2.37	95	77 - 122	2.50	2.62	105	10	30
1,1,1-Trichloroethane	71-55-6	ND	0.250	2.50	2.40	96	70 - 130	2.50	2.58	103	7	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.250	2.50	2.20	88	66 - 129	2.50	2.44	98	10	30
1,1,2-Trichloroethane	79-00-5	ND	0.250	2.50	2.21	88	74 - 120	2.50	2.47	99	11	30
1,1-Dichloroethane	75-34-3	ND	0.250	2.50	2.38	95	71 - 126	2.50	2.59	104	8	30
1,1-Dichloroethene	75-35-4	ND	0.250	2.50	2.22	89	68 - 129	2.50	2.38	95	7	20
1,1-Dichloropropene	563-58-6	ND	0.250	2.50	2.18	87	70 - 138	2.50	2.30	92	5	30
1,2,3-Trichloropropane	96-18-4	ND	0.250	2.50	1.97	79	63 - 132	2.50	2.26	90	14	30
1,2,4-Trichlorobenzene	120-82-1	ND	0.250	2.50	2.12	85	64 - 135	2.50	2.36	94	11	30
1,2,4-Trimethylbenzene	95-63-6	ND	0.250	2.50	2.43	97	75 - 130	2.50	2.66	106	9	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	0.250	2.50	2.00	80	60 - 123	2.50	2.34	94	16	30
1,2-Dibromoethane	106-93-4	ND	0.250	2.50	2.30	92	74 - 122	2.50	2.60	104	12	30
1,2-Dichlorobenzene	95-50-1	ND	0.250	2.50	2.36	94	76 - 125	2.50	2.58	103	9	30
1,2-Dichloroethane	107-06-2	ND	0.250	2.50	2.34	94	68 - 126	2.50	2.50	100	7	30
1,2-Dichloroethene(Total)	540-59-0	ND	0.500	5.00	4.39	88	72 - 129	5.00	4.66	93	6	30
1,2-Dichloropropane	78-87-5	ND	0.250	2.50	2.37	95	72 - 129	2.50	2.62	105	10	30
1,3,5-Trimethylbenzene	108-67-8	ND	0.250	2.50	2.42	97	74 - 136	2.50	2.57	103	6	30
1,3-Dichlorobenzene	541-73-1	ND	0.250	2.50	2.43	97	77 - 127	2.50	2.60	104	7	30
1,3-Dichloropropane	142-28-9	ND	0.250	2.50	2.27	91	77 - 121	2.50	2.56	102	12	30
1,4-Dichlorobenzene	106-46-7	ND	0.250	2.50	2.43	97	74 - 123	2.50	2.65	106	9	30
2,2-Dichloropropane	594-20-7	ND	0.250	2.50	2.18	87	74 - 129	2.50	2.31	92	6	30
2-Butanone	78-93-3	ND	0.250	2.50	2.02	81	47 - 142	2.50	2.41	96	18	30
2-Chlorotoluene	95-49-8	ND	0.250	2.50	2.27	91	75 - 132	2.50	2.47	99	8	30
2-Hexanone	591-78-6	ND	0.250	2.50	1.93	77	47 - 137	2.50	2.35	94	20	30
4-Chlorotoluene	106-43-4	ND	0.250	2.50	2.39	96	74 - 133	2.50	2.56	102	7	30
4-Isopropyltoluene	99-87-6	ND	0.250	2.50	2.51	100	71 - 136	2.50	2.68	107	7	30
4-Methyl-2-pentanone	108-10-1	ND	0.250	2.50	2.08	83	52 - 136	2.50	2.47	99	17	30
Acetone	67-64-1	ND	1.25	2.50	1.85	74	38 - 152	2.50	2.07	83	11	30
Benzene	71-43-2	ND	0.250	2.50	2.46	98	73 - 128	2.50	2.63	105	7	20
Bromobenzene	108-86-1	ND	0.250	2.50	2.26	90	73 - 124	2.50	2.44	98	8	30
Bromochloromethane	74-97-5	ND	0.250	2.50	2.33	93	73 - 127	2.50	2.52	101	8	30
Bromodichloromethane	75-27-4	ND	0.250	2.50	2.41	96	74 - 126	2.50	2.64	106	9	30
Bromoform	75-25-2	ND	0.250	2.50	2.24	90	67 - 122	2.50	2.58	103	14	30

GC/MS Volatiles QC Summary

Analytical Batch 594699	Client ID	MB594699	LCS594699	LCSD594699
	GCAL ID	1608233	1608234	1608235
	Sample Type	MB	LCS	LCSD
	Prep Date	NA	NA	NA
	Analysis Date	09/15/2016 13:34	09/15/2016 08:52	09/15/2016 09:15
	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
Bromomethane	74-83-9	ND	0.250	2.50	1.88	75	48 - 139	2.50	2.21	88	16	30
Carbon disulfide	75-15-0	ND	0.250	2.50	2.31	92	68 - 133	2.50	2.44	98	5	30
Carbon tetrachloride	56-23-5	ND	0.250	2.50	2.49	100	71 - 133	2.50	2.65	106	6	30
Chlorobenzene	108-90-7	ND	0.250	2.50	2.39	96	75 - 121	2.50	2.63	105	10	20
Chloroethane	75-00-3	ND	0.250	2.50	2.06	82	57 - 144	2.50	2.57	103	22	30
Chloroform	67-66-3	ND	0.250	2.50	2.34	94	74 - 124	2.50	2.53	101	8	30
Chloromethane	74-87-3	ND	0.250	2.50	2.12	85	61 - 130	2.50	2.21	88	4	30
cis-1,2-Dichloroethene	156-59-2	ND	0.250	2.50	2.18	87	72 - 130	2.50	2.31	92	6	30
cis-1,3-Dichloropropene	10061-01-5	ND	0.250	2.50	2.16	86	72 - 129	2.50	2.31	92	7	30
Dibromochloromethane	124-48-1	ND	0.250	2.50	2.27	91	74 - 122	2.50	2.58	103	13	30
Dibromomethane	74-95-3	ND	0.250	2.50	2.07	83	72 - 125	2.50	2.31	92	11	30
Dichlorodifluoromethane	75-71-8	ND	0.250	2.50	2.10	84	59 - 138	2.50	2.26	90	7	30
Ethylbenzene	100-41-4	ND	0.250	2.50	2.47	99	74 - 130	2.50	2.75	110	11	30
Hexachlorobutadiene	87-68-3	ND	0.250	2.50	2.55	102	71 - 140	2.50	2.73	109	7	30
Isopropylbenzene (Cumene)	98-82-8	ND	0.250	2.50	2.33	93	74 - 125	2.50	2.54	102	9	30
m,p-Xylene	136777-61-2	ND	0.500	5.00	4.97	99	72 - 128	5.00	5.46	109	9	30
Methylene chloride	75-09-2	ND	0.500	2.50	2.39	96	66 - 130	2.50	2.54	102	6	30
Naphthalene	91-20-3	ND	0.250	2.50	1.83	73	54 - 132	2.50	2.18	87	17	35
n-Butylbenzene	104-51-8	ND	0.250	2.50	2.31	92	68 - 144	2.50	2.47	99	7	30
n-Propylbenzene	103-65-1	ND	0.250	2.50	2.35	94	73 - 137	2.50	2.51	100	7	30
o-Xylene	95-47-6	ND	0.250	2.50	2.52	101	69 - 133	2.50	2.80	112	11	30
sec-Butylbenzene	135-98-8	ND	0.250	2.50	2.40	96	72 - 141	2.50	2.56	102	6	30
Styrene	100-42-5	ND	0.250	2.50	2.22	89	72 - 128	2.50	2.51	100	12	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	0.250	2.50	2.25	90	69 - 126	2.50	2.53	101	12	30
tert-Butylbenzene	98-06-6	ND	0.250	2.50	2.34	94	72 - 136	2.50	2.52	101	7	30
Tetrachloroethene	127-18-4	ND	0.250	2.50	2.46	98	70 - 127	2.50	2.66	106	8	30
Toluene	108-88-3	ND	0.250	2.50	2.31	92	74 - 121	2.50	2.55	102	10	20
trans-1,2-Dichloroethene	156-60-5	ND	0.250	2.50	2.22	89	67 - 134	2.50	2.35	94	6	30
trans-1,3-Dichloropropene	10061-02-6	ND	0.250	2.50	2.05	82	72 - 126	2.50	2.22	89	8	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	0.250	2.50	1.95	78	44 - 146	2.50	2.42	97	22	30
Trichloroethene	79-01-6	ND	0.250	2.50	2.21	88	78 - 127	2.50	2.38	95	7	20
Trichlorofluoromethane	75-69-4	ND	0.250	2.50	2.34	94	64 - 141	2.50	2.33	93	0	30
Trichlorotrifluoroethane	76-13-1	ND	0.250	2.50	2.34	94	66 - 139	2.50	2.39	96	2	30
Vinyl chloride	75-01-4	ND	0.250	2.50	2.24	90	67 - 131	2.50	2.44	98	9	30
Xylene (total)	1330-20-7	ND	0.750	7.50	7.49	100	71 - 129	7.50	8.26	110	10	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	2.66	106	2.5	2.53	101	62 - 125	2.5	2.51	100	NA	NA
4-Bromofluorobenzene	460-00-4	2.54	102	2.5	2.59	104	62 - 127	2.5	2.66	106	NA	NA
Dibromofluoromethane	1868-53-7	2.52	101	2.5	2.49	100	65 - 130	2.5	2.47	99	NA	NA
Toluene d8	2037-26-5	2.64	106	2.5	2.42	97	71 - 132	2.5	2.5	100	NA	NA

Analytical Batch 594290	Client ID	MB594290	LCS594290	LCSD594290
	GCAL ID	1606473	1606474	1606475
	Sample Type	MB	LCS	LCSD
	Prep Date	NA	NA	NA
	Analysis Date	09/09/2016 14:48	09/09/2016 13:19	09/09/2016 13:42
	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	48.1	96	75 - 124	50.0	47.9	96	0	30
1,1,1-Trichloroethane	71-55-6	ND	5.00	50.0	47.9	96	76 - 126	50.0	48.5	97	1	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	5.00	50.0	53.1	106	70 - 122	50.0	53.5	107	1	30
1,1,2-Trichloroethane	79-00-5	ND	5.00	50.0	52.4	105	72 - 121	50.0	50.3	101	4	30
1,1-Dichloroethane	75-34-3	ND	5.00	50.0	51.5	103	74 - 127	50.0	49.2	98	5	30
1,1-Dichloroethene	75-35-4	ND	5.00	50.0	53.7	107	69 - 129	50.0	48.6	97	10	20
1,1-Dichloropropene	563-58-6	ND	5.00	50.0	53.5	107	72 - 131	50.0	51.1	102	5	30
1,2,3-Trichloropropane	96-18-4	ND	5.00	50.0	46.9	94	70 - 120	50.0	48.5	97	3	30

GC/MS Volatiles QC Summary

Analytical Batch 594290	Client ID	MB594290		LCS594290				LCSD594290				
	GCAL ID	1606473		1606474				1606475				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	09/09/2016 14:48		09/09/2016 13:19				09/09/2016 13:42				
	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
1,2,4-Trichlorobenzene	120-82-1	ND	5.00	50.0	46.9	94	61 - 135	50.0	46.3	93	1	30
1,2,4-Trimethylbenzene	95-63-6	ND	5.00	50.0	52.4	105	74 - 125	50.0	53.0	106	1	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	5.00	50.0	52.0	104	57 - 121	50.0	54.1	108	4	30
1,2-Dibromoethane	106-93-4	ND	5.00	50.0	48.4	97	70 - 124	50.0	47.7	95	1	30
1,2-Dichlorobenzene	95-50-1	ND	5.00	50.0	48.5	97	71 - 126	50.0	48.5	97	0	30
1,2-Dichloroethane	107-06-2	ND	5.00	50.0	47.6	95	71 - 129	50.0	47.2	94	1	30
1,2-Dichloroethene(Total)	540-59-0	ND	10.0	100	103	103	74 - 128	100	101	101	2	30
1,2-Dichloropropane	78-87-5	ND	5.00	50.0	50.0	100	72 - 128	50.0	49.3	99	1	30
1,3,5-Trimethylbenzene	108-67-8	ND	5.00	50.0	50.2	100	71 - 132	50.0	49.8	100	1	30
1,3-Dichlorobenzene	541-73-1	ND	5.00	50.0	51.0	102	74 - 126	50.0	49.3	99	3	30
1,3-Dichloropropane	142-28-9	ND	5.00	50.0	48.8	98	74 - 122	50.0	49.9	100	2	30
1,4-Dichlorobenzene	106-46-7	ND	5.00	50.0	47.7	95	72 - 122	50.0	47.6	95	0	30
2,2-Dichloropropane	594-20-7	ND	5.00	50.0	51.9	104	77 - 124	50.0	50.3	101	3	30
2-Butanone	78-93-3	ND	5.00	50.0	56.6	113	58 - 137	50.0	61.7	123	9	30
2-Chlorotoluene	95-49-8	ND	5.00	50.0	48.0	96	72 - 127	50.0	47.5	95	1	30
2-Hexanone	591-78-6	ND	5.00	50.0	52.3	105	50 - 135	50.0	54.2	108	4	30
4-Chlorotoluene	106-43-4	ND	5.00	50.0	49.7	99	75 - 126	50.0	50.7	101	2	30
4-Isopropyltoluene	99-87-6	ND	5.00	50.0	53.8	108	71 - 129	50.0	52.8	106	2	30
4-Methyl-2-pentanone	108-10-1	ND	5.00	50.0	53.2	106	57 - 132	50.0	58.2	116	9	30
Acetone	67-64-1	ND	5.00	50.0	66.6	133	44 - 156	50.0	72.1	144	8	30
Benzene	71-43-2	ND	5.00	50.0	49.9	100	70 - 129	50.0	49.3	99	1	20
Bromobenzene	108-86-1	ND	5.00	50.0	48.4	97	71 - 120	50.0	48.3	97	0	30
Bromochloromethane	74-97-5	ND	5.00	50.0	51.0	102	76 - 130	50.0	51.8	104	2	30
Bromodichloromethane	75-27-4	ND	5.00	50.0	48.6	97	74 - 125	50.0	47.8	96	2	30
Bromoform	75-25-2	ND	5.00	50.0	48.2	96	64 - 122	50.0	49.4	99	2	30
Bromomethane	74-83-9	ND	5.00	50.0	47.0	94	47 - 138	50.0	39.4	79	18	30
Carbon disulfide	75-15-0	ND	5.00	50.0	52.8	106	69 - 136	50.0	48.4	97	9	30
Carbon tetrachloride	56-23-5	ND	5.00	50.0	52.3	105	76 - 128	50.0	50.2	100	4	30
Chlorobenzene	108-90-7	ND	5.00	50.0	49.3	99	74 - 123	50.0	47.7	95	3	20
Chloroethane	75-00-3	ND	5.00	50.0	54.6	109	62 - 141	50.0	48.4	97	12	30
Chloroform	67-66-3	ND	5.00	50.0	47.1	94	75 - 122	50.0	47.4	95	1	30
Chloromethane	74-87-3	ND	5.00	50.0	50.3	101	59 - 132	50.0	41.6	83	19	30
cis-1,2-Dichloroethene	156-59-2	ND	5.00	50.0	51.9	104	73 - 130	50.0	52.6	105	1	30
cis-1,3-Dichloropropene	10061-01-5	ND	5.00	50.0	50.6	101	71 - 132	50.0	51.8	104	2	30
Dibromochloromethane	124-48-1	ND	5.00	50.0	48.0	96	71 - 123	50.0	46.3	93	4	30
Dibromomethane	74-95-3	ND	5.00	50.0	49.5	99	72 - 129	50.0	52.1	104	5	30
Dichlorodifluoromethane	75-71-8	ND	5.00	50.0	51.7	103	58 - 140	50.0	46.7	93	10	30
Ethylbenzene	100-41-4	ND	5.00	50.0	49.9	100	74 - 126	50.0	48.6	97	3	30
Hexachlorobutadiene	87-68-3	ND	5.00	50.0	52.3	105	61 - 144	50.0	47.1	94	10	30
Isopropylbenzene (Cumene)	98-82-8	ND	5.00	50.0	53.1	106	71 - 125	50.0	52.4	105	1	30
m,p-Xylene	136777-61-2	ND	10.0	100	105	105	74 - 126	100	100	100	5	30
Methylene chloride	75-09-2	ND	5.00	50.0	47.3	95	68 - 132	50.0	47.3	95	0	30
Naphthalene	91-20-3	ND	5.00	50.0	51.0	102	57 - 138	50.0	51.9	104	2	35
n-Butylbenzene	104-51-8	ND	5.00	50.0	54.0	108	69 - 134	50.0	53.6	107	1	30
n-Propylbenzene	103-65-1	ND	5.00	50.0	51.2	102	75 - 129	50.0	50.7	101	1	30
o-Xylene	95-47-6	ND	5.00	50.0	52.4	105	73 - 130	50.0	51.0	102	3	30
sec-Butylbenzene	135-98-8	ND	5.00	50.0	51.5	103	70 - 136	50.0	51.4	103	0	30
Styrene	100-42-5	ND	5.00	50.0	52.4	105	71 - 127	50.0	52.0	104	1	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	5.00	50.0	51.7	103	71 - 125	50.0	52.1	104	1	30
tert-Butylbenzene	98-06-6	ND	5.00	50.0	54.3	109	72 - 126	50.0	52.7	105	3	30
Tetrachloroethene	127-18-4	ND	5.00	50.0	48.1	96	68 - 128	50.0	46.2	92	4	30
Toluene	108-88-3	ND	5.00	50.0	48.4	97	72 - 120	50.0	47.9	96	1	20
trans-1,2-Dichloroethene	156-60-5	ND	5.00	50.0	51.6	103	69 - 132	50.0	48.8	98	6	30
trans-1,3-Dichloropropene	10061-02-6	ND	5.00	50.0	49.7	99	71 - 131	50.0	52.1	104	5	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	5.00	50.0	49.3	99	56 - 132	50.0	52.4	105	6	30
Trichloroethene	79-01-6	ND	5.00	50.0	49.4	99	76 - 129	50.0	48.6	97	2	20
Trichlorofluoromethane	75-69-4	ND	5.00	50.0	57.0	114	72 - 136	50.0	48.7	97	16	30
Trichlorotrifluoroethane	76-13-1	ND	5.00	50.0	54.8	110	72 - 136	50.0	49.5	99	10	30

GC/MS Volatiles QC Summary

Analytical Batch 594290	Client ID	MB594290		LCS594290				LCSD594290				
	GCAL ID	1606473		1606474				1606475				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	09/09/2016 14:48		09/09/2016 13:19				09/09/2016 13:42				
	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
Vinyl chloride	75-01-4	ND	2.00	50.0	56.7	113	68 - 132	50.0	48.8	98	15	30
Xylene (total)	1330-20-7	ND	15.0	150	158	105	74 - 127	150	151	101	5	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	50.8	102	50	50.8	102	71 - 127	50	50.9	102	NA	NA
4-Bromofluorobenzene	460-00-4	46.2	92	50	51.3	103	78 - 130	50	49.5	99	NA	NA
Dibromofluoromethane	1868-53-7	50.4	101	50	50	100	77 - 127	50	51.8	104	NA	NA
Toluene d8	2037-26-5	51.1	102	50	49.3	99	76 - 134	50	47.5	95	NA	NA

CHAIN OF CUSTODY RECORD

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

Client ID: 4912 - Clearwater Environmental Resources
SDG: 216090905
PM: SAK

Report to:
Client: Clearwater Environmental
Address: 3870 P'tree Ind. Blvd, Ste 340 / 30
Duluth GA 30096
Contact: Jack Wattle
Phone: 678-491-4609
E-mail: jack.wattle@clearwater-env.net

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

P.O. Number
Project Name/Number: RAYLOC

Sampled By: Perry Fox

Analytical Requests & Method: VOCs via 8260B

GCAL use only:
Custody Seal used ☐ yes ☐ no
intact ☐ yes ☐ no
Temperature °C 0.5-E29
2:40PM

☐ Dissolved Analysis Requested
☐ Field filtered
☐ Lab filtered

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	No Containers	VOCs via 8260B	Preservative
S	9/7/16	1402		X	PD-2 @ 10'	4	X	1
		1437		X	WD-2 @ 10'		X	2
		1452		X	WD-4 @ 10'		X	3
		1443		X	WD-8 @ 5'		X	4
		1413		X	WD-11 @ 10'		X	5
		1458		X	ADD-1 @ 6'		X	6
		1501		X	ADD-1 @ 10'		X	7
		1502		X	ADD-2 @ 5'		X	8
		1514		X	ADD-2 @ 10'		X	9
					TRIP BLANK			10

Air Bill No: 7771 8189 0379

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:
	9/8/16	1235	Brad Lachman	9/8/16	1235
Brad Lachman	9/8/16	1325	Fider		
FedEx	9-9-16	10:17	Doan McCune	9-9-16	10:17

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

SAMPLE RECEIVING CHECKLIST

216090905

SAMPLE DELIVERY GROUP 216090905	
Client PM SAK 4912 - Clearwater Environmental Resources	**Transport Method** FEDEX
Profile Number 259985	**Received By** McCune, Dodie N.
Line Item(s) 1 - VOC 2 - Soils	**Receive Date(s)** 09/09/16

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: E29	Temp(°C)
777181899379		0.5

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

Revision 1.5

Page 1 of 1

APPENDIX C
JUNE AND SEPTEMBER 2016 GROUNDWATER LABORATORY REPORTS

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

July 07, 2016

Jack Wintle
Clearwater Environmental Resources, LLC
3870 Peachtree Ind. Blvd.
Duluth GA 30096

TEL: (678) 491-4601
FAX:

RE: RAYLOC GW

Dear Jack Wintle: Order No: 1606N48

Analytical Environmental Services, Inc. received 12 samples on June 23, 2016 2:50 pm for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES's accreditations are as follows:
-NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/16-06/30/17.
-NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/16-06/30/17.
-NELAC/Texas Certificate No. T104704509-16-6 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 03/01/16-02/28/17.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

Mirzeta Kararic

Mirzeta Kararic
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1606148

Date: 6/23/16 Page 1 of 1

COMPANY: Clearwater Environmental Resources LLC

ADDRESS: 3070 Pinetree Blvd Ste 340139 Duluth GA 30096

PHONE: 678-491-4601

FAX:

SAMPLED BY: Perry Fritz / Clearwater

SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOCs via 8260B	VFAs via Sulfone	DOC/TOC	Chloride	Nitrate/Nitrite	Sulphate	Alkalinity	Total Fe (Mn SW6010C)	Diss. Fe (Mn SW6010C)	REMARKS	No # of Containers
							PRESERVATION (See codes)										
							HCl	HCl	HCl	I	I	I	I	N	I		
1	MW-7 @ 30'	6/22/16	1512	X		GW	2										2
2	MW-12 @ 60	6/23	1037	X			2	2	2	1	→	→	→	1	1		9
3	MW-15 @ 30'	6/22	1258	X			2										2
4	MW-17 @ 30'	6/22	1120	X			2	2	2	1	→	→	→	1	1		9
5	MW-19 @ 30'	6/22	1220	X			2										2
6	MW-21 @ 60'	6/23	0936	X			2	2	2	1	→	→	→	1	1		9
7	MW-22 @ 60'	6/23	0843	X			2	2	2	1	→	→	→	1	1		9
8	MW-23 @ 60'	6/23	0745	X			2	2	2	1	→	→	→	1	1		9
9	MW-24 @ 30'	6/22	1425	X			2										2
10	PT-3 @ 60'	6/23	1149	X			2	2	2	1	→	→	→	1	1		9
11	MW-20 @ 60'	6/23	1234	X			2	2	2	1	→	→	→	1	1		9
12																	
13																	
14																	

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	6/23/16 1450	1: Jessica Hartley	6/23/16 2:50 pm
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: BAYLOR GW

PROJECT #: 1502-31-3

SITE ADDRESS: Atlanta GA

SEND REPORT TO: jackputtle@clearwaterenv.net

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: PO#:

RECEIPT

Total # of Containers: 71

Turnaround Time Request
- ○ Standard 5 Business Days
- ○ 2 Business Day Rush
- ○ Next Business Day Rush
- ○ Same Day Rush (auth req.)
- ○ Other

STATE PROGRAM (if any):

E-mail? Y / N; Fax? Y / N

DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

(CLIENT) FedEx UPS MAIL COURIER

GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Client: Clearwater Environmental Resources, LLC
Project: RAYLOC GW
Lab ID: 1606N48

Case Narrative

Sample Receiving Nonconformance:

Samples 1606N48-004, -007, and -008 were received outside of the EPA/Method specified holding time of 24 hours for method SM3500-Fe-B. The laboratory proceeded with analysis at the client's request 6/23/2016.

For work order 1606N48, all samples were received at a temperature of 15.4°C, outside of the required temperature range of 0-6°C. The laboratory proceeded with analysis at the client's request 6/23/2016.

H2SO4 preserved samples for TOC and Nitrate-Nitrite were not received for the samples 1606N48-002, -004.-006, -007, -008, -010, and -011. After receipt at the laboratory, one of the unpreserved bottles received for each sample was split and preserved per method requirements to prepare the sample needed for TOC and Nitrate-Nitrite.

Ferrous Iron - SM3500-FE D:

All reported hits for Ferric Iron are from Total Ferric Iron analyses.

Analytical Environmental Services, Inc

Date: 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-7 @ 30'
Project Name:	RAYLOC GW	**Collection Date:**	6/22/2016 3:12:00 PM
Lab ID:	1606N48-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
1,1-Dichloroethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
1,1-Dichloroethene	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
1,2-Dibromoethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
1,2-Dichloroethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
1,2-Dichloropropane	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
2-Butanone	BRL	50		ug/L	225985	1	06/27/2016 17:02	CH
2-Hexanone	BRL	10		ug/L	225985	1	06/27/2016 17:02	CH
4-Methyl-2-pentanone	BRL	10		ug/L	225985	1	06/27/2016 17:02	CH
Acetone	BRL	50		ug/L	225985	1	06/27/2016 17:02	CH
Benzene	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Bromodichloromethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Bromoform	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Bromomethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Carbon disulfide	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Carbon tetrachloride	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Chlorobenzene	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Chloroethane	BRL	10		ug/L	225985	1	06/27/2016 17:02	CH
Chloroform	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Chloromethane	BRL	10		ug/L	225985	1	06/27/2016 17:02	CH
cis-1,2-Dichloroethene	6.9	5.0		ug/L	225985	1	06/27/2016 17:02	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Cyclohexane	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Dibromochloromethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Dichlorodifluoromethane	BRL	10		ug/L	225985	1	06/27/2016 17:02	CH
Ethylbenzene	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Freon-113	BRL	10		ug/L	225985	1	06/27/2016 17:02	CH
Isopropylbenzene	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
m,p-Xylene	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Methyl acetate	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Methylcyclohexane	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Methylene chloride	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
o-Xylene	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-7 @ 30'
Project Name:	RAYLOC GW	**Collection Date:**	6/22/2016 3:12:00 PM
Lab ID:	1606N48-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Tetrachloroethene	8.0	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Toluene	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Trichloroethene	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Trichlorofluoromethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:02	CH
Vinyl chloride	BRL	2.0		ug/L	225985	1	06/27/2016 17:02	CH
Surr: 4-Bromofluorobenzene	80.8	70.7-125		%REC	225985	1	06/27/2016 17:02	CH
Surr: Dibromofluoromethane	104	82.2-120		%REC	225985	1	06/27/2016 17:02	CH
Surr: Toluene-d8	106	81.8-120		%REC	225985	1	06/27/2016 17:02	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-12 @ 60'
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016 10:37:00 AM
Lab ID:	1606N48-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE FATTY ACIDS INHOUSE_VFA								
Acetic Acid	BRL	10.0		mg/L	226009	1	06/27/2016 14:03	RF
Butyric Acid	BRL	10.0		mg/L	226009	1	06/27/2016 14:03	RF
Isobutyric Acid	BRL	10.0		mg/L	226009	1	06/27/2016 14:03	RF
Isovaleric Acid	BRL	10.0		mg/L	226009	1	06/27/2016 14:03	RF
Propionic Acid	BRL	10.0		mg/L	226009	1	06/27/2016 14:03	RF
Valeric Acid	BRL	10.0		mg/L	226009	1	06/27/2016 14:03	RF
Total Organic Carbon (TOC) SW9060A								
Organic Carbon, Total	BRL	1.00		mg/L	R319893	1	06/27/2016 18:38	JM
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
1,1-Dichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
1,1-Dichloroethene	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
1,2-Dibromoethane	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
1,2-Dichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
1,2-Dichloropropane	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
2-Butanone	BRL	50		ug/L	225985	1	06/24/2016 05:31	CH
2-Hexanone	BRL	10		ug/L	225985	1	06/24/2016 05:31	CH
4-Methyl-2-pentanone	BRL	10		ug/L	225985	1	06/24/2016 05:31	CH
Acetone	BRL	50		ug/L	225985	1	06/24/2016 05:31	CH
Benzene	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Bromodichloromethane	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Bromoform	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Bromomethane	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Carbon disulfide	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Carbon tetrachloride	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Chlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Chloroethane	BRL	10		ug/L	225985	1	06/24/2016 05:31	CH
Chloroform	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Chloromethane	BRL	10		ug/L	225985	1	06/24/2016 05:31	CH
cis-1,2-Dichloroethene	90	5.0		ug/L	225985	1	06/24/2016 05:31	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Cyclohexane	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-12 @ 60'
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016 10:37:00 AM
Lab ID:	1606N48-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Dibromochloromethane	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Dichlorodifluoromethane	BRL	10		ug/L	225985	1	06/24/2016 05:31	CH
Ethylbenzene	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Freon-113	BRL	10		ug/L	225985	1	06/24/2016 05:31	CH
Isopropylbenzene	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
m,p-Xylene	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Methyl acetate	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Methylcyclohexane	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Methylene chloride	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
o-Xylene	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Styrene	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Tetrachloroethene	1400	100		ug/L	225985	20	06/24/2016 22:52	CH
Toluene	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Trichloroethene	19	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Trichlorofluoromethane	BRL	5.0		ug/L	225985	1	06/24/2016 05:31	CH
Vinyl chloride	BRL	2.0		ug/L	225985	1	06/24/2016 05:31	CH
Surr: 4-Bromofluorobenzene	82.7	70.7-125		%REC	225985	1	06/24/2016 05:31	CH
Surr: 4-Bromofluorobenzene	78.7	70.7-125		%REC	225985	20	06/24/2016 22:52	CH
Surr: Dibromofluoromethane	107	82.2-120		%REC	225985	20	06/24/2016 22:52	CH
Surr: Dibromofluoromethane	91.6	82.2-120		%REC	225985	1	06/24/2016 05:31	CH
Surr: Toluene-d8	110	81.8-120		%REC	225985	20	06/24/2016 22:52	CH
Surr: Toluene-d8	97.1	81.8-120		%REC	225985	1	06/24/2016 05:31	CH
Nitrogen, Nitrate-Nitrite (as N) E353.2								
Nitrogen, Nitrate-Nitrite (as N)	2.28	0.250		mg/L	R320031	5	06/30/2016 09:40	TL
METALS, DISSOLVED SW6010D				**(SW3005A)**				
Iron	BRL	0.100		mg/L	226199	1	06/29/2016 18:24	JL
Manganese	1.15	0.0150		mg/L	226199	1	06/29/2016 18:24	JL
ION SCAN SW9056A								
Chloride	10	1.0		mg/L	R320038	1	06/27/2016 13:17	JW
Sulfate	BRL	1.0		mg/L	R320038	1	06/27/2016 13:17	JW
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Ethane	BRL	9.0		ug/L	226058	1	06/27/2016 15:59	MD
Ethylene	BRL	7.0		ug/L	226058	1	06/27/2016 15:59	MD
Methane	BRL	4.0		ug/L	226058	1	06/27/2016 15:59	MD

Qualifiers:

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- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-12 @ 60'
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016 10:37:00 AM
Lab ID:	1606N48-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Dissolved Organic Carbon SW9060A								
Organic Carbon, Dissolved	BRL	1.00		mg/L	R319788	1	06/24/2016 11:44	JM
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	12.0	3.00		mg/L	R320041	1	06/29/2016 12:00	BD
METALS, TOTAL SW6010D (SW3010A)								
Iron	6.39	0.100		mg/L	226191	1	07/01/2016 20:29	JL
Manganese	2.83	0.0150		mg/L	226191	1	07/01/2016 20:29	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-15 @ 30'
Project Name:	RAYLOC GW	**Collection Date:**	6/22/2016 12:58:00 PM
Lab ID:	1606N48-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
1,1-Dichloroethane	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
1,1-Dichloroethene	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
1,2-Dibromoethane	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
1,2-Dichloroethane	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
1,2-Dichloropropane	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
2-Butanone	BRL	50		ug/L	225985	1	06/27/2016 16:11	CH
2-Hexanone	BRL	10		ug/L	225985	1	06/27/2016 16:11	CH
4-Methyl-2-pentanone	BRL	10		ug/L	225985	1	06/27/2016 16:11	CH
Acetone	BRL	50		ug/L	225985	1	06/27/2016 16:11	CH
Benzene	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Bromodichloromethane	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Bromoform	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Bromomethane	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Carbon disulfide	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Carbon tetrachloride	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Chlorobenzene	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Chloroethane	BRL	10		ug/L	225985	1	06/27/2016 16:11	CH
Chloroform	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Chloromethane	BRL	10		ug/L	225985	1	06/27/2016 16:11	CH
cis-1,2-Dichloroethene	18	5.0		ug/L	225985	1	06/27/2016 16:11	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Cyclohexane	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Dibromochloromethane	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Dichlorodifluoromethane	BRL	10		ug/L	225985	1	06/27/2016 16:11	CH
Ethylbenzene	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Freon-113	BRL	10		ug/L	225985	1	06/27/2016 16:11	CH
Isopropylbenzene	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
m,p-Xylene	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Methyl acetate	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Methylcyclohexane	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Methylene chloride	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
o-Xylene	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
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- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-15 @ 30'
Project Name:	RAYLOC GW	**Collection Date:**	6/22/2016 12:58:00 PM
Lab ID:	1606N48-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Tetrachloroethene	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Toluene	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Trichloroethene	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Trichlorofluoromethane	BRL	5.0		ug/L	225985	1	06/27/2016 16:11	CH
Vinyl chloride	24	2.0		ug/L	225985	1	06/27/2016 16:11	CH
Surr: 4-Bromofluorobenzene	83.9	70.7-125		%REC	225985	1	06/27/2016 16:11	CH
Surr: Dibromofluoromethane	99.5	82.2-120		%REC	225985	1	06/27/2016 16:11	CH
Surr: Toluene-d8	101	81.8-120		%REC	225985	1	06/27/2016 16:11	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-17 @ 30'
Project Name:	RAYLOC GW	**Collection Date:**	6/22/2016 11:20:00 AM
Lab ID:	1606N48-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE FATTY ACIDS INHOUSE_VFA								
Acetic Acid	BRL	10.0		mg/L	226009	1	06/29/2016 08:40	RF
Butyric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 08:40	RF
Isobutyric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 08:40	RF
Isovaleric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 08:40	RF
Propionic Acid	BRL	10.0		mg/L	226009	1	06/29/2016 08:40	RF
Valeric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 08:40	RF
Total Organic Carbon (TOC) SW9060A								
Organic Carbon, Total	BRL	1.00		mg/L	R319893	1	06/27/2016 19:02	JM
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
1,1-Dichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
1,1-Dichloroethene	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
1,2-Dibromoethane	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
1,2-Dichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
1,2-Dichloropropane	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
2-Butanone	BRL	50		ug/L	225985	1	06/24/2016 06:22	CH
2-Hexanone	BRL	10		ug/L	225985	1	06/24/2016 06:22	CH
4-Methyl-2-pentanone	BRL	10		ug/L	225985	1	06/24/2016 06:22	CH
Acetone	BRL	50		ug/L	225985	1	06/24/2016 06:22	CH
Benzene	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Bromodichloromethane	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Bromoform	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Bromomethane	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Carbon disulfide	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Carbon tetrachloride	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Chlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Chloroethane	BRL	10		ug/L	225985	1	06/24/2016 06:22	CH
Chloroform	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Chloromethane	BRL	10		ug/L	225985	1	06/24/2016 06:22	CH
cis-1,2-Dichloroethene	470	50		ug/L	225985	10	06/25/2016 00:08	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Cyclohexane	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-17 @ 30'
Project Name:	RAYLOC GW	**Collection Date:**	6/22/2016 11:20:00 AM
Lab ID:	1606N48-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Dibromochloromethane	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Dichlorodifluoromethane	BRL	10		ug/L	225985	1	06/24/2016 06:22	CH
Ethylbenzene	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Freon-113	BRL	10		ug/L	225985	1	06/24/2016 06:22	CH
Isopropylbenzene	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
m,p-Xylene	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Methyl acetate	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Methylcyclohexane	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Methylene chloride	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
o-Xylene	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Styrene	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Tetrachloroethene	1300	50		ug/L	225985	10	06/25/2016 00:08	CH
Toluene	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
trans-1,2-Dichloroethene	5.0	5.0		ug/L	225985	1	06/24/2016 06:22	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Trichloroethene	280	50		ug/L	225985	10	06/25/2016 00:08	CH
Trichlorofluoromethane	BRL	5.0		ug/L	225985	1	06/24/2016 06:22	CH
Vinyl chloride	BRL	2.0		ug/L	225985	1	06/24/2016 06:22	CH
Surr: 4-Bromofluorobenzene	79.7	70.7-125		%REC	225985	10	06/25/2016 00:08	CH
Surr: 4-Bromofluorobenzene	83.1	70.7-125		%REC	225985	1	06/24/2016 06:22	CH
Surr: Dibromofluoromethane	100	82.2-120		%REC	225985	1	06/24/2016 06:22	CH
Surr: Dibromofluoromethane	104	82.2-120		%REC	225985	10	06/25/2016 00:08	CH
Surr: Toluene-d8	100	81.8-120		%REC	225985	10	06/25/2016 00:08	CH
Surr: Toluene-d8	101	81.8-120		%REC	225985	1	06/24/2016 06:22	CH
Nitrogen, Nitrate-Nitrite (as N) E353.2								
Nitrogen, Nitrate-Nitrite (as N)	0.653	0.050		mg/L	R320031	1	06/30/2016 09:15	TL
METALS, DISSOLVED SW6010D				**(SW3005A)**				
Iron	BRL	0.100		mg/L	226199	1	06/29/2016 18:27	JL
Manganese	BRL	0.0150		mg/L	226199	1	06/29/2016 18:27	JL
ION SCAN SW9056A								
Chloride	4.7	1.0		mg/L	R320038	1	06/27/2016 13:32	JW
Sulfate	1.5	1.0		mg/L	R320038	1	06/27/2016 13:32	JW
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Ethane	BRL	9.0		ug/L	226058	1	06/27/2016 16:04	MD
Ethylene	BRL	7.0		ug/L	226058	1	06/27/2016 16:04	MD
Methane	10.0	4.0		ug/L	226058	1	06/27/2016 16:04	MD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-17 @ 30'
Project Name:	RAYLOC GW	**Collection Date:**	6/22/2016 11:20:00 AM
Lab ID:	1606N48-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Dissolved Organic Carbon SW9060A								
Organic Carbon, Dissolved	BRL	1.00		mg/L	R319788	1	06/24/2016 12:12	JM
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	53.0	3.00		mg/L	R320041	1	06/29/2016 12:00	BD
METALS, TOTAL SW6010D (SW3010A)								
Iron	1.16	0.100		mg/L	226191	1	07/01/2016 20:32	JL
Manganese	0.343	0.0150		mg/L	226191	1	07/01/2016 20:32	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-19 @ 30'
Project Name:	RAYLOC GW	**Collection Date:**	6/22/2016 12:20:00 PM
Lab ID:	1606N48-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
1,1-Dichloroethane	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
1,1-Dichloroethene	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
1,2-Dibromoethane	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
1,2-Dichloroethane	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
1,2-Dichloropropane	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
2-Butanone	BRL	50		ug/L	225985	1	06/28/2016 19:08	CH
2-Hexanone	BRL	10		ug/L	225985	1	06/28/2016 19:08	CH
4-Methyl-2-pentanone	BRL	10		ug/L	225985	1	06/28/2016 19:08	CH
Acetone	BRL	50		ug/L	225985	1	06/28/2016 19:08	CH
Benzene	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Bromodichloromethane	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Bromoform	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Bromomethane	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Carbon disulfide	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Carbon tetrachloride	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Chlorobenzene	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Chloroethane	BRL	10		ug/L	225985	1	06/28/2016 19:08	CH
Chloroform	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Chloromethane	BRL	10		ug/L	225985	1	06/28/2016 19:08	CH
cis-1,2-Dichloroethene	27	5.0		ug/L	225985	1	06/28/2016 19:08	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Cyclohexane	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Dibromochloromethane	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Dichlorodifluoromethane	BRL	10		ug/L	225985	1	06/28/2016 19:08	CH
Ethylbenzene	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Freon-113	BRL	10		ug/L	225985	1	06/28/2016 19:08	CH
Isopropylbenzene	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
m,p-Xylene	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Methyl acetate	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Methylcyclohexane	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Methylene chloride	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
o-Xylene	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-19 @ 30'
Project Name:	RAYLOC GW	**Collection Date:**	6/22/2016 12:20:00 PM
Lab ID:	1606N48-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Tetrachloroethene	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Toluene	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Trichloroethene	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Trichlorofluoromethane	BRL	5.0		ug/L	225985	1	06/28/2016 19:08	CH
Vinyl chloride	3.0	2.0		ug/L	225985	1	06/28/2016 19:08	CH
Surr: 4-Bromofluorobenzene	74.8	70.7-125		%REC	225985	1	06/28/2016 19:08	CH
Surr: Dibromofluoromethane	106	82.2-120		%REC	225985	1	06/28/2016 19:08	CH
Surr: Toluene-d8	105	81.8-120		%REC	225985	1	06/28/2016 19:08	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-21 @ 60'
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016 9:36:00 AM
Lab ID:	1606N48-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE FATTY ACIDS INHOUSE_VFA								
Acetic Acid	BRL	10.0		mg/L	226009	1	06/29/2016 09:27	RF
Butyric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 09:27	RF
Isobutyric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 09:27	RF
Isovaleric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 09:27	RF
Propionic Acid	BRL	10.0		mg/L	226009	1	06/29/2016 09:27	RF
Valeric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 09:27	RF
Total Organic Carbon (TOC) SW9060A								
Organic Carbon, Total	12.7	1.00		mg/L	R319893	1	06/27/2016 19:27	JM
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
1,1-Dichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
1,1-Dichloroethene	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
1,2-Dibromoethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
1,2-Dichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
1,2-Dichloropropane	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
2-Butanone	BRL	50		ug/L	225985	1	06/24/2016 07:14	CH
2-Hexanone	BRL	10		ug/L	225985	1	06/24/2016 07:14	CH
4-Methyl-2-pentanone	BRL	10		ug/L	225985	1	06/24/2016 07:14	CH
Acetone	BRL	50		ug/L	225985	1	06/24/2016 07:14	CH
Benzene	26	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Bromodichloromethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Bromoform	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Bromomethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Carbon disulfide	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Carbon tetrachloride	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Chlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Chloroethane	BRL	10		ug/L	225985	1	06/24/2016 07:14	CH
Chloroform	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Chloromethane	BRL	10		ug/L	225985	1	06/24/2016 07:14	CH
cis-1,2-Dichloroethene	10	5.0		ug/L	225985	1	06/24/2016 07:14	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Cyclohexane	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-21 @ 60'
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016 9:36:00 AM
Lab ID:	1606N48-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Dibromochloromethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Dichlorodifluoromethane	BRL	10		ug/L	225985	1	06/24/2016 07:14	CH
Ethylbenzene	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Freon-113	BRL	10		ug/L	225985	1	06/24/2016 07:14	CH
Isopropylbenzene	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
m,p-Xylene	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Methyl acetate	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Methylcyclohexane	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Methylene chloride	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
o-Xylene	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Styrene	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Tetrachloroethene	4100	250		ug/L	225985	50	06/24/2016 22:26	CH
Toluene	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
trans-1,2-Dichloroethene	8.3	5.0		ug/L	225985	1	06/24/2016 07:14	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Trichloroethene	240	100		ug/L	225985	50	06/24/2016 22:26	CH
Trichlorofluoromethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:14	CH
Vinyl chloride	BRL	2.0		ug/L	225985	1	06/24/2016 07:14	CH
Surr: 4-Bromofluorobenzene	83.6	70.7-125		%REC	225985	1	06/24/2016 07:14	CH
Surr: 4-Bromofluorobenzene	80.1	70.7-125		%REC	225985	50	06/24/2016 22:26	CH
Surr: Dibromofluoromethane	99.2	82.2-120		%REC	225985	50	06/24/2016 22:26	CH
Surr: Dibromofluoromethane	90.7	82.2-120		%REC	225985	1	06/24/2016 07:14	CH
Surr: Toluene-d8	104	81.8-120		%REC	225985	50	06/24/2016 22:26	CH
Surr: Toluene-d8	93.6	81.8-120		%REC	225985	1	06/24/2016 07:14	CH
Nitrogen, Nitrate-Nitrite (as N) E353.2								
Nitrogen, Nitrate-Nitrite (as N)	BRL	0.050		mg/L	R320031	1	06/30/2016 09:16	TL
METALS, DISSOLVED SW6010D				**(SW3005A)**				
Iron	BRL	0.100		mg/L	226199	1	06/29/2016 18:31	JL
Manganese	BRL	0.0150		mg/L	226199	1	06/29/2016 18:31	JL
ION SCAN SW9056A								
Chloride	1.6	1.0		mg/L	R320038	1	06/27/2016 13:46	JW
Sulfate	3.7	1.0		mg/L	R320038	1	06/27/2016 13:46	JW
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Ethane	BRL	9.0		ug/L	226058	1	06/27/2016 16:08	MD
Ethylene	BRL	7.0		ug/L	226058	1	06/27/2016 16:08	MD
Methane	BRL	4.0		ug/L	226058	1	06/27/2016 16:08	MD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-21 @ 60'
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016 9:36:00 AM
Lab ID:	1606N48-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Dissolved Organic Carbon SW9060A								
Organic Carbon, Dissolved	13.1	1.00		mg/L	R319788	1	06/24/2016 12:41	JM
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	59.0	3.00		mg/L	R320041	1	06/29/2016 12:00	BD
METALS, TOTAL SW6010D (SW3010A)								
Iron	0.166	0.100		mg/L	226191	1	07/01/2016 20:35	JL
Manganese	BRL	0.0150		mg/L	226191	1	07/01/2016 20:35	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-22 @ 60'
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016 8:43:00 AM
Lab ID:	1606N48-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE FATTY ACIDS INHOUSE_VFA								
Acetic Acid	BRL	10.0		mg/L	226009	1	06/29/2016 10:15	RF
Butyric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 10:15	RF
Isobutyric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 10:15	RF
Isovaleric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 10:15	RF
Propionic Acid	BRL	10.0		mg/L	226009	1	06/29/2016 10:15	RF
Valeric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 10:15	RF
Total Organic Carbon (TOC) SW9060A								
Organic Carbon, Total	BRL	1.00		mg/L	R319893	1	06/27/2016 19:51	JM
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
1,1-Dichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
1,1-Dichloroethene	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
1,2-Dibromoethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
1,2-Dichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
1,2-Dichloropropane	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
2-Butanone	BRL	50		ug/L	225985	1	06/24/2016 07:39	CH
2-Hexanone	BRL	10		ug/L	225985	1	06/24/2016 07:39	CH
4-Methyl-2-pentanone	BRL	10		ug/L	225985	1	06/24/2016 07:39	CH
Acetone	BRL	50		ug/L	225985	1	06/24/2016 07:39	CH
Benzene	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Bromodichloromethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Bromoform	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Bromomethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Carbon disulfide	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Carbon tetrachloride	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Chlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Chloroethane	BRL	10		ug/L	225985	1	06/24/2016 07:39	CH
Chloroform	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Chloromethane	BRL	10		ug/L	225985	1	06/24/2016 07:39	CH
cis-1,2-Dichloroethene	250	100		ug/L	225985	20	06/24/2016 23:17	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Cyclohexane	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-22 @ 60'
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016 8:43:00 AM
Lab ID:	1606N48-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Dibromochloromethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Dichlorodifluoromethane	BRL	10		ug/L	225985	1	06/24/2016 07:39	CH
Ethylbenzene	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Freon-113	BRL	10		ug/L	225985	1	06/24/2016 07:39	CH
Isopropylbenzene	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
m,p-Xylene	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Methyl acetate	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Methylcyclohexane	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Methylene chloride	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
o-Xylene	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Styrene	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Tetrachloroethene	1500	100		ug/L	225985	20	06/24/2016 23:17	CH
Toluene	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Trichloroethene	150	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Trichlorofluoromethane	BRL	5.0		ug/L	225985	1	06/24/2016 07:39	CH
Vinyl chloride	BRL	2.0		ug/L	225985	1	06/24/2016 07:39	CH
Surr: 4-Bromofluorobenzene	81.3	70.7-125		%REC	225985	1	06/24/2016 07:39	CH
Surr: 4-Bromofluorobenzene	77.6	70.7-125		%REC	225985	20	06/24/2016 23:17	CH
Surr: Dibromofluoromethane	94.8	82.2-120		%REC	225985	1	06/24/2016 07:39	CH
Surr: Dibromofluoromethane	97.9	82.2-120		%REC	225985	20	06/24/2016 23:17	CH
Surr: Toluene-d8	102	81.8-120		%REC	225985	20	06/24/2016 23:17	CH
Surr: Toluene-d8	95.3	81.8-120		%REC	225985	1	06/24/2016 07:39	CH
Nitrogen, Nitrate-Nitrite (as N) E353.2								
Nitrogen, Nitrate-Nitrite (as N)	0.060	0.050		mg/L	R320031	1	06/30/2016 09:17	TL
METALS, DISSOLVED SW6010D				**(SW3005A)**				
Iron	BRL	0.100		mg/L	226199	1	06/29/2016 18:34	JL
Manganese	0.240	0.0150		mg/L	226199	1	06/29/2016 18:34	JL
ION SCAN SW9056A								
Chloride	8.9	1.0		mg/L	R320038	1	06/27/2016 14:01	JW
Sulfate	1.7	1.0		mg/L	R320038	1	06/27/2016 14:01	JW
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Ethane	BRL	9.0		ug/L	226058	1	06/27/2016 16:13	MD
Ethylene	BRL	7.0		ug/L	226058	1	06/27/2016 16:13	MD
Methane	BRL	4.0		ug/L	226058	1	06/27/2016 16:13	MD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-22 @ 60'
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016 8:43:00 AM
Lab ID:	1606N48-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Dissolved Organic Carbon SW9060A								
Organic Carbon, Dissolved	BRL	1.00		mg/L	R319788	1	06/24/2016 13:08	JM
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	20.0	3.00		mg/L	R320041	1	06/29/2016 12:00	BD
METALS, TOTAL SW6010D (SW3010A)								
Iron	7.94	0.100		mg/L	226191	1	07/01/2016 20:39	JL
Manganese	0.435	0.0150		mg/L	226191	1	07/01/2016 20:39	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-23 @ 60'
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016 7:45:00 AM
Lab ID:	1606N48-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE FATTY ACIDS INHOUSE_VFA								
Acetic Acid	BRL	10.0		mg/L	226009	1	06/29/2016 11:02	RF
Butyric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 11:02	RF
Isobutyric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 11:02	RF
Isovaleric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 11:02	RF
Propionic Acid	BRL	10.0		mg/L	226009	1	06/29/2016 11:02	RF
Valeric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 11:02	RF
Total Organic Carbon (TOC) SW9060A								
Organic Carbon, Total	BRL	1.00		mg/L	R319893	1	06/27/2016 20:15	JM
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
1,1-Dichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
1,1-Dichloroethene	6.7	5.0		ug/L	225985	1	06/24/2016 08:05	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
1,2-Dibromoethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
1,2-Dichlorobenzene	29	5.0		ug/L	225985	1	06/24/2016 08:05	CH
1,2-Dichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
1,2-Dichloropropane	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
2-Butanone	BRL	50		ug/L	225985	1	06/24/2016 08:05	CH
2-Hexanone	BRL	10		ug/L	225985	1	06/24/2016 08:05	CH
4-Methyl-2-pentanone	BRL	10		ug/L	225985	1	06/24/2016 08:05	CH
Acetone	BRL	50		ug/L	225985	1	06/24/2016 08:05	CH
Benzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Bromodichloromethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Bromoform	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Bromomethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Carbon disulfide	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Carbon tetrachloride	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Chlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Chloroethane	BRL	10		ug/L	225985	1	06/24/2016 08:05	CH
Chloroform	14	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Chloromethane	BRL	10		ug/L	225985	1	06/24/2016 08:05	CH
cis-1,2-Dichloroethene	1900	100		ug/L	225985	20	06/24/2016 23:43	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Cyclohexane	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-23 @ 60'
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016 7:45:00 AM
Lab ID:	1606N48-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Dibromochloromethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Dichlorodifluoromethane	BRL	10		ug/L	225985	1	06/24/2016 08:05	CH
Ethylbenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Freon-113	BRL	10		ug/L	225985	1	06/24/2016 08:05	CH
Isopropylbenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
m,p-Xylene	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Methyl acetate	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Methylcyclohexane	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Methylene chloride	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
o-Xylene	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Styrene	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Tetrachloroethene	2600	100		ug/L	225985	20	06/24/2016 23:43	CH
Toluene	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
trans-1,2-Dichloroethene	8.9	5.0		ug/L	225985	1	06/24/2016 08:05	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Trichloroethene	490	100		ug/L	225985	20	06/24/2016 23:43	CH
Trichlorofluoromethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:05	CH
Vinyl chloride	BRL	2.0		ug/L	225985	1	06/24/2016 08:05	CH
Surr: 4-Bromofluorobenzene	82.2	70.7-125		%REC	225985	1	06/24/2016 08:05	CH
Surr: 4-Bromofluorobenzene	76.2	70.7-125		%REC	225985	20	06/24/2016 23:43	CH
Surr: Dibromofluoromethane	106	82.2-120		%REC	225985	20	06/24/2016 23:43	CH
Surr: Dibromofluoromethane	93.9	82.2-120		%REC	225985	1	06/24/2016 08:05	CH
Surr: Toluene-d8	108	81.8-120		%REC	225985	20	06/24/2016 23:43	CH
Surr: Toluene-d8	94.4	81.8-120		%REC	225985	1	06/24/2016 08:05	CH
Nitrogen, Nitrate-Nitrite (as N) E353.2								
Nitrogen, Nitrate-Nitrite (as N)	0.102	0.050		mg/L	R320031	1	06/30/2016 09:18	TL
METALS, DISSOLVED SW6010D				**(SW3005A)**				
Iron	BRL	0.100		mg/L	226199	1	06/29/2016 18:37	JL
Manganese	0.372	0.0150		mg/L	226199	1	06/29/2016 18:37	JL
ION SCAN SW9056A								
Chloride	79	5.0		mg/L	R320038	5	06/27/2016 16:53	JW
Sulfate	BRL	1.0		mg/L	R320038	1	06/27/2016 14:16	JW
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Ethane	BRL	9.0		ug/L	226058	1	06/27/2016 16:28	MD
Ethylene	BRL	7.0		ug/L	226058	1	06/27/2016 16:28	MD
Methane	8.5	4.0		ug/L	226058	1	06/27/2016 16:28	MD

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-23 @ 60'
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016 7:45:00 AM
Lab ID:	1606N48-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Dissolved Organic Carbon SW9060A								
Organic Carbon, Dissolved	2.37	1.00		mg/L	R319788	1	06/24/2016 13:34	JM
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	18.0	3.00		mg/L	R320041	1	06/29/2016 12:00	BD
METALS, TOTAL SW6010D (SW3010A)								
Iron	0.554	0.100		mg/L	226191	1	07/01/2016 20:42	JL
Manganese	0.393	0.0150		mg/L	226191	1	07/01/2016 20:42	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-24 @ 30'
Project Name:	RAYLOC GW	**Collection Date:**	6/22/2016 2:25:00 PM
Lab ID:	1606N48-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
1,1-Dichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
1,1-Dichloroethene	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
1,2-Dibromoethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
1,2-Dichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
1,2-Dichloropropane	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
2-Butanone	BRL	50		ug/L	225985	1	06/24/2016 08:31	CH
2-Hexanone	BRL	10		ug/L	225985	1	06/24/2016 08:31	CH
4-Methyl-2-pentanone	BRL	10		ug/L	225985	1	06/24/2016 08:31	CH
Acetone	BRL	50		ug/L	225985	1	06/24/2016 08:31	CH
Benzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Bromodichloromethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Bromoform	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Bromomethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Carbon disulfide	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Carbon tetrachloride	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Chlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Chloroethane	BRL	10		ug/L	225985	1	06/24/2016 08:31	CH
Chloroform	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Chloromethane	BRL	10		ug/L	225985	1	06/24/2016 08:31	CH
cis-1,2-Dichloroethene	310	50		ug/L	225985	10	06/25/2016 00:34	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Cyclohexane	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Dibromochloromethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Dichlorodifluoromethane	BRL	10		ug/L	225985	1	06/24/2016 08:31	CH
Ethylbenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Freon-113	BRL	10		ug/L	225985	1	06/24/2016 08:31	CH
Isopropylbenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
m,p-Xylene	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Methyl acetate	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Methylcyclohexane	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Methylene chloride	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
o-Xylene	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-24 @ 30'
Project Name:	RAYLOC GW	**Collection Date:**	6/22/2016 2:25:00 PM
Lab ID:	1606N48-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Tetrachloroethene	220	50		ug/L	225985	10	06/25/2016 00:34	CH
Toluene	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Trichloroethene	67	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Trichlorofluoromethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:31	CH
Vinyl chloride	BRL	2.0		ug/L	225985	1	06/24/2016 08:31	CH
Surr: 4-Bromofluorobenzene	79.6	70.7-125		%REC	225985	1	06/24/2016 08:31	CH
Surr: 4-Bromofluorobenzene	81	70.7-125		%REC	225985	10	06/25/2016 00:34	CH
Surr: Dibromofluoromethane	99.9	82.2-120		%REC	225985	10	06/25/2016 00:34	CH
Surr: Dibromofluoromethane	103	82.2-120		%REC	225985	1	06/24/2016 08:31	CH
Surr: Toluene-d8	101	81.8-120		%REC	225985	1	06/24/2016 08:31	CH
Surr: Toluene-d8	102	81.8-120		%REC	225985	10	06/25/2016 00:34	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	PT-3 @ 60'
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016 11:49:00 AM
Lab ID:	1606N48-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE FATTY ACIDS INHOUSE_VFA								
Acetic Acid	BRL	10.0		mg/L	226009	1	06/29/2016 11:50	RF
Butyric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 11:50	RF
Isobutyric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 11:50	RF
Isovaleric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 11:50	RF
Propionic Acid	BRL	10.0		mg/L	226009	1	06/29/2016 11:50	RF
Valeric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 11:50	RF
Total Organic Carbon (TOC) SW9060A								
Organic Carbon, Total	BRL	1.00		mg/L	R319893	1	06/27/2016 20:36	JM
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
1,1-Dichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
1,1-Dichloroethene	5.4	5.0		ug/L	225985	1	06/24/2016 08:56	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
1,2-Dibromoethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
1,2-Dichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
1,2-Dichloropropane	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
2-Butanone	BRL	50		ug/L	225985	1	06/24/2016 08:56	CH
2-Hexanone	BRL	10		ug/L	225985	1	06/24/2016 08:56	CH
4-Methyl-2-pentanone	BRL	10		ug/L	225985	1	06/24/2016 08:56	CH
Acetone	BRL	50		ug/L	225985	1	06/24/2016 08:56	CH
Benzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Bromodichloromethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Bromoform	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Bromomethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Carbon disulfide	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Carbon tetrachloride	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Chlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Chloroethane	BRL	10		ug/L	225985	1	06/24/2016 08:56	CH
Chloroform	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Chloromethane	BRL	10		ug/L	225985	1	06/24/2016 08:56	CH
cis-1,2-Dichloroethene	980	100		ug/L	225985	20	06/27/2016 15:19	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Cyclohexane	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	PT-3 @ 60'
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016 11:49:00 AM
Lab ID:	1606N48-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Dibromochloromethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Dichlorodifluoromethane	BRL	10		ug/L	225985	1	06/24/2016 08:56	CH
Ethylbenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Freon-113	BRL	10		ug/L	225985	1	06/24/2016 08:56	CH
Isopropylbenzene	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
m,p-Xylene	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Methyl acetate	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Methylcyclohexane	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Methylene chloride	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
o-Xylene	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Styrene	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Tetrachloroethene	18000	2500		ug/L	225985	500	06/27/2016 14:53	CH
Toluene	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
trans-1,2-Dichloroethene	15	5.0		ug/L	225985	1	06/24/2016 08:56	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Trichloroethene	1500	100		ug/L	225985	20	06/27/2016 15:19	CH
Trichlorofluoromethane	BRL	5.0		ug/L	225985	1	06/24/2016 08:56	CH
Vinyl chloride	3.5	2.0		ug/L	225985	1	06/24/2016 08:56	CH
Surr: 4-Bromofluorobenzene	82.6	70.7-125		%REC	225985	500	06/27/2016 14:53	CH
Surr: 4-Bromofluorobenzene	81.9	70.7-125		%REC	225985	1	06/24/2016 08:56	CH
Surr: 4-Bromofluorobenzene	83.9	70.7-125		%REC	225985	20	06/27/2016 15:19	CH
Surr: Dibromofluoromethane	103	82.2-120		%REC	225985	500	06/27/2016 14:53	CH
Surr: Dibromofluoromethane	84.6	82.2-120		%REC	225985	1	06/24/2016 08:56	CH
Surr: Dibromofluoromethane	97.7	82.2-120		%REC	225985	20	06/27/2016 15:19	CH
Surr: Toluene-d8	102	81.8-120		%REC	225985	500	06/27/2016 14:53	CH
Surr: Toluene-d8	88.9	81.8-120		%REC	225985	1	06/24/2016 08:56	CH
Surr: Toluene-d8	98.6	81.8-120		%REC	225985	20	06/27/2016 15:19	CH
Nitrogen, Nitrate-Nitrite (as N) E353.2								
Nitrogen, Nitrate-Nitrite (as N)	1.28	0.050		mg/L	R320031	1	06/30/2016 09:19	TL
METALS, DISSOLVED SW6010D				**(SW3005A)**				
Iron	BRL	0.100		mg/L	226199	1	06/29/2016 18:40	JL
Manganese	0.161	0.0150		mg/L	226199	1	06/29/2016 18:40	JL
ION SCAN SW9056A								
Chloride	9.5	1.0		mg/L	R320038	1	06/27/2016 14:31	JW
Sulfate	1.0	1.0		mg/L	R320038	1	06/27/2016 14:31	JW
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	PT-3 @ 60'
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016 11:49:00 AM
Lab ID:	1606N48-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
GC Analysis of Gaseous Samples SOP-RSK 175					**(RSK175)**			
Ethane	BRL	9.0		ug/L	226058	1	06/27/2016 16:32	MD
Ethylene	BRL	7.0		ug/L	226058	1	06/27/2016 16:32	MD
Methane	4.7	4.0		ug/L	226058	1	06/27/2016 16:32	MD
Dissolved Organic Carbon SW9060A								
Organic Carbon, Dissolved	BRL	1.00		mg/L	R319788	1	06/24/2016 13:58	JM
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	44.0	3.00		mg/L	R320041	1	06/29/2016 12:00	BD
METALS, TOTAL SW6010D					**(SW3010A)**			
Iron	3.69	0.100		mg/L	226191	1	07/01/2016 20:45	JL
Manganese	0.291	0.0150		mg/L	226191	1	07/01/2016 20:45	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-20 @60'
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016 12:34:00 PM
Lab ID:	1606N48-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILE FATTY ACIDS INHOUSE_VFA								
Acetic Acid	BRL	10.0		mg/L	226009	1	06/29/2016 12:37	RF
Butyric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 12:37	RF
Isobutyric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 12:37	RF
Isovaleric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 12:37	RF
Propionic Acid	BRL	10.0		mg/L	226009	1	06/29/2016 12:37	RF
Valeric Acid	BRL	10.0		mg/L	226009	1	06/29/2016 12:37	RF
Total Organic Carbon (TOC) SW9060A								
Organic Carbon, Total	BRL	1.00		mg/L	R319893	1	06/27/2016 20:57	JM
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
1,1-Dichloroethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
1,1-Dichloroethene	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
1,2-Dibromoethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
1,2-Dichloroethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
1,2-Dichloropropane	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
2-Butanone	BRL	50		ug/L	225985	1	06/27/2016 17:54	CH
2-Hexanone	BRL	10		ug/L	225985	1	06/27/2016 17:54	CH
4-Methyl-2-pentanone	BRL	10		ug/L	225985	1	06/27/2016 17:54	CH
Acetone	BRL	50		ug/L	225985	1	06/27/2016 17:54	CH
Benzene	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Bromodichloromethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Bromoform	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Bromomethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Carbon disulfide	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Carbon tetrachloride	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Chlorobenzene	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Chloroethane	BRL	10		ug/L	225985	1	06/27/2016 17:54	CH
Chloroform	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Chloromethane	BRL	10		ug/L	225985	1	06/27/2016 17:54	CH
cis-1,2-Dichloroethene	99	5.0		ug/L	225985	1	06/27/2016 17:54	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Cyclohexane	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-20 @60'
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016 12:34:00 PM
Lab ID:	1606N48-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Dibromochloromethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Dichlorodifluoromethane	BRL	10		ug/L	225985	1	06/27/2016 17:54	CH
Ethylbenzene	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Freon-113	BRL	10		ug/L	225985	1	06/27/2016 17:54	CH
Isopropylbenzene	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
m,p-Xylene	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Methyl acetate	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Methylcyclohexane	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Methylene chloride	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
o-Xylene	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Styrene	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Tetrachloroethene	2000	250		ug/L	225985	50	06/27/2016 17:28	CH
Toluene	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
trans-1,2-Dichloroethene	5.2	5.0		ug/L	225985	1	06/27/2016 17:54	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Trichloroethene	170	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Trichlorofluoromethane	BRL	5.0		ug/L	225985	1	06/27/2016 17:54	CH
Vinyl chloride	BRL	2.0		ug/L	225985	1	06/27/2016 17:54	CH
Surr: 4-Bromofluorobenzene	81.7	70.7-125		%REC	225985	50	06/27/2016 17:28	CH
Surr: 4-Bromofluorobenzene	78.5	70.7-125		%REC	225985	1	06/27/2016 17:54	CH
Surr: Dibromofluoromethane	102	82.2-120		%REC	225985	50	06/27/2016 17:28	CH
Surr: Dibromofluoromethane	94.7	82.2-120		%REC	225985	1	06/27/2016 17:54	CH
Surr: Toluene-d8	105	81.8-120		%REC	225985	50	06/27/2016 17:28	CH
Surr: Toluene-d8	99.2	81.8-120		%REC	225985	1	06/27/2016 17:54	CH
Nitrogen, Nitrate-Nitrite (as N) E353.2								
Nitrogen, Nitrate-Nitrite (as N)	0.988	0.050		mg/L	R320031	1	06/30/2016 09:20	TL
METALS, DISSOLVED SW6010D				**(SW3005A)**				
Iron	BRL	0.100		mg/L	226199	1	06/29/2016 18:50	JL
Manganese	0.208	0.0150		mg/L	226199	1	06/29/2016 18:50	JL
ION SCAN SW9056A								
Chloride	2.7	1.0		mg/L	R320038	1	06/27/2016 14:45	JW
Sulfate	BRL	1.0		mg/L	R320038	1	06/27/2016 14:45	JW
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Ethane	BRL	9.0		ug/L	226058	1	06/27/2016 16:37	MD
Ethylene	BRL	7.0		ug/L	226058	1	06/27/2016 16:37	MD
Methane	BRL	4.0		ug/L	226058	1	06/27/2016 16:37	MD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-20 @60'
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016 12:34:00 PM
Lab ID:	1606N48-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Dissolved Organic Carbon SW9060A								
Organic Carbon, Dissolved	BRL	1.00		mg/L	R319788	1	06/24/2016 14:25	JM
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	31.0	3.00		mg/L	R320041	1	06/29/2016 12:00	BD
METALS, TOTAL SW6010D (SW3010A)								
Iron	3.07	0.100		mg/L	226191	1	07/01/2016 20:55	JL
Manganese	0.610	0.0150		mg/L	226191	1	07/01/2016 20:55	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	TRIP BLANK
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016
Lab ID:	1606N48-012	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
1,1-Dichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
1,1-Dichloroethene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
1,2-Dibromoethane	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
1,2-Dichloroethane	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
1,2-Dichloropropane	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
2-Butanone	BRL	50		ug/L	225985	1	06/24/2016 01:39	CH
2-Hexanone	BRL	10		ug/L	225985	1	06/24/2016 01:39	CH
4-Methyl-2-pentanone	BRL	10		ug/L	225985	1	06/24/2016 01:39	CH
Acetone	BRL	50		ug/L	225985	1	06/24/2016 01:39	CH
Benzene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Bromodichloromethane	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Bromoform	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Bromomethane	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Carbon disulfide	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Carbon tetrachloride	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Chlorobenzene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Chloroethane	BRL	10		ug/L	225985	1	06/24/2016 01:39	CH
Chloroform	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Chloromethane	BRL	10		ug/L	225985	1	06/24/2016 01:39	CH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Cyclohexane	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Dibromochloromethane	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Dichlorodifluoromethane	BRL	10		ug/L	225985	1	06/24/2016 01:39	CH
Ethylbenzene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Freon-113	BRL	10		ug/L	225985	1	06/24/2016 01:39	CH
Isopropylbenzene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
m,p-Xylene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Methyl acetate	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Methylcyclohexane	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Methylene chloride	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
o-Xylene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jul-16

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	TRIP BLANK
Project Name:	RAYLOC GW	**Collection Date:**	6/23/2016
Lab ID:	1606N48-012	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Tetrachloroethene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Toluene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Trichloroethene	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Trichlorofluoromethane	BRL	5.0		ug/L	225985	1	06/24/2016 01:39	CH
Vinyl chloride	BRL	2.0		ug/L	225985	1	06/24/2016 01:39	CH
Surr: 4-Bromofluorobenzene	82	70.7-125		%REC	225985	1	06/24/2016 01:39	CH
Surr: Dibromofluoromethane	97	82.2-120		%REC	225985	1	06/24/2016 01:39	CH
Surr: Toluene-d8	99.9	81.8-120		%REC	225985	1	06/24/2016 01:39	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Date: *07-Jul-16*

CLIENT: Clearwater Environmental Resources, LLC
Client Sample ID: MW-12 @ 60'
Project: RAYLOC GW
Collection Date: 6/23/2016 10:37:00 AM
Lab ID: 1606N48-002
Matrix: GROUNDWATER

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
FERROUS IRON SM3500-FE-B							Analyst: **JCO**
Iron, as Ferric (Fe+3)	6.40	0.100		mg/L		1	6/24/2016 7:25 AM
Iron, as Ferric (Fe+3)	BRL	0.100		mg/L		1	6/24/2016 7:25 AM
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L		1	6/24/2016 7:25 AM
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L		1	6/24/2016 7:25 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
BRL	Below Reporting Limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
N	Analyte not NELAC certified	NC	Not Confirmed
B	Analyte detected in the associated Method Blank	<	Less than Result value
>	Greater than Result value		

Analytical Environmental Services, Inc.

Date: *07-Jul-16*

CLIENT: Clearwater Environmental Resources, LLC
Client Sample ID: MW-17 @ 30'
Project: RAYLOC GW
Collection Date: 6/22/2016 11:20:00 AM
Lab ID: 1606N48-004
Matrix: GROUNDWATER

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
FERROUS IRON SM3500-FE-B							Analyst: **JCO**
Iron, as Ferric (Fe+3)	1.16	0.100	H	mg/L		1	6/24/2016 7:25 AM
Iron, as Ferric (Fe+3)	BRL	0.100	H	mg/L		1	6/24/2016 7:25 AM
Iron, as Ferrous (Fe+2)	BRL	0.100	H	mg/L		1	6/24/2016 7:25 AM
Iron, as Ferrous (Fe+2)	BRL	0.100	H	mg/L		1	6/24/2016 7:25 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
BRL	Below Reporting Limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
N	Analyte not NELAC certified	NC	Not Confirmed
B	Analyte detected in the associated Method Blank	<	Less than Result value
>	Greater than Result value		

Analytical Environmental Services, Inc.

Date: *07-Jul-16*

CLIENT: Clearwater Environmental Resources, LLC
Client Sample ID: MW-21 @ 60'
Project: RAYLOC GW
Collection Date: 6/23/2016 9:36:00 AM
Lab ID: 1606N48-006
Matrix: GROUNDWATER

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
FERROUS IRON SM3500-FE-B							Analyst: **JCO**
Iron, as Ferric (Fe+3)	0.166	0.100		mg/L		1	6/24/2016 7:25 AM
Iron, as Ferric (Fe+3)	BRL	0.100		mg/L		1	6/24/2016 7:25 AM
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L		1	6/24/2016 7:25 AM
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L		1	6/24/2016 7:25 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
BRL	Below Reporting Limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
N	Analyte not NELAC certified	NC	Not Confirmed
B	Analyte detected in the associated Method Blank	<	Less than Result value
>	Greater than Result value		

Analytical Environmental Services, Inc.

Date: *07-Jul-16*

CLIENT: Clearwater Environmental Resources, LLC
Client Sample ID: MW-22 @ 60'
Project: RAYLOC GW
Collection Date: 6/23/2016 8:43:00 AM
Lab ID: 1606N48-007
Matrix: GROUNDWATER

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
FERROUS IRON SM3500-FE-B							Analyst: **JCO**
Iron, as Ferric (Fe+3)	7.94	0.100		mg/L		1	6/24/2016 7:25 AM
Iron, as Ferric (Fe+3)	BRL	0.100		mg/L		1	6/24/2016 7:25 AM
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L		1	6/24/2016 7:25 AM
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L		1	6/24/2016 7:25 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
BRL	Below Reporting Limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
N	Analyte not NELAC certified	NC	Not Confirmed
B	Analyte detected in the associated Method Blank	<	Less than Result value
>	Greater than Result value		

Analytical Environmental Services, Inc.

Date: *07-Jul-16*

CLIENT: Clearwater Environmental Resources, LLC
Client Sample ID: MW-23 @ 60'
Project: RAYLOC GW
Collection Date: 6/23/2016 7:45:00 AM
Lab ID: 1606N48-008
Matrix: GROUNDWATER

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
FERROUS IRON SM3500-FE-B							Analyst: **JCO**
Iron, as Ferric (Fe+3)	0.554	0.100		mg/L		1	6/24/2016 7:25 AM
Iron, as Ferric (Fe+3)	BRL	0.100		mg/L		1	6/24/2016 7:25 AM
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L		1	6/24/2016 7:25 AM
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L		1	6/24/2016 7:25 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
BRL	Below Reporting Limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
N	Analyte not NELAC certified	NC	Not Confirmed
B	Analyte detected in the associated Method Blank	<	Less than Result value
>	Greater than Result value		

Analytical Environmental Services, Inc.

Date: *07-Jul-16*

CLIENT: Clearwater Environmental Resources, LLC
Client Sample ID: PT-3 @ 60'
Project: RAYLOC GW
Collection Date: 6/23/2016 11:49:00 AM
Lab ID: 1606N48-010
Matrix: GROUNDWATER

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
FERROUS IRON SM3500-FE-B							Analyst: **JCO**
Iron, as Ferric (Fe+3)	3.09	0.100		mg/L		1	6/24/2016 7:25 AM
Iron, as Ferric (Fe+3)	BRL	0.100		mg/L		1	6/24/2016 7:25 AM
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L		1	6/24/2016 7:25 AM
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L		1	6/24/2016 7:25 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
BRL	Below Reporting Limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
N	Analyte not NELAC certified	NC	Not Confirmed
B	Analyte detected in the associated Method Blank	<	Less than Result value
>	Greater than Result value		

Analytical Environmental Services, Inc.

Date: *07-Jul-16*

CLIENT: Clearwater Environmental Resources, LLC
Client Sample ID: MW-20 @60'
Project: RAYLOC GW
Collection Date: 6/23/2016 12:34:00 PM
Lab ID: 1606N48-011
Matrix: GROUNDWATER

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
FERROUS IRON SM3500-FE-B							Analyst: **JCO**
Iron, as Ferric (Fe+3)	3.07	0.100		mg/L		1	6/24/2016 7:25 AM
Iron, as Ferric (Fe+3)	BRL	0.100		mg/L		1	6/24/2016 7:25 AM
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L		1	6/24/2016 7:25 AM
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L		1	6/24/2016 7:25 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	E	Estimated (Value above quantitation range)
BRL	Below Reporting Limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See Case Narrative
N	Analyte not NELAC certified	NC	Not Confirmed
B	Analyte detected in the associated Method Blank	<	Less than Result value
>	Greater than Result value		

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Clearwater Env. Work Order Number 1606N48

Checklist completed by _____ 6/23/16
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes __ No ✓

Cooler #1 15.4c Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ TR 6/24/16 No ✓

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No ✓ Not Applicable __

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Analytical Environmental Services, Inc

Date: 7-Jul-16

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Lab Order: 1606N48

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1606N48-001A	MW-7 @ 30'	6/22/2016 3:12:00PM	Groundwater	TCL VOLATILE ORGANICS		6/23/2016 10:58:00 PM	06/27/2016
1606N48-002A	MW-12 @ 60'	6/23/2016 10:37:00AM	Groundwater	TCL VOLATILE ORGANICS		6/23/2016 10:58:00 PM	06/24/2016
1606N48-002B	MW-12 @ 60'	6/23/2016 10:37:00AM	Groundwater	Volatile Fatty Acids		6/27/2016 10:00:00 PM	06/27/2016
1606N48-002B	MW-12 @ 60'	6/23/2016 10:37:00AM	Groundwater	GC Analysis of Gaseous Samples		6/27/2016 12:01:49 PM	06/27/2016
1606N48-002C	MW-12 @ 60'	6/23/2016 10:37:00AM	Groundwater	Nitrogen, Nitrate-Nitrite (as N)			06/30/2016
1606N48-002C	MW-12 @ 60'	6/23/2016 10:37:00AM	Groundwater	Total Organic Carbon (TOC)			06/27/2016
1606N48-002D	MW-12 @ 60'	6/23/2016 10:37:00AM	Groundwater	ION SCAN			06/27/2016
1606N48-002D	MW-12 @ 60'	6/23/2016 10:37:00AM	Groundwater	Dissolved Organic Carbon			06/24/2016
1606N48-002D	MW-12 @ 60'	6/23/2016 10:37:00AM	Groundwater	Alkalinity by SM2320B			06/29/2016
1606N48-002E	MW-12 @ 60'	6/23/2016 10:37:00AM	Groundwater	TOTAL METALS BY ICP		6/29/2016 10:05:00 AM	07/01/2016
1606N48-002F	MW-12 @ 60'	6/23/2016 10:37:00AM	Groundwater	DISSOLVED METALS BY ICP		6/29/2016 12:34:00 PM	06/29/2016
1606N48-002F	MW-12 @ 60'	6/23/2016 10:37:00AM	Groundwater	Ferrous Iron			06/24/2016
1606N48-003A	MW-15 @ 30'	6/22/2016 12:58:00PM	Groundwater	TCL VOLATILE ORGANICS		6/23/2016 10:58:00 PM	06/27/2016
1606N48-004A	MW-17 @ 30'	6/22/2016 11:20:00AM	Groundwater	TCL VOLATILE ORGANICS		6/23/2016 10:58:00 PM	06/24/2016
1606N48-004A	MW-17 @ 30'	6/22/2016 11:20:00AM	Groundwater	TCL VOLATILE ORGANICS		6/23/2016 10:58:00 PM	06/25/2016
1606N48-004B	MW-17 @ 30'	6/22/2016 11:20:00AM	Groundwater	Volatile Fatty Acids		6/27/2016 10:00:00 PM	06/29/2016
1606N48-004B	MW-17 @ 30'	6/22/2016 11:20:00AM	Groundwater	GC Analysis of Gaseous Samples		6/27/2016 12:01:49 PM	06/27/2016
1606N48-004C	MW-17 @ 30'	6/22/2016 11:20:00AM	Groundwater	Nitrogen, Nitrate-Nitrite (as N)			06/30/2016
1606N48-004C	MW-17 @ 30'	6/22/2016 11:20:00AM	Groundwater	Total Organic Carbon (TOC)			06/27/2016
1606N48-004D	MW-17 @ 30'	6/22/2016 11:20:00AM	Groundwater	ION SCAN			06/27/2016
1606N48-004D	MW-17 @ 30'	6/22/2016 11:20:00AM	Groundwater	Dissolved Organic Carbon			06/24/2016
1606N48-004D	MW-17 @ 30'	6/22/2016 11:20:00AM	Groundwater	Alkalinity by SM2320B			06/29/2016
1606N48-004E	MW-17 @ 30'	6/22/2016 11:20:00AM	Groundwater	TOTAL METALS BY ICP		6/29/2016 10:05:00 AM	07/01/2016
1606N48-004F	MW-17 @ 30'	6/22/2016 11:20:00AM	Groundwater	DISSOLVED METALS BY ICP		6/29/2016 12:34:00 PM	06/29/2016
1606N48-004F	MW-17 @ 30'	6/22/2016 11:20:00AM	Groundwater	Ferrous Iron			06/24/2016
1606N48-005A	MW-19 @ 30'	6/22/2016 12:20:00PM	Groundwater	TCL VOLATILE ORGANICS		6/23/2016 10:58:00 PM	06/28/2016
1606N48-006A	MW-21 @ 60'	6/23/2016 9:36:00AM	Groundwater	TCL VOLATILE ORGANICS		6/23/2016 10:58:00 PM	06/24/2016
1606N48-006B	MW-21 @ 60'	6/23/2016 9:36:00AM	Groundwater	Volatile Fatty Acids		6/27/2016 10:00:00 PM	06/29/2016
1606N48-006B	MW-21 @ 60'	6/23/2016 9:36:00AM	Groundwater	GC Analysis of Gaseous Samples		6/27/2016 12:01:49 PM	06/27/2016

Analytical Environmental Services, Inc

Date: 7-Jul-16

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Lab Order: 1606N48

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1606N48-006C	MW-21 @ 60'	6/23/2016 9:36:00AM	Groundwater	Nitrogen, Nitrate-Nitrite (as N)			06/30/2016
1606N48-006C	MW-21 @ 60'	6/23/2016 9:36:00AM	Groundwater	Total Organic Carbon (TOC)			06/27/2016
1606N48-006D	MW-21 @ 60'	6/23/2016 9:36:00AM	Groundwater	ION SCAN			06/27/2016
1606N48-006D	MW-21 @ 60'	6/23/2016 9:36:00AM	Groundwater	Dissolved Organic Carbon			06/24/2016
1606N48-006D	MW-21 @ 60'	6/23/2016 9:36:00AM	Groundwater	Alkalinity by SM2320B			06/29/2016
1606N48-006E	MW-21 @ 60'	6/23/2016 9:36:00AM	Groundwater	TOTAL METALS BY ICP		6/29/2016 10:05:00 AM	07/01/2016
1606N48-006F	MW-21 @ 60'	6/23/2016 9:36:00AM	Groundwater	DISSOLVED METALS BY ICP		6/29/2016 12:34:00 PM	06/29/2016
1606N48-006F	MW-21 @ 60'	6/23/2016 9:36:00AM	Groundwater	Ferrous Iron			06/24/2016
1606N48-007A	MW-22 @ 60'	6/23/2016 8:43:00AM	Groundwater	TCL VOLATILE ORGANICS		6/23/2016 10:58:00 PM	06/24/2016
1606N48-007B	MW-22 @ 60'	6/23/2016 8:43:00AM	Groundwater	Volatile Fatty Acids		6/27/2016 10:00:00 PM	06/29/2016
1606N48-007B	MW-22 @ 60'	6/23/2016 8:43:00AM	Groundwater	GC Analysis of Gaseous Samples		6/27/2016 12:01:49 PM	06/27/2016
1606N48-007C	MW-22 @ 60'	6/23/2016 8:43:00AM	Groundwater	Nitrogen, Nitrate-Nitrite (as N)			06/30/2016
1606N48-007C	MW-22 @ 60'	6/23/2016 8:43:00AM	Groundwater	Total Organic Carbon (TOC)			06/27/2016
1606N48-007D	MW-22 @ 60'	6/23/2016 8:43:00AM	Groundwater	ION SCAN			06/27/2016
1606N48-007D	MW-22 @ 60'	6/23/2016 8:43:00AM	Groundwater	Dissolved Organic Carbon			06/24/2016
1606N48-007D	MW-22 @ 60'	6/23/2016 8:43:00AM	Groundwater	Alkalinity by SM2320B			06/29/2016
1606N48-007E	MW-22 @ 60'	6/23/2016 8:43:00AM	Groundwater	TOTAL METALS BY ICP		6/29/2016 10:05:00 AM	07/01/2016
1606N48-007F	MW-22 @ 60'	6/23/2016 8:43:00AM	Groundwater	DISSOLVED METALS BY ICP		6/29/2016 12:34:00 PM	06/29/2016
1606N48-007F	MW-22 @ 60'	6/23/2016 8:43:00AM	Groundwater	Ferrous Iron			06/24/2016
1606N48-008A	MW-23 @ 60'	6/23/2016 7:45:00AM	Groundwater	TCL VOLATILE ORGANICS		6/23/2016 10:58:00 PM	06/24/2016
1606N48-008B	MW-23 @ 60'	6/23/2016 7:45:00AM	Groundwater	Volatile Fatty Acids		6/27/2016 10:00:00 PM	06/29/2016
1606N48-008B	MW-23 @ 60'	6/23/2016 7:45:00AM	Groundwater	GC Analysis of Gaseous Samples		6/27/2016 12:01:49 PM	06/27/2016
1606N48-008C	MW-23 @ 60'	6/23/2016 7:45:00AM	Groundwater	Nitrogen, Nitrate-Nitrite (as N)			06/30/2016
1606N48-008C	MW-23 @ 60'	6/23/2016 7:45:00AM	Groundwater	Total Organic Carbon (TOC)			06/27/2016
1606N48-008D	MW-23 @ 60'	6/23/2016 7:45:00AM	Groundwater	ION SCAN			06/27/2016
1606N48-008D	MW-23 @ 60'	6/23/2016 7:45:00AM	Groundwater	Dissolved Organic Carbon			06/24/2016
1606N48-008D	MW-23 @ 60'	6/23/2016 7:45:00AM	Groundwater	Alkalinity by SM2320B			06/29/2016
1606N48-008E	MW-23 @ 60'	6/23/2016 7:45:00AM	Groundwater	TOTAL METALS BY ICP		6/29/2016 10:05:00 AM	07/01/2016
1606N48-008F	MW-23 @ 60'	6/23/2016 7:45:00AM	Groundwater	DISSOLVED METALS BY ICP		6/29/2016 12:34:00 PM	06/29/2016

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Lab Order: 1606N48

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1606N48-008F	MW-23 @ 60'	6/23/2016 7:45:00AM	Groundwater	Ferrous Iron			06/24/2016
1606N48-009A	MW-24 @ 30'	6/22/2016 2:25:00PM	Groundwater	TCL VOLATILE ORGANICS		6/23/2016 10:58:00 PM	06/24/2016
1606N48-009A	MW-24 @ 30'	6/22/2016 2:25:00PM	Groundwater	TCL VOLATILE ORGANICS		6/23/2016 10:58:00 PM	06/25/2016
1606N48-010A	PT-3 @ 60'	6/23/2016 11:49:00AM	Groundwater	TCL VOLATILE ORGANICS		6/23/2016 10:58:00 PM	06/24/2016
1606N48-010A	PT-3 @ 60'	6/23/2016 11:49:00AM	Groundwater	TCL VOLATILE ORGANICS		6/23/2016 10:58:00 PM	06/27/2016
1606N48-010B	PT-3 @ 60'	6/23/2016 11:49:00AM	Groundwater	Volatile Fatty Acids		6/27/2016 10:00:00 PM	06/29/2016
1606N48-010B	PT-3 @ 60'	6/23/2016 11:49:00AM	Groundwater	GC Analysis of Gaseous Samples		6/27/2016 12:01:49 PM	06/27/2016
1606N48-010C	PT-3 @ 60'	6/23/2016 11:49:00AM	Groundwater	Nitrogen, Nitrate-Nitrite (as N)			06/30/2016
1606N48-010C	PT-3 @ 60'	6/23/2016 11:49:00AM	Groundwater	Total Organic Carbon (TOC)			06/27/2016
1606N48-010D	PT-3 @ 60'	6/23/2016 11:49:00AM	Groundwater	ION SCAN			06/27/2016
1606N48-010D	PT-3 @ 60'	6/23/2016 11:49:00AM	Groundwater	Dissolved Organic Carbon			06/24/2016
1606N48-010D	PT-3 @ 60'	6/23/2016 11:49:00AM	Groundwater	Alkalinity by SM2320B			06/29/2016
1606N48-010E	PT-3 @ 60'	6/23/2016 11:49:00AM	Groundwater	TOTAL METALS BY ICP		6/29/2016 10:05:00 AM	07/01/2016
1606N48-010F	PT-3 @ 60'	6/23/2016 11:49:00AM	Groundwater	DISSOLVED METALS BY ICP		6/29/2016 12:34:00 PM	06/29/2016
1606N48-010F	PT-3 @ 60'	6/23/2016 11:49:00AM	Groundwater	Ferrous Iron			06/24/2016
1606N48-011A	MW-20 @60'	6/23/2016 12:34:00PM	Groundwater	TCL VOLATILE ORGANICS		6/23/2016 10:58:00 PM	06/27/2016
1606N48-011B	MW-20 @60'	6/23/2016 12:34:00PM	Groundwater	Volatile Fatty Acids		6/27/2016 10:00:00 PM	06/29/2016
1606N48-011B	MW-20 @60'	6/23/2016 12:34:00PM	Groundwater	GC Analysis of Gaseous Samples		6/27/2016 12:01:49 PM	06/27/2016
1606N48-011C	MW-20 @60'	6/23/2016 12:34:00PM	Groundwater	Nitrogen, Nitrate-Nitrite (as N)			06/30/2016
1606N48-011C	MW-20 @60'	6/23/2016 12:34:00PM	Groundwater	Total Organic Carbon (TOC)			06/27/2016
1606N48-011D	MW-20 @60'	6/23/2016 12:34:00PM	Groundwater	ION SCAN			06/27/2016
1606N48-011D	MW-20 @60'	6/23/2016 12:34:00PM	Groundwater	Dissolved Organic Carbon			06/24/2016
1606N48-011D	MW-20 @60'	6/23/2016 12:34:00PM	Groundwater	Alkalinity by SM2320B			06/29/2016
1606N48-011E	MW-20 @60'	6/23/2016 12:34:00PM	Groundwater	TOTAL METALS BY ICP		6/29/2016 10:05:00 AM	07/01/2016
1606N48-011F	MW-20 @60'	6/23/2016 12:34:00PM	Groundwater	DISSOLVED METALS BY ICP		6/29/2016 12:34:00 PM	06/29/2016
1606N48-011F	MW-20 @60'	6/23/2016 12:34:00PM	Groundwater	Ferrous Iron			06/24/2016
1606N48-012A	TRIP BLANK	6/23/2016 12:00:00AM	Aqueous	TCL VOLATILE ORGANICS		6/23/2016 10:58:00 PM	06/24/2016

AES, Inc.
3080 Presidential Drive
Atlanta GA 30340

pH Adjustment Sheet

AES Sample ID number	Test Requested	pH as Received	Required pH	Preservative Required	Lot # of Preservative	Amount Added mL or Pellets*	Final pH	Tech's Initials	Date	Time
1606N48-002C	9060	6	<2	H_2SO_4	6693-33	0.5 mL Pellets	1	[illegible]	7-5pm 6/23/16	
1606N48-004C						mL Pellets				
1606N48-006C						mL Pellets				
1606N48-007C						mL Pellets				
1606N48-008C						mL Pellets				
1606N48-010C						mL Pellets				
1606N48-011C	↓	↓	↓	↓	↓	mL Pellets	↓	↓	↓	↓
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				
						mL Pellets				

* Number of Pellets when adding NAOH

DWM 8/22/2014 10:01 AM

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Workorder: 1606N48

ANALYTICAL QC SUMMARY REPORT

BatchID: 225985

Sample ID: **MB-225985** Client ID: Units: **ug/L** Prep Date: **06/23/2016** Run No: **319637**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **225985** Analysis Date: **06/23/2016** Seq No: **6898004**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	50									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Workorder: 1606N48

ANALYTICAL QC SUMMARY REPORT

BatchID: 225985

Sample ID: **MB-225985** Client ID: Units: **ug/L** Prep Date: **06/23/2016** Run No: **319637**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **225985** Analysis Date: **06/23/2016** Seq No: **6898004**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	41.68	0	50.00		83.4	70.7	125				
Surr: Dibromofluoromethane	49.72	0	50.00		99.4	82.2	120				
Surr: Toluene-d8	52.85	0	50.00		106	81.8	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Workorder: 1606N48

ANALYTICAL QC SUMMARY REPORT

BatchID: 225985

Sample ID: **LCS-225985** Client ID: Units: **ug/L** Prep Date: **06/23/2016** Run No: **319637**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **225985** Analysis Date: **06/23/2016** Seq No: **6898002**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	57.27	5.0	50.00		115	65.3	137				
Benzene	50.95	5.0	50.00		102	74.9	123				
Chlorobenzene	49.40	5.0	50.00		98.8	73.9	124				
Toluene	54.35	5.0	50.00		109	75	124				
Trichloroethene	53.36	5.0	50.00		107	73.1	128				
Surr: 4-Bromofluorobenzene	42.00	0	50.00		84.0	70.7	125				
Surr: Dibromofluoromethane	50.36	0	50.00		101	82.2	120				
Surr: Toluene-d8	52.30	0	50.00		105	81.8	120				

Sample ID: **1606M09-001AMS** Client ID: Units: **ug/L** Prep Date: **06/23/2016** Run No: **319700**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **225985** Analysis Date: **06/24/2016** Seq No: **6902126**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	26760	2500	25000		107	60	150				
Benzene	24740	2500	25000		98.9	70.1	132				
Chlorobenzene	25340	2500	25000		101	70.9	131				
Toluene	25330	2500	25000		101	70.1	133				
Trichloroethene	25450	2500	25000		102	70	136				
Surr: 4-Bromofluorobenzene	20060	0	25000		80.2	70.7	125				
Surr: Dibromofluoromethane	23450	0	25000		93.8	82.2	120				
Surr: Toluene-d8	23830	0	25000		95.3	81.8	120				

Sample ID: **1606M09-001AMSD** Client ID: Units: **ug/L** Prep Date: **06/23/2016** Run No: **319700**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **225985** Analysis Date: **06/24/2016** Seq No: **6902127**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	27240	2500	25000		109	60	150	26760	1.78	17.7	
Benzene	25210	2500	25000		101	70.1	132	24740	1.90	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Workorder: 1606N48

ANALYTICAL QC SUMMARY REPORT

BatchID: 225985

Sample ID: **1606M09-001AMSD** Client ID:
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **ug/L** Prep Date: **06/23/2016** Run No: **319700**
BatchID: **225985** Analysis Date: **06/24/2016** Seq No: **6902127**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	24890	2500	25000		99.6	70.9	131	25340	1.77	20	
Toluene	26490	2500	25000		106	70.1	133	25330	4.46	20	
Trichloroethene	25320	2500	25000		101	70	136	25450	0.492	20	
Surr: 4-Bromofluorobenzene	20000	0	25000		80.0	70.7	125	20060	0	0	
Surr: Dibromofluoromethane	24860	0	25000		99.4	82.2	120	23450	0	0	
Surr: Toluene-d8	25560	0	25000		102	81.8	120	23830	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Workorder: 1606N48

ANALYTICAL QC SUMMARY REPORT

BatchID: 226009

Sample ID: **MB-226009** Client ID: Units: **mg/L** Prep Date: **06/27/2016** Run No: **319852**
SampleType: **MBLK** TestCode: **VOLATILE FATTY ACIDS INHOUSE_VFA** BatchID: **226009** Analysis Date: **06/27/2016** Seq No: **6903825**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetic Acid	BRL	10.0									
Butyric Acid	BRL	10.0									
Isobutyric Acid	BRL	10.0									
Isovaleric Acid	BRL	10.0									
Propionic Acid	BRL	10.0									
Valeric Acid	BRL	10.0									

Sample ID: **LCS-226009** Client ID: Units: **mg/L** Prep Date: **06/27/2016** Run No: **319852**
SampleType: **LCS** TestCode: **VOLATILE FATTY ACIDS INHOUSE_VFA** BatchID: **226009** Analysis Date: **06/27/2016** Seq No: **6903826**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetic Acid	96.68	10.0	100.0		96.7	80	120				
Butyric Acid	95.08	10.0	100.0		95.1	80	120				
Isobutyric Acid	93.49	10.0	100.0		93.5	80	120				
Isovaleric Acid	94.42	10.0	100.0		94.4	80	120				
Propionic Acid	95.64	10.0	100.0		95.6	80	120				
Valeric Acid	99.42	10.0	100.0		99.4	80	120				

Sample ID: **1606N48-002BMS** Client ID: **MW-12 @ 60'** Units: **mg/L** Prep Date: **06/27/2016** Run No: **319852**
SampleType: **MS** TestCode: **VOLATILE FATTY ACIDS INHOUSE_VFA** BatchID: **226009** Analysis Date: **06/27/2016** Seq No: **6903828**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetic Acid	96.02	10.0	100.0		96.0	50	150				
Butyric Acid	96.04	10.0	100.0		96.0	50	150				
Isobutyric Acid	94.40	10.0	100.0		94.4	50	150				
Isovaleric Acid	94.23	10.0	100.0		94.2	50	150				
Propionic Acid	94.52	10.0	100.0		94.5	50	150				
Valeric Acid	97.44	10.0	100.0		97.4	50	150				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Workorder: 1606N48

ANALYTICAL QC SUMMARY REPORT

BatchID: 226009

Sample ID: **1606N48-002BMSD** Client ID: **MW-12 @ 60'** Units: **mg/L** Prep Date: **06/27/2016** Run No: **319852**
SampleType: **MSD** TestCode: **VOLATILE FATTY ACIDS INHOUSE_VFA** BatchID: **226009** Analysis Date: **06/27/2016** Seq No: **6903829**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Acetic Acid	96.31	10.0	100.0		96.3	50	150	96.02	0.305	50	
Butyric Acid	94.84	10.0	100.0		94.8	50	150	96.04	1.26	50	
Isobutyric Acid	93.05	10.0	100.0		93.0	50	150	94.40	1.44	50	
Isovaleric Acid	95.07	10.0	100.0		95.1	50	150	94.23	0.880	50	
Propionic Acid	93.91	10.0	100.0		93.9	50	150	94.52	0.639	50	
Valeric Acid	95.81	10.0	100.0		95.8	50	150	97.44	1.69	50	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Workorder: 1606N48

ANALYTICAL QC SUMMARY REPORT

BatchID: 226058

Sample ID: **MB-226058** Client ID: Units: **ug/L** Prep Date: **06/27/2016** Run No: **319867**
SampleType: **MBLK** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **226058** Analysis Date: **06/27/2016** Seq No: **6903933**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	BRL	9.0									
Ethylene	BRL	7.0									
Methane	BRL	4.0									

Sample ID: **LCS-226058** Client ID: Units: **ug/L** Prep Date: **06/27/2016** Run No: **319867**
SampleType: **LCS** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **226058** Analysis Date: **06/27/2016** Seq No: **6903934**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	141.2	9.0	200.0		70.6	40.9	115				
Ethylene	95.10	7.0	200.0		47.6	26.8	115				
Methane	155.9	4.0	200.0		77.9	45.9	115				

Sample ID: **LCSD-226058** Client ID: Units: **ug/L** Prep Date: **06/27/2016** Run No: **319867**
SampleType: **LCSD** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **226058** Analysis Date: **06/27/2016** Seq No: **6903935**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	135.4	9.0	200.0		67.7	40.9	115	141.2	4.21	20	
Ethylene	90.86	7.0	200.0		45.4	26.8	115	95.10	4.56	20	
Methane	146.4	4.0	200.0		73.2	45.9	115	155.9	6.22	20	

Sample ID: **1606N48-006BMS** Client ID: **MW-21 @ 60'** Units: **ug/L** Prep Date: **06/27/2016** Run No: **319867**
SampleType: **MS** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **226058** Analysis Date: **06/27/2016** Seq No: **6903971**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	131.2	9.0	200.0		65.6	40.5	115				
Ethylene	86.27	7.0	200.0		43.1	23	115				
Methane	141.6	4.0	200.0		70.8	40	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Workorder: 1606N48

ANALYTICAL QC SUMMARY REPORT

BatchID: 226058

Sample ID: **1606N48-006BMSD** Client ID: **MW-21 @ 60'** Units: **ug/L** Prep Date: **06/27/2016** Run No: **319867**
SampleType: **MSD** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **226058** Analysis Date: **06/27/2016** Seq No: **6903972**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	127.3	9.0	200.0		63.6	40.5	115	131.2	3.04	20	
Ethylene	86.84	7.0	200.0		43.4	23	115	86.27	0.660	20	
Methane	142.1	4.0	200.0		71.1	40	115	141.6	0.399	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Workorder: 1606N48

ANALYTICAL QC SUMMARY REPORT

BatchID: 226191

Sample ID: **MB-226191**	Client ID:			Units: **mg/L**	Prep Date: **06/29/2016**	Run No: **320326**
SampleType: **MBLK**	TestCode: **METALS, TOTAL**	**SW6010D**		BatchID: **226191**	Analysis Date: **07/01/2016**	Seq No: **6916156**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	BRL	0.100									
Manganese	BRL	0.0150									

Sample ID: **LCS-226191**	Client ID:			Units: **mg/L**	Prep Date: **06/29/2016**	Run No: **320326**
SampleType: **LCS**	TestCode: **METALS, TOTAL**	**SW6010D**		BatchID: **226191**	Analysis Date: **07/01/2016**	Seq No: **6916157**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	10.57	0.100	10.00		106	80	120				
Manganese	1.058	0.0150	1.000		106	80	120				

Sample ID: **1606N55-001DMS**	Client ID:			Units: **mg/L**	Prep Date: **06/29/2016**	Run No: **320326**
SampleType: **MS**	TestCode: **METALS, TOTAL**	**SW6010D**		BatchID: **226191**	Analysis Date: **07/01/2016**	Seq No: **6916159**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	12.00	0.100	10.00	1.489	105	75	125				
Manganese	1.173	0.0150	1.000	0.1150	106	75	125				

Sample ID: **1606N55-001DMSD**	Client ID:			Units: **mg/L**	Prep Date: **06/29/2016**	Run No: **320326**
SampleType: **MSD**	TestCode: **METALS, TOTAL**	**SW6010D**		BatchID: **226191**	Analysis Date: **07/01/2016**	Seq No: **6916160**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	11.90	0.100	10.00	1.489	104	75	125	12.00	0.794	20	
Manganese	1.155	0.0150	1.000	0.1150	104	75	125	1.173	1.51	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Workorder: 1606N48

ANALYTICAL QC SUMMARY REPORT

BatchID: 226199

Sample ID: **MB-226199**	Client ID:			Units: **mg/L**	Prep Date: **06/29/2016**	Run No: **320072**
SampleType: **MBLK**	TestCode: **METALS, DISSOLVED**	**SW6010D**		BatchID: **226199**	Analysis Date: **06/29/2016**	Seq No: **6910871**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	BRL	0.100									
Manganese	BRL	0.0150									

Sample ID: **LCS-226199**	Client ID:			Units: **mg/L**	Prep Date: **06/29/2016**	Run No: **320072**
SampleType: **LCS**	TestCode: **METALS, DISSOLVED**	**SW6010D**		BatchID: **226199**	Analysis Date: **06/29/2016**	Seq No: **6910872**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	10.27	0.100	10.00		103	80	120				
Manganese	1.032	0.0150	1.000		103	80	120				

Sample ID: **1606M93-004AMS**	Client ID:			Units: **mg/L**	Prep Date: **06/29/2016**	Run No: **320072**
SampleType: **MS**	TestCode: **METALS, DISSOLVED**	**SW6010D**		BatchID: **226199**	Analysis Date: **06/29/2016**	Seq No: **6910874**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	10.33	0.100	10.00	0.5133	98.1	75	125				
Manganese	0.9952	0.0150	1.000	0.006180	98.9	75	125				

Sample ID: **1606M93-004AMSD**	Client ID:			Units: **mg/L**	Prep Date: **06/29/2016**	Run No: **320072**
SampleType: **MSD**	TestCode: **METALS, DISSOLVED**	**SW6010D**		BatchID: **226199**	Analysis Date: **06/29/2016**	Seq No: **6910877**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	10.44	0.100	10.00	0.5133	99.3	75	125	10.33	1.11	20	
Manganese	1.007	0.0150	1.000	0.006180	100	75	125	0.9952	1.21	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Workorder: 1606N48

ANALYTICAL QC SUMMARY REPORT

BatchID: R319788

Sample ID: **MB-R319788**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **319788**
SampleType: **MBLK**	TestCode: **Dissolved Organic Carbon**	**SW9060A**		BatchID: **R319788**	Analysis Date: **06/24/2016**	Seq No: **6902351**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Dissolved	BRL	1.00									

Sample ID: **LCS-R319788**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **319788**
SampleType: **LCS**	TestCode: **Dissolved Organic Carbon**	**SW9060A**		BatchID: **R319788**	Analysis Date: **06/24/2016**	Seq No: **6902336**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Dissolved	24.77	1.00	25.00		99.1	90	110				

Sample ID: **1606N48-006DMS**	Client ID: **MW-21 @ 60'**			Units: **mg/L**	Prep Date:	Run No: **319788**
SampleType: **MS**	TestCode: **Dissolved Organic Carbon**	**SW9060A**		BatchID: **R319788**	Analysis Date: **06/24/2016**	Seq No: **6902412**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Dissolved	37.55	1.00	25.00	13.08	97.9	80	120				

Sample ID: **1606N48-006DMSD**	Client ID: **MW-21 @ 60'**			Units: **mg/L**	Prep Date:	Run No: **319788**
SampleType: **MSD**	TestCode: **Dissolved Organic Carbon**	**SW9060A**		BatchID: **R319788**	Analysis Date: **06/24/2016**	Seq No: **6902416**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Dissolved	36.46	1.00	25.00	13.08	93.5	80	120	37.55	2.95	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Workorder: 1606N48

ANALYTICAL QC SUMMARY REPORT

BatchID: R319893

Sample ID: **MB-R319893**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **319893**
SampleType: **MBLK**	TestCode: **Total Organic Carbon (TOC) SW9060A**				BatchID: **R319893**		Analysis Date: **06/27/2016**		Seq No: **6904691**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	BRL	1.00									

Sample ID: **LCS-R319893**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **319893**
SampleType: **LCS**	TestCode: **Total Organic Carbon (TOC) SW9060A**				BatchID: **R319893**		Analysis Date: **06/27/2016**		Seq No: **6904690**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	25.81	1.00	25.00		103	90	110				

Sample ID: **1606N48-011CMS**	Client ID: **MW-20 @60'**				Units: **mg/L**		Prep Date:		Run No: **319893**
SampleType: **MS**	TestCode: **Total Organic Carbon (TOC) SW9060A**				BatchID: **R319893**		Analysis Date: **06/27/2016**		Seq No: **6904705**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	24.59	1.00	25.00		98.4	80	120				

Sample ID: **1606N48-011CMSD**	Client ID: **MW-20 @60'**				Units: **mg/L**		Prep Date:		Run No: **319893**
SampleType: **MSD**	TestCode: **Total Organic Carbon (TOC) SW9060A**				BatchID: **R319893**		Analysis Date: **06/27/2016**		Seq No: **6904706**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	24.16	1.00	25.00		96.6	80	120	24.59	1.76	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Workorder: 1606N48

ANALYTICAL QC SUMMARY REPORT

BatchID: R320031

Sample ID: **MB-R320031**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **320031**
SampleType: **MBLK**	TestCode: **Nitrogen, Nitrate-Nitrite (as N) E353.2**			BatchID: **R320031**	Analysis Date: **06/30/2016**		Seq No: **6908585**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite (as N)	BRL	0.050									

Sample ID: **LCS-R320031**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **320031**
SampleType: **LCS**	TestCode: **Nitrogen, Nitrate-Nitrite (as N) E353.2**			BatchID: **R320031**	Analysis Date: **06/30/2016**		Seq No: **6908586**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite (as N)	0.5090	0.050	0.5000		102	90	110				

Sample ID: **1606N48-006CMS**	Client ID: **MW-21 @ 60'**			Units: **mg/L**	Prep Date:		Run No: **320031**
SampleType: **MS**	TestCode: **Nitrogen, Nitrate-Nitrite (as N) E353.2**			BatchID: **R320031**	Analysis Date: **06/30/2016**		Seq No: **6908621**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite (as N)	0.5070	0.050	0.5000		101	90	110				

Sample ID: **1606N55-001CMS**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **320031**
SampleType: **MS**	TestCode: **Nitrogen, Nitrate-Nitrite (as N) E353.2**			BatchID: **R320031**	Analysis Date: **06/30/2016**		Seq No: **6908624**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite (as N)	0.7190	0.050	0.5000	0.2420	95.4	90	110				

Sample ID: **1606N48-006CMSD**	Client ID: **MW-21 @ 60'**			Units: **mg/L**	Prep Date:		Run No: **320031**
SampleType: **MSD**	TestCode: **Nitrogen, Nitrate-Nitrite (as N) E353.2**			BatchID: **R320031**	Analysis Date: **06/30/2016**		Seq No: **6908623**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrogen, Nitrate-Nitrite (as N)	0.5160	0.050	0.5000		103	90	110	0.5070	1.76	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Workorder: 1606N48

ANALYTICAL QC SUMMARY REPORT

BatchID: R320038

Sample ID: **MB-R320038** Client ID: Units: **mg/L** Prep Date: Run No: **320038**
SampleType: **MBLK** TestCode: **ION SCAN SW9056A** BatchID: **R320038** Analysis Date: **06/27/2016** Seq No: **6908682**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	BRL	1.0									
Sulfate	BRL	1.0									

Sample ID: **LCS-R320038** Client ID: Units: **mg/L** Prep Date: Run No: **320038**
SampleType: **LCS** TestCode: **ION SCAN SW9056A** BatchID: **R320038** Analysis Date: **06/27/2016** Seq No: **6908681**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	10.44	1.0	10.00	0.1334	103	90	110				
Sulfate	25.15	1.0	25.00		101	90	110				

Sample ID: **1606N43-018CMS** Client ID: Units: **mg/L** Prep Date: Run No: **320038**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R320038** Analysis Date: **06/27/2016** Seq No: **6908697**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	13.97	1.0	10.00	4.141	98.3	90	110				
Sulfate	25.94	1.0	25.00	1.023	99.7	90	110				

Sample ID: **1606N48-006DMS** Client ID: **MW-21 @ 60'** Units: **mg/L** Prep Date: Run No: **320038**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R320038** Analysis Date: **06/27/2016** Seq No: **6908699**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	11.30	1.0	10.00	1.622	96.8	90	110				
Sulfate	29.17	1.0	25.00	3.739	102	90	110				

Sample ID: **1606N43-018CMSD** Client ID: Units: **mg/L** Prep Date: Run No: **320038**
SampleType: **MSD** TestCode: **ION SCAN SW9056A** BatchID: **R320038** Analysis Date: **06/27/2016** Seq No: **6908698**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	14.10	1.0	10.00	4.141	99.6	90	110	13.97	0.889	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Workorder: 1606N48

ANALYTICAL QC SUMMARY REPORT

BatchID: R320038

Sample ID: **1606N43-018CMSD** Client ID:
SampleType: **MSD** TestCode: **ION SCAN SW9056A**
Units: **mg/L** Prep Date: Run No: **320038**
BatchID: **R320038** Analysis Date: **06/27/2016** Seq No: **6908698**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfate	26.49	1.0	25.00	1.023	102	90	110	25.94	2.10	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Workorder: 1606N48

ANALYTICAL QC SUMMARY REPORT

BatchID: R320041

Sample ID: **MB-R320041**	Client ID:					Units: **mg/L**		Prep Date:		Run No: **320041**	
SampleType: **MBLK**	TestCode: **Alkalinity by SM2320B**					BatchID: **R320041**		Analysis Date: **06/29/2016**		Seq No: **6908743**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	BRL	3.00									

Sample ID: **LCS-R320041**	Client ID:					Units: **mg/L**		Prep Date:		Run No: **320041**	
SampleType: **LCS**	TestCode: **Alkalinity by SM2320B**					BatchID: **R320041**		Analysis Date: **06/29/2016**		Seq No: **6908744**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	127.0	3.00	125.0		102	75	125				

Sample ID: **1606M98-010ADUP**	Client ID:					Units: **mg/L**		Prep Date:		Run No: **320041**	
SampleType: **DUP**	TestCode: **Alkalinity by SM2320B**					BatchID: **R320041**		Analysis Date: **06/29/2016**		Seq No: **6908765**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	30.00	3.00						28.00	6.90	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC GW
Workorder: 1606N48

ANALYTICAL QC SUMMARY REPORT

BatchID: R320156

Sample ID: **MB-R320156**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **320156**
SampleType: **MBLK**	TestCode: **Ferrous Iron**	**SM3500-Fe-B**		BatchID: **R320156**	Analysis Date: **06/24/2016**	Seq No: **6911585**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferric (Fe+3)	BRL	0.100									
Iron, as Ferrous (Fe+2)	BRL	0.100									

Sample ID: **LCS-R320156**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **320156**
SampleType: **LCS**	TestCode: **Ferrous Iron**	**SM3500-Fe-B**		BatchID: **R320156**	Analysis Date: **06/24/2016**	Seq No: **6911586**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4402	0.100	0.5000		88.0	85	115				

Sample ID: **1606N48-008FMS**	Client ID: **MW-23 @ 60'**			Units: **mg/L**	Prep Date:	Run No: **320156**
SampleType: **MS**	TestCode: **Ferrous Iron**	**SM3500-Fe-B**		BatchID: **R320156**	Analysis Date: **06/24/2016**	Seq No: **6911594**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4213	0.100	0.5000		84.3	80	120				

Sample ID: **1606N48-008FMSD**	Client ID: **MW-23 @ 60'**			Units: **mg/L**	Prep Date:	Run No: **320156**
SampleType: **MSD**	TestCode: **Ferrous Iron**	**SM3500-Fe-B**		BatchID: **R320156**	Analysis Date: **06/24/2016**	Seq No: **6911595**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.4444	0.100	0.5000		88.9	80	120	0.4213	5.34	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

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 09/21/2016

GCAL Report 216091623

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
NO	Indicates the sample did not ignite when preliminary test performed for EPA Method 1030
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 216091623

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:** 216091623

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, sample 21609162302 (MW-12 @ 60'), 21609162304 (MW-17 @ 30'), 21609162306 (MW-20 @ 60'), 21609162307 (MW-21 @ 60'),21609162309 (MW-23 @ 60'), and 21609162311 (PT-3 @ 60') had to be diluted due to the presence of non-target background. This dilution is reflected in the elevated reporting limits. Additional dilutions were required to bracket the concentration of target analytes within the calibration range of the instrument.

Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21609162301	MW-7 @ 30'	Water	09/12/2016 13:39	09/16/2016 10:12
21609162302	MW-12 @ 60'	Water	09/12/2016 11:15	09/16/2016 10:12
21609162303	MW-15 @ 30'	Water	09/12/2016 10:32	09/16/2016 10:12
21609162304	MW-17 @ 30'	Water	09/12/2016 09:22	09/16/2016 10:12
21609162305	MW-19 @ 30'	Water	09/12/2016 09:59	09/16/2016 10:12
21609162306	MW-20 @ 60'	Water	09/12/2016 14:45	09/16/2016 10:12
21609162307	MW-21 @ 60'	Water	09/13/2016 11:03	09/16/2016 10:12
21609162308	MW-22 @ 60'	Water	09/13/2016 10:32	09/16/2016 10:12
21609162309	MW-23 @ 60'	Water	09/13/2016 09:57	09/16/2016 10:12
21609162310	MW-24 @ 30'	Water	09/12/2016 11:56	09/16/2016 10:12
21609162311	PT-3 @ 60'	Water	09/12/2016 14:11	09/16/2016 10:12
21609162312	TRIP BLANK	Water	09/12/2016 00:01	09/16/2016 10:12

Summary of Compounds Detected

MW-7 @ 30'

Collect Date 09/12/2016 13:39 **GCAL ID** 21609162301
Receive Date 09/16/2016 10:12 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
156-59-2	cis-1,2-Dichloroethene	7.87	5.00	ug/L
127-18-4	Tetrachloroethene	26.6	5.00	ug/L
79-01-6	Trichloroethene	5.69	5.00	ug/L

MW-12 @ 60'

Collect Date 09/12/2016 11:15 **GCAL ID** 21609162302
Receive Date 09/16/2016 10:12 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	28.5	20.0	ug/L
156-59-2	cis-1,2-Dichloroethene	28.5	10.0	ug/L
127-18-4	Tetrachloroethene	563	100	ug/L
79-01-6	Trichloroethene	17.5	10.0	ug/L

MW-15 @ 30'

Collect Date 09/12/2016 10:32 **GCAL ID** 21609162303
Receive Date 09/16/2016 10:12 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	83.7	10.0	ug/L
156-59-2	cis-1,2-Dichloroethene	83.7	5.00	ug/L
75-01-4	Vinyl chloride	194	2.00	ug/L

MW-17 @ 30'

Collect Date 09/12/2016 09:22 **GCAL ID** 21609162304
Receive Date 09/16/2016 10:12 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	472	20.0	ug/L
156-59-2	cis-1,2-Dichloroethene	375	100	ug/L
127-18-4	Tetrachloroethene	862	100	ug/L

Summary of Compounds Detected

MW-17 @ 30'

Collect Date: 09/12/2016 09:22
Receive Date: 09/16/2016 10:12
GCAL ID: 21609162304
Matrix: Water

EPA 8260B (Continued)

CAS#	Parameter	Result	LOQ	Units
79-01-6	Trichloroethene	189	10.0	ug/L

MW-19 @ 30'

Collect Date: 09/12/2016 09:59
Receive Date: 09/16/2016 10:12
GCAL ID: 21609162305
Matrix: Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	81.6	10.0	ug/L
156-59-2	cis-1,2-Dichloroethene	81.6	5.00	ug/L
127-18-4	Tetrachloroethene	49.8	5.00	ug/L
79-01-6	Trichloroethene	8.43	5.00	ug/L
75-01-4	Vinyl chloride	14.8	2.00	ug/L

MW-20 @ 60'

Collect Date: 09/12/2016 14:45
Receive Date: 09/16/2016 10:12
GCAL ID: 21609162306
Matrix: Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	61.2	50.0	ug/L
156-59-2	cis-1,2-Dichloroethene	61.2	25.0	ug/L
127-18-4	Tetrachloroethene	1600	250	ug/L
79-01-6	Trichloroethene	113	25.0	ug/L

MW-21 @ 60'

Collect Date: 09/13/2016 11:03
Receive Date: 09/16/2016 10:12
GCAL ID: 21609162307
Matrix: Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	16100	2500	ug/L

Summary of Compounds Detected

MW-22 @ 60'

Collect Date 09/13/2016 10:32 **GCAL ID** 21609162308
Receive Date 09/16/2016 10:12 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	232	10.0	ug/L
156-59-2	cis-1,2-Dichloroethene	167	50.0	ug/L
127-18-4	Tetrachloroethene	1090	50.0	ug/L
79-01-6	Trichloroethene	113	5.00	ug/L

MW-23 @ 60'

Collect Date 09/13/2016 09:57 **GCAL ID** 21609162309
Receive Date 09/16/2016 10:12 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
95-50-1	1,2-Dichlorobenzene	29.1	25.0	ug/L
540-59-0	1,2-Dichloroethene(Total)	2500	500	ug/L
156-59-2	cis-1,2-Dichloroethene	2500	250	ug/L
127-18-4	Tetrachloroethene	2920	250	ug/L
79-01-6	Trichloroethene	597	25.0	ug/L

MW-24 @ 30'

Collect Date 09/12/2016 11:56 **GCAL ID** 21609162310
Receive Date 09/16/2016 10:12 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	176	10.0	ug/L
156-59-2	cis-1,2-Dichloroethene	175	5.00	ug/L
127-18-4	Tetrachloroethene	162	5.00	ug/L
79-01-6	Trichloroethene	36.2	5.00	ug/L

PT-3 @ 60'

Collect Date 09/12/2016 14:11 **GCAL ID** 21609162311
Receive Date 09/16/2016 10:12 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	684	500	ug/L
156-59-2	cis-1,2-Dichloroethene	684	250	ug/L
127-18-4	Tetrachloroethene	16200	2500	ug/L

Summary of Compounds Detected

PT-3 @ 60'				
	Collect Date	09/12/2016 14:11	GCAL ID	21609162311
	Receive Date	09/16/2016 10:12	Matrix	Water

EPA 8260B (Continued)

CAS#	Parameter	Result	LOQ	Units
79-01-6	Trichloroethene	1020	250	ug/L

Sample Results

MW-7 @ 30'	**Collect Date**	09/12/2016 13:39	**GCAL ID**	21609162301
	Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/18/2016 13:49	DEC	594849

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**	**7.87**	**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

Sample Results

MW-7 @ 30'

Collect Date	09/12/2016 13:39	**GCAL ID**	21609162301
Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/18/2016 13:49	DEC	594849

CAS#	Parameter	Result	LOQ	Units
98-82-8	Isopropylbenzene (Cumene)	ND	5.00	ug/L
136777-61-2	m,p-Xylene	ND	10.0	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**	**26.6**	**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**	**5.69**	**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	48.3	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	50	50.5	ug/L	101	77 - 127
2037-26-5	Toluene d8	50	53.3	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	51	ug/L	102	71 - 127

MW-12 @ 60'

Collect Date	09/12/2016 11:15	**GCAL ID**	21609162302
Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	09/18/2016 20:36	JCK	594849

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

Sample Results

MW-12 @ 60'

Collect Date	09/12/2016 11:15	**GCAL ID**	21609162302
Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	09/18/2016 20:36	JCK	594849

CAS#	Parameter	Result	LOQ	Units
75-35-4	1,1-Dichloroethene	ND	10.0	ug/L
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)**	**28.5**	**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**	**28.5**	**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
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

Sample Results

MW-12 @ 60'	**Collect Date**	09/12/2016 11:15	**GCAL ID**	21609162302
	Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	09/18/2016 20:36	JCK	594849

CAS#	Parameter	Result	LOQ	Units
103-65-1	n-Propylbenzene	ND	10.0	ug/L
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**	**17.5**	**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	96.3	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	100	101	ug/L	101	77 - 127
2037-26-5	Toluene d8	100	109	ug/L	109	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	99.9	ug/L	100	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	20	09/18/2016 18:30	JCK	594849

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**563**	**100**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1000	976	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	1000	1030	ug/L	103	77 - 127
2037-26-5	Toluene d8	1000	1050	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	1000	1010	ug/L	101	71 - 127

Sample Results

MW-15 @ 30'	**Collect Date**	09/12/2016 10:32	**GCAL ID**	21609162303
	Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/18/2016 14:12	JCK	594849

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)**	**83.7**	**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**	**83.7**	**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

Sample Results

MW-15 @ 30'

Collect Date	09/12/2016 10:32	**GCAL ID**	21609162303
Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/18/2016 14:12	JCK	594849

CAS#	Parameter	Result	LOQ	Units
98-82-8	Isopropylbenzene (Cumene)	ND	5.00	ug/L
136777-61-2	m,p-Xylene	ND	10.0	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**	**194**	**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	51.3	ug/L	103	77 - 127
2037-26-5	Toluene d8	50	53.5	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	52.2	ug/L	104	71 - 127

MW-17 @ 30'

Collect Date	09/12/2016 09:22	**GCAL ID**	21609162304
Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	09/20/2016 14:41	LBH	594991

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

Sample Results

MW-17 @ 30'	**Collect Date**	09/12/2016 09:22	**GCAL ID**	21609162304
	Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	09/20/2016 14:41	LBH	594991

CAS#	Parameter	Result	LOQ	Units
75-35-4	1,1-Dichloroethene	ND	10.0	ug/L
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)**	**472**	**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
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
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**	09/12/2016 09:22	**GCAL ID**	21609162304
	Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	09/20/2016 14:41	LBH	594991

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**	**189**	**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	95.6	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	100	95.9	ug/L	96	77 - 127
2037-26-5	Toluene d8	100	102	ug/L	102	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	98.3	ug/L	98	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	20	09/18/2016 18:54	JCK	594849

CAS#	Parameter	Result	LOQ	Units
156-59-2	**cis-1,2-Dichloroethene**	**375**	**100**	**ug/L**
127-18-4	**Tetrachloroethene**	**862**	**100**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1000	960	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	1000	1030	ug/L	103	77 - 127
2037-26-5	Toluene d8	1000	1050	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	1000	1050	ug/L	105	71 - 127

Sample Results

MW-19 @ 30'	**Collect Date**	09/12/2016 09:59	**GCAL ID**	21609162305
	Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/18/2016 14:36	JCK	594849

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)**	**81.6**	**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**	**81.6**	**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

Sample Results

MW-19 @ 30'

Collect Date	09/12/2016 09:59	**GCAL ID**	21609162305
Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/18/2016 14:36	JCK	594849

CAS#	Parameter	Result	LOQ	Units
98-82-8	Isopropylbenzene (Cumene)	ND	5.00	ug/L
136777-61-2	m,p-Xylene	ND	10.0	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**	**49.8**	**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**	**8.43**	**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**	**14.8**	**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	48.8	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	50	51	ug/L	102	77 - 127
2037-26-5	Toluene d8	50	53.5	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	51.1	ug/L	102	71 - 127

MW-20 @ 60'

Collect Date	09/12/2016 14:45	**GCAL ID**	21609162306
Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	09/18/2016 19:43	JCK	594849

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

Sample Results

MW-20 @ 60'	**Collect Date**	09/12/2016 14:45	**GCAL ID**	21609162306
	Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	09/18/2016 19:43	JCK	594849

CAS#	Parameter	Result	LOQ	Units
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
540-59-0	**1,2-Dichloroethene(Total)**	**61.2**	**50.0**	**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
156-59-2	**cis-1,2-Dichloroethene**	**61.2**	**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
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

Sample Results

MW-20 @ 60'

Collect Date	09/12/2016 14:45	**GCAL ID**	21609162306
Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	09/18/2016 19:43	JCK	594849

CAS#	Parameter	Result	LOQ	Units
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**	**113**	**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	238	ug/L	95	78 - 130
1868-53-7	Dibromofluoromethane	250	254	ug/L	102	77 - 127
2037-26-5	Toluene d8	250	273	ug/L	109	76 - 134
17060-07-0	1,2-Dichloroethane-d4	250	261	ug/L	104	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50	09/18/2016 16:33	DEC	594849

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**1600**	**250**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2500	2470	ug/L	99	78 - 130
1868-53-7	Dibromofluoromethane	2500	2620	ug/L	105	77 - 127
2037-26-5	Toluene d8	2500	2640	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	2500	2570	ug/L	103	71 - 127

Sample Results

MW-21 @ 60'	**Collect Date**	09/13/2016 11:03	**GCAL ID**	21609162307
	Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50	09/18/2016 17:20	DEC	594849

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	ug/L
71-55-6	1,1,1-Trichloroethane	ND	250	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	ug/L
79-00-5	1,1,2-Trichloroethane	ND	250	ug/L
75-34-3	1,1-Dichloroethane	ND	250	ug/L
75-35-4	1,1-Dichloroethene	ND	250	ug/L
563-58-6	1,1-Dichloropropene	ND	250	ug/L
96-18-4	1,2,3-Trichloropropane	ND	250	ug/L
120-82-1	1,2,4-Trichlorobenzene	ND	250	ug/L
95-63-6	1,2,4-Trimethylbenzene	ND	250	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	ug/L
106-93-4	1,2-Dibromoethane	ND	250	ug/L
95-50-1	1,2-Dichlorobenzene	ND	250	ug/L
107-06-2	1,2-Dichloroethane	ND	250	ug/L
540-59-0	1,2-Dichloroethene(Total)	ND	500	ug/L
78-87-5	1,2-Dichloropropane	ND	250	ug/L
108-67-8	1,3,5-Trimethylbenzene	ND	250	ug/L
541-73-1	1,3-Dichlorobenzene	ND	250	ug/L
142-28-9	1,3-Dichloropropane	ND	250	ug/L
106-46-7	1,4-Dichlorobenzene	ND	250	ug/L
594-20-7	2,2-Dichloropropane	ND	250	ug/L
78-93-3	2-Butanone	ND	250	ug/L
95-49-8	2-Chlorotoluene	ND	250	ug/L
591-78-6	2-Hexanone	ND	250	ug/L
106-43-4	4-Chlorotoluene	ND	250	ug/L
99-87-6	4-Isopropyltoluene	ND	250	ug/L
108-10-1	4-Methyl-2-pentanone	ND	250	ug/L
67-64-1	Acetone	ND	250	ug/L
71-43-2	Benzene	ND	250	ug/L
108-86-1	Bromobenzene	ND	250	ug/L
74-97-5	Bromochloromethane	ND	250	ug/L
75-27-4	Bromodichloromethane	ND	250	ug/L
75-25-2	Bromoform	ND	250	ug/L
74-83-9	Bromomethane	ND	250	ug/L
75-15-0	Carbon disulfide	ND	250	ug/L
56-23-5	Carbon tetrachloride	ND	250	ug/L
108-90-7	Chlorobenzene	ND	250	ug/L
75-00-3	Chloroethane	ND	250	ug/L
67-66-3	Chloroform	ND	250	ug/L
74-87-3	Chloromethane	ND	250	ug/L
156-59-2	cis-1,2-Dichloroethene	ND	250	ug/L
10061-01-5	cis-1,3-Dichloropropene	ND	250	ug/L
124-48-1	Dibromochloromethane	ND	250	ug/L
74-95-3	Dibromomethane	ND	250	ug/L
75-71-8	Dichlorodifluoromethane	ND	250	ug/L
100-41-4	Ethylbenzene	ND	250	ug/L
87-68-3	Hexachlorobutadiene	ND	250	ug/L

Sample Results

MW-21 @ 60'

Collect Date	09/13/2016 11:03	**GCAL ID**	21609162307
Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50	09/18/2016 17:20	DEC	594849

CAS#	Parameter	Result	LOQ	Units
98-82-8	Isopropylbenzene (Cumene)	ND	250	ug/L
136777-61-2	m,p-Xylene	ND	500	ug/L
75-09-2	Methylene chloride	ND	250	ug/L
91-20-3	Naphthalene	ND	250	ug/L
104-51-8	n-Butylbenzene	ND	250	ug/L
103-65-1	n-Propylbenzene	ND	250	ug/L
95-47-6	o-Xylene	ND	250	ug/L
135-98-8	sec-Butylbenzene	ND	250	ug/L
100-42-5	Styrene	ND	250	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	250	ug/L
98-06-6	tert-Butylbenzene	ND	250	ug/L
108-88-3	Toluene	ND	250	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	250	ug/L
10061-02-6	trans-1,3-Dichloropropene	ND	250	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	ND	250	ug/L
79-01-6	Trichloroethene	ND	250	ug/L
75-69-4	Trichlorofluoromethane	ND	250	ug/L
76-13-1	Trichlorotrifluoroethane	ND	250	ug/L
75-01-4	Vinyl chloride	ND	100	ug/L
1330-20-7	Xylene (total)	ND	750	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2500	2460	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	2500	2500	ug/L	100	77 - 127
2037-26-5	Toluene d8	2500	2630	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	2500	2520	ug/L	101	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	500	09/18/2016 15:46	DEC	594849

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	16100	2500	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	25000	24200	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	25000	25300	ug/L	101	77 - 127
2037-26-5	Toluene d8	25000	26700	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	25000	26300	ug/L	105	71 - 127

Sample Results

MW-22 @ 60'	**Collect Date**	09/13/2016 10:32	**GCAL ID**	21609162308
	Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/20/2016 15:35	LBH	594991

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)**	**232**	**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
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-22 @ 60'	**Collect Date**	09/13/2016 10:32	**GCAL ID**	21609162308
	Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/20/2016 15:35	LBH	594991

CAS#	Parameter	Result	LOQ	Units
136777-61-2	m,p-Xylene	ND	10.0	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
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**	**113**	**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	48.6	ug/L	97	77 - 127
2037-26-5	Toluene d8	50	50.9	ug/L	102	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	48.8	ug/L	98	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	10	09/18/2016 19:17	JCK	594849

CAS#	Parameter	Result	LOQ	Units
156-59-2	**cis-1,2-Dichloroethene**	**167**	**50.0**	**ug/L**
127-18-4	**Tetrachloroethene**	**1090**	**50.0**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	500	486	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	500	507	ug/L	101	77 - 127
2037-26-5	Toluene d8	500	542	ug/L	108	76 - 134
17060-07-0	1,2-Dichloroethane-d4	500	511	ug/L	102	71 - 127

Sample Results

MW-23 @ 60'	**Collect Date**	09/13/2016 09:57	**GCAL ID**	21609162309
	Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	09/18/2016 20:10	JCK	594849

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**	**29.1**	**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

Sample Results

MW-23 @ 60'				
	Collect Date	09/13/2016 09:57	GCAL ID	21609162309
	Receive Date	09/16/2016 10:12	Matrix	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	09/18/2016 20:10	JCK	594849

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**	**597**	**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	242	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	250	255	ug/L	102	77 - 127
2037-26-5	Toluene d8	250	267	ug/L	107	76 - 134
17060-07-0	1,2-Dichloroethane-d4	250	253	ug/L	101	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50	09/18/2016 16:56	DEC	594849

CAS#	Parameter	Result	LOQ	Units
540-59-0	**1,2-Dichloroethene(Total)**	**2500**	**500**	**ug/L**
156-59-2	**cis-1,2-Dichloroethene**	**2500**	**250**	**ug/L**
127-18-4	**Tetrachloroethene**	**2920**	**250**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2500	2480	ug/L	99	78 - 130
1868-53-7	Dibromofluoromethane	2500	2570	ug/L	103	77 - 127
2037-26-5	Toluene d8	2500	2650	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	2500	2550	ug/L	102	71 - 127

Sample Results

MW-24 @ 30'	**Collect Date**	09/12/2016 11:56	**GCAL ID**	21609162310
	Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/18/2016 14:59	DEC	594849

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)**	**176**	**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**	**175**	**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

Sample Results

MW-24 @ 30'

Collect Date	09/12/2016 11:56	**GCAL ID**	21609162310
Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/18/2016 14:59	DEC	594849

CAS#	Parameter	Result	LOQ	Units
98-82-8	Isopropylbenzene (Cumene)	ND	5.00	ug/L
136777-61-2	m,p-Xylene	ND	10.0	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**	**162**	**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**	**36.2**	**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	49	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	50	51.1	ug/L	102	77 - 127
2037-26-5	Toluene d8	50	52.8	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	52	ug/L	104	71 - 127

PT-3 @ 60'

Collect Date	09/12/2016 14:11	**GCAL ID**	21609162311
Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50	09/18/2016 17:43	JCK	594849

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	ug/L
71-55-6	1,1,1-Trichloroethane	ND	250	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	ug/L
79-00-5	1,1,2-Trichloroethane	ND	250	ug/L
75-34-3	1,1-Dichloroethane	ND	250	ug/L

Sample Results

PT-3 @ 60'	**Collect Date**	09/12/2016 14:11	**GCAL ID**	21609162311
	Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50	09/18/2016 17:43	JCK	594849

CAS#	Parameter	Result	LOQ	Units
75-35-4	1,1-Dichloroethene	ND	250	ug/L
563-58-6	1,1-Dichloropropene	ND	250	ug/L
96-18-4	1,2,3-Trichloropropane	ND	250	ug/L
120-82-1	1,2,4-Trichlorobenzene	ND	250	ug/L
95-63-6	1,2,4-Trimethylbenzene	ND	250	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	ug/L
106-93-4	1,2-Dibromoethane	ND	250	ug/L
95-50-1	1,2-Dichlorobenzene	ND	250	ug/L
107-06-2	1,2-Dichloroethane	ND	250	ug/L
540-59-0	**1,2-Dichloroethene(Total)**	**684**	**500**	**ug/L**
78-87-5	1,2-Dichloropropane	ND	250	ug/L
108-67-8	1,3,5-Trimethylbenzene	ND	250	ug/L
541-73-1	1,3-Dichlorobenzene	ND	250	ug/L
142-28-9	1,3-Dichloropropane	ND	250	ug/L
106-46-7	1,4-Dichlorobenzene	ND	250	ug/L
594-20-7	2,2-Dichloropropane	ND	250	ug/L
78-93-3	2-Butanone	ND	250	ug/L
95-49-8	2-Chlorotoluene	ND	250	ug/L
591-78-6	2-Hexanone	ND	250	ug/L
106-43-4	4-Chlorotoluene	ND	250	ug/L
99-87-6	4-Isopropyltoluene	ND	250	ug/L
108-10-1	4-Methyl-2-pentanone	ND	250	ug/L
67-64-1	Acetone	ND	250	ug/L
71-43-2	Benzene	ND	250	ug/L
108-86-1	Bromobenzene	ND	250	ug/L
74-97-5	Bromochloromethane	ND	250	ug/L
75-27-4	Bromodichloromethane	ND	250	ug/L
75-25-2	Bromoform	ND	250	ug/L
74-83-9	Bromomethane	ND	250	ug/L
75-15-0	Carbon disulfide	ND	250	ug/L
56-23-5	Carbon tetrachloride	ND	250	ug/L
108-90-7	Chlorobenzene	ND	250	ug/L
75-00-3	Chloroethane	ND	250	ug/L
67-66-3	Chloroform	ND	250	ug/L
74-87-3	Chloromethane	ND	250	ug/L
156-59-2	**cis-1,2-Dichloroethene**	**684**	**250**	**ug/L**
10061-01-5	cis-1,3-Dichloropropene	ND	250	ug/L
124-48-1	Dibromochloromethane	ND	250	ug/L
74-95-3	Dibromomethane	ND	250	ug/L
75-71-8	Dichlorodifluoromethane	ND	250	ug/L
100-41-4	Ethylbenzene	ND	250	ug/L
87-68-3	Hexachlorobutadiene	ND	250	ug/L
98-82-8	Isopropylbenzene (Cumene)	ND	250	ug/L
136777-61-2	m,p-Xylene	ND	500	ug/L
75-09-2	Methylene chloride	ND	250	ug/L
91-20-3	Naphthalene	ND	250	ug/L
104-51-8	n-Butylbenzene	ND	250	ug/L

Sample Results

PT-3 @ 60'

Collect Date	09/12/2016 14:11	**GCAL ID**	21609162311
Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	50	09/18/2016 17:43	JCK	594849

CAS#	Parameter	Result	LOQ	Units
103-65-1	n-Propylbenzene	ND	250	ug/L
95-47-6	o-Xylene	ND	250	ug/L
135-98-8	sec-Butylbenzene	ND	250	ug/L
100-42-5	Styrene	ND	250	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	250	ug/L
98-06-6	tert-Butylbenzene	ND	250	ug/L
108-88-3	Toluene	ND	250	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	250	ug/L
10061-02-6	trans-1,3-Dichloropropene	ND	250	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	ND	250	ug/L
79-01-6	**Trichloroethene**	**1020**	**250**	**ug/L**
75-69-4	Trichlorofluoromethane	ND	250	ug/L
76-13-1	Trichlorotrifluoroethane	ND	250	ug/L
75-01-4	Vinyl chloride	ND	100	ug/L
1330-20-7	Xylene (total)	ND	750	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2500	2520	ug/L	101	78 - 130
1868-53-7	Dibromofluoromethane	2500	2580	ug/L	103	77 - 127
2037-26-5	Toluene d8	2500	2660	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	2500	2630	ug/L	105	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	500	09/18/2016 16:09	DEC	594849

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**16200**	**2500**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	25000	24700	ug/L	99	78 - 130
1868-53-7	Dibromofluoromethane	25000	25100	ug/L	100	77 - 127
2037-26-5	Toluene d8	25000	26500	ug/L	106	76 - 134
17060-07-0	1,2-Dichloroethane-d4	25000	25600	ug/L	102	71 - 127

Sample Results

TRIP BLANK	**Collect Date**	09/12/2016 00:01	**GCAL ID**	21609162312
	Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/18/2016 15:22	DEC	594849

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

Sample Results

TRIP BLANK	**Collect Date**	09/12/2016 00:01	**GCAL ID**	21609162312
	Receive Date	09/16/2016 10:12	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/18/2016 15:22	DEC	594849

CAS#	Parameter	Result	LOQ	Units
98-82-8	Isopropylbenzene (Cumene)	ND	5.00	ug/L
136777-61-2	m,p-Xylene	ND	10.0	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	48.5	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	50	50.8	ug/L	102	77 - 127
2037-26-5	Toluene d8	50	52.3	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.9	ug/L	100	71 - 127

GC/MS Volatiles QC Summary

Analytical Batch 594849	Client ID	MB594849		LCS594849				LCSD594849				
	GCAL ID	1609007		1609008				1609009				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	09/18/2016 13:23		09/18/2016 11:42				09/18/2016 12:13				
	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	51.0	102	75 - 124	50.0	51.8	104	2	30
1,1,1-Trichloroethane	71-55-6	ND	5.00	50.0	52.6	105	76 - 126	50.0	52.3	105	1	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	5.00	50.0	48.7	97	70 - 122	50.0	51.2	102	5	30
1,1,2-Trichloroethane	79-00-5	ND	5.00	50.0	49.3	99	72 - 121	50.0	50.9	102	3	30
1,1-Dichloroethane	75-34-3	ND	5.00	50.0	51.2	102	74 - 127	50.0	52.1	104	2	30
1,1-Dichloroethene	75-35-4	ND	5.00	50.0	49.8	100	69 - 129	50.0	49.1	98	1	20
1,1-Dichloropropene	563-58-6	ND	5.00	50.0	47.6	95	72 - 131	50.0	46.8	94	2	30
1,2,3-Trichloropropane	96-18-4	ND	5.00	50.0	44.1	88	70 - 120	50.0	47.5	95	7	30
1,2,4-Trichlorobenzene	120-82-1	ND	5.00	50.0	45.8	92	61 - 135	50.0	48.0	96	5	30
1,2,4-Trimethylbenzene	95-63-6	ND	5.00	50.0	51.1	102	74 - 125	50.0	51.3	103	0	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	5.00	50.0	46.7	93	57 - 121	50.0	50.9	102	9	30
1,2-Dibromoethane	106-93-4	ND	5.00	50.0	51.0	102	70 - 124	50.0	55.5	111	8	30
1,2-Dichlorobenzene	95-50-1	ND	5.00	50.0	49.9	100	71 - 126	50.0	50.8	102	2	30
1,2-Dichloroethane	107-06-2	ND	5.00	50.0	51.4	103	71 - 129	50.0	52.7	105	2	30
1,2-Dichloroethene(Total)	540-59-0	ND	10.0	100	95.2	95	74 - 128	100	97.4	97	2	30
1,2-Dichloropropane	78-87-5	ND	5.00	50.0	52.0	104	72 - 128	50.0	52.2	104	0	30
1,3,5-Trimethylbenzene	108-67-8	ND	5.00	50.0	51.1	102	71 - 132	50.0	50.7	101	1	30
1,3-Dichlorobenzene	541-73-1	ND	5.00	50.0	51.2	102	74 - 126	50.0	52.1	104	2	30
1,3-Dichloropropane	142-28-9	ND	5.00	50.0	49.3	99	74 - 122	50.0	51.7	103	5	30
1,4-Dichlorobenzene	106-46-7	ND	5.00	50.0	51.6	103	72 - 122	50.0	53.1	106	3	30
2,2-Dichloropropane	594-20-7	ND	5.00	50.0	48.4	97	77 - 124	50.0	46.3	93	4	30
2-Butanone	78-93-3	ND	5.00	50.0	50.3	101	58 - 137	50.0	51.0	102	1	30
2-Chlorotoluene	95-49-8	ND	5.00	50.0	47.7	95	72 - 127	50.0	48.0	96	1	30
2-Hexanone	591-78-6	ND	5.00	50.0	46.0	92	50 - 135	50.0	54.1	108	16	30
4-Chlorotoluene	106-43-4	ND	5.00	50.0	50.2	100	75 - 126	50.0	50.6	101	1	30
4-Isopropyltoluene	99-87-6	ND	5.00	50.0	53.6	107	71 - 129	50.0	52.9	106	1	30
4-Methyl-2-pentanone	108-10-1	ND	5.00	50.0	50.4	101	57 - 132	50.0	55.6	111	10	30
Acetone	67-64-1	ND	5.00	50.0	43.9	88	44 - 156	50.0	48.6	97	10	30
Benzene	71-43-2	ND	5.00	50.0	53.0	106	70 - 129	50.0	52.8	106	0	20
Bromobenzene	108-86-1	ND	5.00	50.0	47.0	94	71 - 120	50.0	48.7	97	4	30
Bromochloromethane	74-97-5	ND	5.00	50.0	48.8	98	76 - 130	50.0	48.6	97	0	30
Bromodichloromethane	75-27-4	ND	5.00	50.0	52.2	104	74 - 125	50.0	53.7	107	3	30
Bromoform	75-25-2	ND	5.00	50.0	49.8	100	64 - 122	50.0	53.7	107	8	30
Bromomethane	74-83-9	ND	5.00	50.0	40.9	82	47 - 138	50.0	42.0	84	3	30
Carbon disulfide	75-15-0	ND	5.00	50.0	51.0	102	69 - 136	50.0	49.1	98	4	30
Carbon tetrachloride	56-23-5	ND	5.00	50.0	53.7	107	76 - 128	50.0	53.8	108	0	30
Chlorobenzene	108-90-7	ND	5.00	50.0	51.3	103	74 - 123	50.0	52.4	105	2	20
Chloroethane	75-00-3	ND	5.00	50.0	37.0	74	62 - 141	50.0	44.0	88	17	30
Chloroform	67-66-3	ND	5.00	50.0	51.2	102	75 - 122	50.0	51.4	103	0	30
Chloromethane	74-87-3	ND	5.00	50.0	50.1	100	59 - 132	50.0	50.0	100	0	30
cis-1,2-Dichloroethene	156-59-2	ND	5.00	50.0	46.8	94	73 - 130	50.0	48.3	97	3	30
cis-1,3-Dichloropropene	10061-01-5	ND	5.00	50.0	45.5	91	71 - 132	50.0	47.5	95	4	30
Dibromochloromethane	124-48-1	ND	5.00	50.0	50.3	101	71 - 123	50.0	52.2	104	4	30
Dibromomethane	74-95-3	ND	5.00	50.0	46.9	94	72 - 129	50.0	48.4	97	3	30
Dichlorodifluoromethane	75-71-8	ND	5.00	50.0	48.6	97	58 - 140	50.0	47.4	95	3	30
Ethylbenzene	100-41-4	ND	5.00	50.0	52.7	105	74 - 126	50.0	53.7	107	2	30
Hexachlorobutadiene	87-68-3	ND	5.00	50.0	57.1	114	61 - 144	50.0	57.4	115	1	30
Isopropylbenzene (Cumene)	98-82-8	ND	5.00	50.0	51.0	102	71 - 125	50.0	50.0	100	2	30
m,p-Xylene	136777-61-2	ND	10.0	100	107	107	74 - 126	100	107	107	0	30
Methylene chloride	75-09-2	ND	5.00	50.0	52.5	105	68 - 132	50.0	52.5	105	0	30
Naphthalene	91-20-3	ND	5.00	50.0	41.1	82	57 - 138	50.0	44.0	88	7	35
n-Butylbenzene	104-51-8	ND	5.00	50.0	49.7	99	69 - 134	50.0	49.4	99	1	30
n-Propylbenzene	103-65-1	ND	5.00	50.0	50.4	101	75 - 129	50.0	49.7	99	1	30
o-Xylene	95-47-6	ND	5.00	50.0	53.7	107	73 - 130	50.0	54.6	109	2	30
sec-Butylbenzene	135-98-8	ND	5.00	50.0	51.9	104	70 - 136	50.0	50.8	102	2	30
Styrene	100-42-5	ND	5.00	50.0	47.9	96	71 - 127	50.0	49.1	98	2	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	5.00	50.0	50.4	101	71 - 125	50.0	53.2	106	5	30
tert-Butylbenzene	98-06-6	ND	5.00	50.0	50.4	101	72 - 126	50.0	50.2	100	0	30

GC/MS Volatiles QC Summary

Analytical Batch 594849	Client ID	MB594849	LCS594849	LCSD594849
	GCAL ID	1609007	1609008	1609009
	Sample Type	MB	LCS	LCSD
	Prep Date	NA	NA	NA
	Analysis Date	09/18/2016 13:23	09/18/2016 11:42	09/18/2016 12:13
	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
Tetrachloroethene	127-18-4	ND	5.00	50.0	54.0	108	68 - 128	50.0	54.0	108	0	30
Toluene	108-88-3	ND	5.00	50.0	49.1	98	72 - 120	50.0	50.2	100	2	20
trans-1,2-Dichloroethene	156-60-5	ND	5.00	50.0	48.4	97	69 - 132	50.0	49.1	98	1	30
trans-1,3-Dichloropropene	10061-02-6	ND	5.00	50.0	44.7	89	71 - 131	50.0	46.5	93	4	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	5.00	50.0	46.4	93	56 - 132	50.0	50.6	101	9	30
Trichloroethene	79-01-6	ND	5.00	50.0	48.2	96	76 - 129	50.0	49.1	98	2	20
Trichlorofluoromethane	75-69-4	ND	5.00	50.0	52.2	104	72 - 136	50.0	49.9	100	5	30
Trichlorotrifluoroethane	76-13-1	ND	5.00	50.0	53.1	106	72 - 136	50.0	50.7	101	5	30
Vinyl chloride	75-01-4	ND	2.00	50.0	52.7	105	68 - 132	50.0	50.0	100	5	30
Xylene (total)	1330-20-7	ND	15.0	150	161	107	74 - 127	150	161	107	0	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	51.7	103	50	51.6	103	71 - 127	50	52.4	105	NA	NA
4-Bromofluorobenzene	460-00-4	48.1	96	50	53.1	106	78 - 130	50	53.8	108	NA	NA
Dibromofluoromethane	1868-53-7	51.4	103	50	50.1	100	77 - 127	50	50.3	101	NA	NA
Toluene d8	2037-26-5	53.9	108	50	48.1	96	76 - 134	50	48.7	97	NA	NA

Analytical Batch 594991	Client ID	MB594991	LCS594991	LCSD594991
	GCAL ID	1609461	1609462	1609463
	Sample Type	MB	LCS	LCSD
	Prep Date	NA	NA	NA
	Analysis Date	09/20/2016 12:02	09/20/2016 10:33	09/20/2016 10:55
	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	53.2	106	75 - 124	50.0	52.6	105	1	30
1,1,1-Trichloroethane	71-55-6	ND	5.00	50.0	51.2	102	76 - 126	50.0	50.8	102	1	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	5.00	50.0	48.7	97	70 - 122	50.0	50.4	101	3	30
1,1,2-Trichloroethane	79-00-5	ND	5.00	50.0	51.3	103	72 - 121	50.0	51.4	103	0	30
1,1-Dichloroethane	75-34-3	ND	5.00	50.0	50.5	101	74 - 127	50.0	50.1	100	1	30
1,1-Dichloroethene	75-35-4	ND	5.00	50.0	47.1	94	69 - 129	50.0	47.1	94	0	20
1,1-Dichloropropene	563-58-6	ND	5.00	50.0	55.4	111	72 - 131	50.0	54.6	109	1	30
1,2,3-Trichloropropane	96-18-4	ND	5.00	50.0	52.3	105	70 - 120	50.0	54.4	109	4	30
1,2,4-Trichlorobenzene	120-82-1	ND	5.00	50.0	54.6	109	61 - 135	50.0	53.7	107	2	30
1,2,4-Trimethylbenzene	95-63-6	ND	5.00	50.0	55.7	111	74 - 125	50.0	56.5	113	1	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	5.00	50.0	50.4	101	57 - 121	50.0	53.3	107	6	30
1,2-Dibromoethane	106-93-4	ND	5.00	50.0	55.1	110	70 - 124	50.0	55.4	111	1	30
1,2-Dichlorobenzene	95-50-1	ND	5.00	50.0	51.4	103	71 - 126	50.0	51.8	104	1	30
1,2-Dichloroethane	107-06-2	ND	5.00	50.0	49.7	99	71 - 129	50.0	50.0	100	1	30
1,2-Dichloroethene(Total)	540-59-0	ND	10.0	100	108	108	74 - 128	100	106	106	2	30
1,2-Dichloropropane	78-87-5	ND	5.00	50.0	52.9	106	72 - 128	50.0	52.6	105	1	30
1,3,5-Trimethylbenzene	108-67-8	ND	5.00	50.0	54.2	108	71 - 132	50.0	54.9	110	1	30
1,3-Dichlorobenzene	541-73-1	ND	5.00	50.0	52.1	104	74 - 126	50.0	52.3	105	0	30
1,3-Dichloropropane	142-28-9	ND	5.00	50.0	53.0	106	74 - 122	50.0	53.3	107	1	30
1,4-Dichlorobenzene	106-46-7	ND	5.00	50.0	50.6	101	72 - 122	50.0	50.4	101	0	30
2,2-Dichloropropane	594-20-7	ND	5.00	50.0	55.9	112	77 - 124	50.0	54.8	110	2	30
2-Butanone	78-93-3	ND	5.00	50.0	54.2	108	58 - 137	50.0	57.6	115	6	30
2-Chlorotoluene	95-49-8	ND	5.00	50.0	52.3	105	72 - 127	50.0	52.3	105	0	30
2-Hexanone	591-78-6	ND	5.00	50.0	59.0	118	50 - 135	50.0	61.1	122	3	30
4-Chlorotoluene	106-43-4	ND	5.00	50.0	54.3	109	75 - 126	50.0	54.7	109	1	30
4-Isopropyltoluene	99-87-6	ND	5.00	50.0	56.4	113	71 - 129	50.0	56.5	113	0	30
4-Methyl-2-pentanone	108-10-1	ND	5.00	50.0	60.8	122	57 - 132	50.0	62.8	126	3	30
Acetone	67-64-1	ND	5.00	50.0	44.1	88	44 - 156	50.0	49.0	98	11	30
Benzene	71-43-2	ND	5.00	50.0	52.5	105	70 - 129	50.0	52.0	104	1	20
Bromobenzene	108-86-1	ND	5.00	50.0	50.2	100	71 - 120	50.0	51.1	102	2	30
Bromochloromethane	74-97-5	ND	5.00	50.0	51.0	102	76 - 130	50.0	51.0	102	0	30
Bromodichloromethane	75-27-4	ND	5.00	50.0	51.6	103	74 - 125	50.0	51.7	103	0	30
Bromoform	75-25-2	ND	5.00	50.0	53.3	107	64 - 122	50.0	53.4	107	0	30

GC/MS Volatiles QC Summary

Analytical Batch 594991	Client ID	MB594991		LCS594991				LCSD594991				
	GCAL ID	1609461		1609462				1609463				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	09/20/2016 12:02		09/20/2016 10:33				09/20/2016 10:55				
	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
Bromomethane	74-83-9	ND	5.00	50.0	56.4	113	47 - 138	50.0	56.0	112	1	30
Carbon disulfide	75-15-0	ND	5.00	50.0	48.5	97	69 - 136	50.0	47.4	95	2	30
Carbon tetrachloride	56-23-5	ND	5.00	50.0	50.1	100	76 - 128	50.0	49.2	98	2	30
Chlorobenzene	108-90-7	ND	5.00	50.0	51.4	103	74 - 123	50.0	50.4	101	2	20
Chloroethane	75-00-3	ND	5.00	50.0	54.9	110	62 - 141	50.0	56.5	113	3	30
Chloroform	67-66-3	ND	5.00	50.0	49.6	99	75 - 122	50.0	49.3	99	1	30
Chloromethane	74-87-3	ND	5.00	50.0	55.0	110	59 - 132	50.0	53.5	107	3	30
cis-1,2-Dichloroethene	156-59-2	ND	5.00	50.0	54.8	110	73 - 130	50.0	53.9	108	2	30
cis-1,3-Dichloropropene	10061-01-5	ND	5.00	50.0	51.4	103	71 - 132	50.0	51.7	103	1	30
Dibromochloromethane	124-48-1	ND	5.00	50.0	54.5	109	71 - 123	50.0	54.5	109	0	30
Dibromomethane	74-95-3	ND	5.00	50.0	51.5	103	72 - 129	50.0	52.0	104	1	30
Dichlorodifluoromethane	75-71-8	ND	5.00	50.0	43.8	88	58 - 140	50.0	43.3	87	1	30
Ethylbenzene	100-41-4	ND	5.00	50.0	53.7	107	74 - 126	50.0	53.0	106	1	30
Hexachlorobutadiene	87-68-3	ND	5.00	50.0	51.6	103	61 - 144	50.0	50.9	102	1	30
Isopropylbenzene (Cumene)	98-82-8	ND	5.00	50.0	56.5	113	71 - 125	50.0	56.2	112	1	30
m,p-Xylene	136777-61-2	ND	10.0	100	109	109	74 - 126	100	107	107	2	30
Methylene chloride	75-09-2	ND	5.00	50.0	46.9	94	68 - 132	50.0	46.8	94	0	30
Naphthalene	91-20-3	ND	5.00	50.0	53.4	107	57 - 138	50.0	53.9	108	1	35
n-Butylbenzene	104-51-8	ND	5.00	50.0	58.0	116	69 - 134	50.0	57.9	116	0	30
n-Propylbenzene	103-65-1	ND	5.00	50.0	52.0	104	75 - 129	50.0	52.2	104	0	30
o-Xylene	95-47-6	ND	5.00	50.0	57.0	114	73 - 130	50.0	56.8	114	0	30
sec-Butylbenzene	135-98-8	ND	5.00	50.0	53.6	107	70 - 136	50.0	53.9	108	1	30
Styrene	100-42-5	ND	5.00	50.0	58.3	117	71 - 127	50.0	57.0	114	2	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	5.00	50.0	57.7	115	71 - 125	50.0	58.8	118	2	30
tert-Butylbenzene	98-06-6	ND	5.00	50.0	53.5	107	72 - 126	50.0	54.4	109	2	30
Tetrachloroethene	127-18-4	ND	5.00	50.0	50.8	102	68 - 128	50.0	50.5	101	1	30
Toluene	108-88-3	ND	5.00	50.0	51.2	102	72 - 120	50.0	50.5	101	1	20
trans-1,2-Dichloroethene	156-60-5	ND	5.00	50.0	52.9	106	69 - 132	50.0	52.4	105	1	30
trans-1,3-Dichloropropene	10061-02-6	ND	5.00	50.0	49.8	100	71 - 131	50.0	50.2	100	1	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	5.00	50.0	56.1	112	56 - 132	50.0	58.1	116	4	30
Trichloroethene	79-01-6	ND	5.00	50.0	50.9	102	76 - 129	50.0	50.7	101	0	20
Trichlorofluoromethane	75-69-4	ND	5.00	50.0	45.9	92	72 - 136	50.0	44.9	90	2	30
Trichlorotrifluoroethane	76-13-1	ND	5.00	50.0	45.8	92	72 - 136	50.0	45.5	91	1	30
Vinyl chloride	75-01-4	ND	2.00	50.0	48.0	96	68 - 132	50.0	47.2	94	2	30
Xylene (total)	1330-20-7	ND	15.0	150	166	111	74 - 127	150	164	109	1	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	49.5	99	50	48.2	96	71 - 127	50	48.5	97	NA	NA
4-Bromofluorobenzene	460-00-4	48.1	96	50	50.8	102	78 - 130	50	50.1	100	NA	NA
Dibromofluoromethane	1868-53-7	48.9	98	50	48.8	98	77 - 127	50	48.5	97	NA	NA
Toluene d8	2037-26-5	52.5	105	50	50.4	101	76 - 134	50	50.4	101	NA	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: 216091623
PM: SAK

Report to:
Client: Clearwater Env. Resources LLC
Address: 3670 Pleasant Hill Blvd Ste 340/139
Duluth GA 30096
Contact: Jack Wittle
Phone: 678-491-4601
E-mail: jackwittle@clearwaterenv.net

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

P.O. Number
Project Name/Number: RAYLOC
Sampled By: Perry Frix / Clearwater

Analytical Requests & Method: VOCs via 8260

GCAL use only:
Custody Seal used ☐ yes ☐ no
intact ☐ yes ☐ no
Temperature °C 1.3 E09
2140M

☐ Dissolved Analysis Requested
☐ Field filtered
☐ Lab filtered

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	No Containers	HA	Preservative
GW	9/12	1339		X	MW-7C 30'	3		1
GW	9/12	1115		X	MW-12C 60'	3		2
GW	9/12	1032		X	MW-15C 30'	3		3
GW	9/12	0922		X	MW-17C 30'	3		4
GW	9/12	0959		X	MW-19C 30'	3		5
GW	9/12	1445		X	MW-20C 60'	3		6
GW	9/13	1103		X	MW-21C 60'	3		7
GW	9/13	1037		X	MW-22C 60'	3		8
GW	9/13	0957		X	MW-23C 60'	3		9
GW	9/12	1156		X	MW-24C 30'	3		10
GW	9/12	1411		X	PT-3C 60'	3		11
					TRIP BLANK	3		12
						36		

Air Bill No: 7772 2759 1493

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

Relinquished by: (Signature)	Date: 9/14/16	Time: 0947	Received by: (Signature) Brad Michini	Date: 9/14/16	Time: 0942
Relinquished by: (Signature) Brad Zuchini	Date: 9/14/16	Time: 1430	Received by: (Signature) FedEx	Date:	Time:
Relinquished by: (Signature) FedEx	Date: 9-16-16	Time: 10:12	Received by: (Signature) Dodi McCain	Date: 9-16-16	Time: 10:12

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

SAMPLE RECEIVING CHECKLIST

216091623

SAMPLE DELIVERY GROUP 216091623	
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)** 09/16/16

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: E29	Temp(°C)
777227591993		1.3

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

Revision 1.5

Page 1 of 1

APPENDIX D
JUNE AND SEPEMBER 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: 6/22/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft):	STATIC DEPTH TO WATER (ft): 26.43	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 1446	PURGE ENDED AT: 1511	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)	
1501	0.25	0.25	<0.1		4.92	26.7	0.113	3.18	74.4	160	
1505	~0.125	~0.375	<0.1		4.95	26.6	0.112	2.36	61.3	113	
1508	~0.125	~0.375	<0.1		4.93	26.5	0.112	2.29	60.0	118	
1511	~0.125	~0.375	<0.1		4.94	26.4	0.111	1.87	53.8	104	

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: Bladder Pump **Tubing Type:** PE

SAMPLING DATA

SAMPLED BY (PRINT): Penny Fox / Clearwater	SAMPLER(S) SIGNATURE(S):

SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 1512	SAMPLING ENDED AT: 1517
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	
7	CG	40 mL	HCl	VOCs

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:

Well Cover Replace (2 bolts)

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: RAILROAD
WELL NO: MW-12	SAMPLE ID: MW-12 @ 60'	DATE: 6/23/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 46'	STATIC DEPTH TO WATER (ft): 24.35	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 1020	PURGE ENDED AT: 1036	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)
1027	0.25	0.25	<0.1	24.30	4.87	21.4	0.091	5.03	228	1222
1030	+0.125	<0.375	<0.1	24.30	4.63	21.0	0.089	4.65	247	1214
1033	+0.125	<0.375	<0.1	24.30	4.53	20.8	0.088	4.54	258	1222
1036	+0.125	<0.375	<0.1	24.30	4.53	20.6	0.087	4.46	269	1260

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: Bladder Pump	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT): Perry Kay / Clearwater	SAMPLER(S) SIGNATURE(S):

SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 1037	SAMPLING ENDED AT: 1107
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	
2	CG	40 mL	HCl	VOCs
2	CG	40 mL	HCl	CAHs
2	CG	40 mL	HCl	MEE
1	PE	250 mL	HNO3	Total Metals

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:

1 PE 500mL — Diss Metals

1 PE 500mL — Ions + Alk.

WELL LID - replace, 3 bolts

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: Creek
WELL NO: MW-15	SAMPLE ID: MW-15 @ 30'	DATE: 6/22/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 40'	STATIC DEPTH TO WATER (ft): 9.84	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 1232	PURGE ENDED AT: 1257	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)	
1245	0.75	0.75	<0.1	9.49	5.61	19.3	0.071	2.55	110	201	
1248	≈0.125	≈0.375	<0.1	9.99	5.44	18.5	0.068	1.43	120	144	
1251	≈0.125	≈0.375	<0.1	9.94	5.12	18.2	0.067	0.90	143	55	
1254	≈0.125	≈0.375	<0.1	9.92	4.96	18.1	0.066	0.79	152	54	
1257	≈0.125	≈0.375	<0.1	9.99	4.94	18.1	0.066	0.68	155	41	

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: Bladder Pump	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT): Cory Fox / Clearwater	SAMPLER(S) SIGNATURE(S):

SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 1250	SAMPLING ENDED AT: 1301
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	
2	G6	40ml	HCl	VOCs

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:

Well Cover OK

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: Creek
WELL NO: MW-17	SAMPLE ID: MW-17 C 30'	DATE: 6/22/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 31'	STATIC DEPTH TO WATER (ft): 8.74	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 0840 // 1058	PURGE ENDED AT: 1117	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)
*	0902	~0.13	0.13	<0.1	NR	4.98	25.2	.137	0.0	204	0.0
	1105	0.25	0.25	<0.1	8.74	5.97	20.3	.138	1.99	186	1614
	1108	<0.125	~0.375	<0.1	8.74	5.64	20.7	.139	1.97	207	1619
	1111	<0.125	~0.375	<0.1	8.74	5.60	20.9	.139	1.68	208	1613
	1114	<0.125	~0.375	<0.1	8.74	5.66	21.3	.140	1.94	205	1319
	1117	<0.125	~0.375	<0.1	8.74	5.75	21.6	.140	1.65	199	720

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: Bladder Pump	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT): Perry Frick / Clearwater	SAMPLER(S) SIGNATURE(S):

SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 1120	SAMPLING ENDED AT: 1144
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
2	CG	40 mL	HCl	VOCs
2	CG	40 mL	HCl	CAHs
2	CG	40 mL	HCl	Ethane/Ethene/Methane
1	PE	250mL	HNO_3	Total Metals

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: *Sampling interrupted by initial instrument failure - Horiba replaced w/ YSI unit.

1 PE 500mL — Ions + Alk

1 PE 500mL — ~~Alkalinity~~ Dissolved Metals

Well Cap - OK

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: Creek
WELL NO: MW-19	SAMPLE ID: MW-19 @ 30'	DATE: 6/22/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 35'	STATIC DEPTH TO WATER (ft): 9.79	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 1152	PURGE ENDED AT: 1218	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)	
1206	~0.25	~0.25	<0.1	8.63	5.43	20.8	0.225	2.52	69.6	1621	
1210	~0.125	~0.37	<0.1	8.63	4.97	19.1	0.314	0.69	84.8	1601	
1215	~0.125	~0.37	<0.1	8.63	4.82	18.7	0.317	0.56	90.9	1324	
1218	~0.125	~0.37	<0.1	8.63	4.83	18.7	0.313	0.52	90.7	1593	

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: Bladder Pump	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT): Ryan Friz / Clearwater	SAMPLER(S) SIGNATURE(S):

SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 1220	SAMPLING ENDED AT: 1223
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
2	CG	40mL	HCl	VOCs

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:

Well Cap - OK

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: FCH1	
WELL NO: MW-20	SAMPLE ID: MW-20 @ 60'		DATE: 6/23/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): ~~70~~ 60'	STATIC DEPTH TO WATER (ft): ~~19.55~~ 19.52	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 1204	PURGE ENDED AT: 1232	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)
~~1~~					~~6.65~~	~~29.7~~	~~0.000~~	~~7.6~~	~~131~~	~~0~~
1217	0.25	0.25	<0.1	19.89	6.60	27.9	0.048	7.02	141	329
1220	~0.125	<0.375	<0.1	19.89	6.16	22.0	0.089	6.99	153	173
1223	~0.125	<0.375	<0.1	19.89	5.94	21.1	0.088	6.94	175	216
1226	~0.125	<0.375	<0.1	19.89	5.67	20.9	0.087	6.87	190	326
1229	~0.125	<0.375	<0.1	19.89	5.58	20.8	0.087	6.86	199	444
1232	~0.125	<0.375	<0.2	19.89	5.58	20.7	0.087	6.79	203	472

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: Bladder Pump	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT): Penny Fox / Clearwater	SAMPLER(S) SIGNATURE(S):

SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 1234	SAMPLING ENDED AT: 1253
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	
2	CG	40 mL	HCl	VOCs
2	CG	40 mL	HCl	CAHs
2	CG	40 mL	HCl	MEE
1	PE	250 mL	HNO3	Total metals

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:

1 PE 500mL — Diss Metals

1 PE 500mL — Ions + Alk.

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: Sooke Area
WELL NO: MW-21	SAMPLE ID: MW-21@CO	DATE: 6/23/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 75	STATIC DEPTH TO WATER (ft): 43.05	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 0915	PURGE ENDED AT: 0934	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)
0925	0.25	0.25	<0.1	43.55	6.38	26.8	0.148	2.36	143	17
0928	~0.125	<0.375	<0.1	43.55	6.37	27.0	0.148	2.19	146	13
0931	~0.125	<0.375	<0.1	43.55	6.36	27.1	0.149	2.04	151	14
0934	~0.125	<0.375	<0.1	43.55	6.24	27.0	0.149	1.79	162	12

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: Bladder Pump	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT): Perry Foster / Clearwater	SAMPLER(S) SIGNATURE(S):

SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 0936	SAMPLING ENDED AT: 0957
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	
2	CG	40mL	HCl	VOCs
2	CG	40mL	HCl	CARBS
2	CG	40mL	HCl	MEE
1	PE	250mL	HNO3	Total Metals

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:

1 PE 500mL — Diss Metals

1 PE 500mL — Ions + Alk

WELL LID = OK!

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: SOURCE AREA
WELL NO: MW-77	SAMPLE ID: MW-22 @60'	DATE: 6/23/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 70	STATIC DEPTH TO WATER (ft): 40.13	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 0817	PURGE ENDED AT: 0842	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)	
0833	0.25	0.25	<0.1	40.32	4.81	23.1	0.082	1.93	230	175	
0836	~0.125	~0.375	<0.1	40.32	4.81	22.5	0.081	1.26	239	152	
0839	~0.125	~0.375	<0.1	40.32	4.82	22.5	0.081	1.26	240	160	
0842	~0.125	~0.375	<0.1	40.32	4.82	22.5	0.081	1.29	240	151	

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: Bladder Pump	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT): Penny Fox / Clearwater	SAMPLER(S) SIGNATURE(S):

SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 0843	SAMPLING ENDED AT: 0908
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
2	CG	40mL	HCl	VOCs
2	CG	40mL	HCl	CAHs
2	CG	40mL	HCl	MEE
1	PE	250mL	HNO3	Total Metals

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:

1 PE 500mL – Diss Metals

1 PE 500mL – Ions + Alk.

Well 12- one

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: MW-23 - SOURCE AREA
WELL NO: MW-23	SAMPLE ID: MW-23 @ 60'	DATE: 6/23/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 60'	STATIC DEPTH TO WATER (ft): 45.23	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 0725	PURGE ENDED AT: 0743	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)
0734	0.25	0.25	<0.1	45.36	5.34	23.6	0.278	4.95	173	46
0737	<0.125	~0.375	<0.1	45.36	5.11	23.7	0.279	4.68	187	56
0740	<0.125	~0.375	<0.1	45.36	4.89	23.7	0.281	4.46	199	45
0743	<0.125	~0.375	<0.1	45.36	4.87	23.8	0.281	4.37	202	37

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: Bladder Pump	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT): Ryan Trax / Clearwater	SAMPLER(S) SIGNATURE(S):

SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 0745	SAMPLING ENDED AT: 0813
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
3	CG	40 mL	HCl	VOCs
2	CG	40 mL	HCl	CMTs
2	CG	40 mL	HCl	MEE
1	PE	250 mL	HNO3	Total Metals

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:

- Replace Lid - 3 bolts

1 PE 500mL — Diss Metals

1 PE 500mL — Ions + Alk.

Well Lid - OK

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: RAILROAD	
WELL NO: MW-24	SAMPLE ID: MW-24 @ 30'		DATE: 6/22/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft):	STATIC DEPTH TO WATER (ft): 19.11	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 1402	PURGE ENDED AT: 1424	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)	
1415	0.25	0.25	<0.1	19.42	5.29	22.2	0.178	5.22	155	156	
1418	0.125	0.375	<0.1	19.42	5.28	22.3	0.178	5.19	159	132	
1421	0.125	0.375	<0.1	19.42	5.25	22.5	0.181	5.13	168	154	
1424	0.125	0.375	<0.1	19.42	5.23	22.4	0.182	5.16	173	153	

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: Bladder Pump	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT): Ping Frey / Clearwater	SAMPLER(S) SIGNATURE(S):	
SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 1425	SAMPLING ENDED AT: 1428
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
2	CG	40mL	HCl	VOCs

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:

Cover LID - Replace (2 bolts)

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: ~~FHCA~~ FCHA
WELL NO: PT-3	SAMPLE ID: PT-3 C60'	DATE: 6/23/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 67.6'	STATIC DEPTH TO WATER (ft): 19.24	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 1132	PURGE ENDED AT:	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)	
1136	0.25	0.25	<0.1	19.44	6.06	23.7	0.140	4.08	128	208	
1139	0.125	<0.375	<0.1	19.44	6.03	23.0	0.140	3.60	127	185	
1142	0.125	<0.375	<0.1	19.44	5.72	22.4	0.140	3.40	145	137	
1145	0.125	<0.375	<0.1	19.44	5.68	21.9	0.140	3.29	147	150	
1148	0.125	<0.375	<0.1	19.44	5.71	21.9	0.140	3.24	146	185	

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: Bladder Pump	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT): Perry Frix / Clearwater	SAMPLER(S) SIGNATURE(S):

SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 1149	SAMPLING ENDED AT: 1204
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	
2	CG	40mL	HCl	VOCs
2	CG	40mL	HCl	CAHs MEE
2	CG	40mL	HCl	
1	PE	250mL	HNO3	Total Metals

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:

1 PE 500mL — Diss. Metals
1 PE 500mL — Ions & Alk.

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: CREEK	
WELL NO: MU-7	SAMPLE ID: MU-7 @ 30'		DATE: 9/12/16

PURGING DATA

27.30

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft):	STATIC DEPTH TO WATER (ft): ~~26.43~~	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 1318	PURGE ENDED AT: 1330	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)
1328	0.25	0.25	<0.1	27.33	5.03	22.2	0.071	2.92	210.9	63
1331	~0.125	~0.375	<0.1	27.33	5.03	21.7	0.067	1.21	211.4	69
1334	~0.125	~0.375	<0.1	27.33	5.03	20.9	0.065	0.81	212.8	67
1338	~0.125	~0.375	<0.1	27.33	5.04	20.6	0.066	0.75	213.3	55

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: Bladder Pump	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT): Penny Fritz / Clearwater	SAMPLER(S) SIGNATURE(S):	
SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 1339	SAMPLING ENDED AT: 1345
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	
3	CG	40mL	HCl	VOCs

Groundwater Parameter Tolerances (if possible):

Turbidity: <10 NTUs
Temperature: +/- 5 °F
pH: +/- 0.1 Units
Specific Conductance: +/- 5%

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-12	SAMPLE ID: MW-12 @ 60'		DATE: 9/12/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 96'	STATIC DEPTH TO WATER (ft): 27.49	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 1055	PURGE ENDED AT: 1114	TOTAL VOL PURGED (gal): ~0.375

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)	
1102	0.25	0.25	<0.1	~~105~~ 27.55	5.21	19.2	0.064	5.07	226.7	652	
1105	<0.125	~0.375	<0.1	27.57	4.70	19.1	0.064	4.60	230.6	637	
1108	<0.125	~0.375	<0.1	27.57	5.22	19.0	0.063	4.22	235.3	708	
1111	<0.125	~0.375	<0.1	27.57	5.25	19.3	0.063	3.99	237.9	751	
1114	<0.125	~0.375	<0.1	27.57	5.26	19.3	0.063	3.98	240.6	673	

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: Bladder Pump	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT): Peter Frix / Clearwater	SAMPLER(S) SIGNATURE(S):

SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 1115	SAMPLING ENDED AT: 1122
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
3	CG	40mL	HCl	VOCs

Groundwater Parameter Tolerances (if possible):

Turbidity: <10 NTUs
Temperature: +/- 5 °F
pH: +/- 0.1 Units
Specific Conductance: +/- 5%

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-5	SAMPLE ID: MW-5@30	DATE: 9/12/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 40'	STATIC DEPTH TO WATER (ft): 10.52	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 1015	PURGE ENDED AT: 1031	TOTAL VOL PURGED (gal): ~0.375

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)	
1019	0.25	0.25	<0.1	10.56	5.95	20.7	0.098	4.20	52.6	501	
1023	~0.375	~0.375	<0.1	10.56	5.92	20.7	.097	0.90	52.3	741	
1027	<0.375	~0.375	<0.1	10.56	5.92	20.5	.095	0.76	55.4	723	
1031	<0.375	~0.375	<0.1	10.56	5.91	20.7	.095	.44	55.1	847	

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: Bladder Pump **Tubing Type:** PE

SAMPLING DATA

SAMPLED BY (PRINT): Penny Fritz / Clearwater		SAMPLER(S) SIGNATURE(S):
SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 1032	SAMPLING ENDED AT: 1036
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	
3	CG	40mL	HCl	VOCs

Groundwater Parameter Tolerances (if possible):
Turbidity: <10 NTUs
Temperature: +/- 5 °F
pH: +/- 0.1 Units
Specific Conductance: +/- 5%

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-17	SAMPLE ID: MW-17C 30'	DATE: 9/12/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 31	STATIC DEPTH TO WATER (ft): 8.83	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 0904	PURGE ENDED AT: 0921	TOTAL VOL PURGED (gal): ~0.375

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)	
0906	0.25	0.25	<0.1	8.85	6.09	19.3	0.130	1.44	102.7	964	
0915	<0.125	~0.375	<0.1	8.85	6.10	19.4	0.129	0.94	110.7	926	
0918	<0.125	~0.375	<0.1	8.85	6.11	19.6	0.129	0.86	113.4	820	
0921	<0.125	~0.375	<0.1	8.85	6.12	19.7	0.128	0.82	118.7	852	

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: Bladder Pump	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT): Ryan Fox / Classmate	SAMPLER(S) SIGNATURE(S):	
SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 0922	SAMPLING ENDED AT: 0925
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
3	CG	40mL	HCl	VOCs

Groundwater Parameter Tolerances (if possible):

Turbidity: <10 NTUs
Temperature: +/- 5 °F
pH: +/- 0.1 Units
Specific Conductance: +/- 5%

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-19	SAMPLE ID: MW-19 @ 36'	DATE: 9/12/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 35'	STATIC DEPTH TO WATER (ft): 8.97	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 0935	PURGE ENDED AT: 0958	TOTAL VOL PURGED (gal): ~0.37

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)
0946	0.25	0.25	<0.1	8.99	5.28	20.3	0.221	1.40	110.4	>1000
0949	<0.125	~0.37	<0.1	8.99	5.21	19.8	.222	0.97	114.6	>1000
0952	<0.125	~0.37	<0.1	8.99	5.25	19.3	.219	0.36	106.9	>1000
0955	<0.125	~0.37	<0.1	8.99	5.30	19.2	.214	0.44	102.1	>1000
0958	<0.125	~0.37	<0.1	8.99	5.31	19.2	.213	0.35	101.1	>1000

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: Bladder Pump	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT): Perry Frix / Clearwater	SAMPLER(S) SIGNATURE(S):

SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 0959	SAMPLING ENDED AT: 1003
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	
3	CG	40mL	HCl	VOCs

Groundwater Parameter Tolerances (if possible):

Turbidity: <10 NTUs
Temperature: +/- 5 °F
pH: +/- 0.1 Units
Specific Conductance: +/- 5%

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: MU-20	SAMPLE ID: MU-20 C60'	DATE: 9/12/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 70'	STATIC DEPTH TO WATER (ft): 22.90	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 1422	PURGE ENDED AT: 1442	TOTAL VOL PURGED (gal): ~0.37

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)	
1432	0.25	0.25	<0.1	22.95	6.15	21.9	0.084	6.25	170.0	289	
1435	~0.05	~0.375	<0.1	22.95	6.14	22.1	0.083	5.75	167.8	311	
1438	~0.125	~0.375	<0.1	22.95	6.15	22.5	0.083	5.31	167.4	329	
1442	~0.125	~0.375	<0.1	22.95	6.15	23.0	0.084	4.97	168.4	291	

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: Bladder Pump **Tubing Type:** PE

SAMPLING DATA

SAMPLED BY (PRINT): Perry Frey / Clearwater	SAMPLER(S) SIGNATURE(S):

SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 1445	SAMPLING ENDED AT: 1449
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
3	CG	40 mL	HCl	VOCs

Groundwater Parameter Tolerances (if possible):
Turbidity: <10 NTUs
Temperature: +/- 5 °F
pH: +/- 0.1 Units
Specific Conductance: +/- 5%

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 C60'	DATE: 9/13/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 75'	STATIC DEPTH TO WATER (ft): 45.78	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 1043	PURGE ENDED AT:	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)
1053	0.25	0.25	<0.1	45.81	6.90	26.3	0.120	4.51	136.3	100
1056	<0.125	~0.37	<0.1	45.82	6.91	26.0	0.120	3.78	136.9	23
1059	<0.125	~0.37	<0.1	45.82	6.92	25.7	0.119	3.40	136.4	11
1102	<0.125	~0.37	<0.1	45.82	6.92	25.7	0.119	3.16	135.3	9.9

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: Bladder Pump **Tubing Type:** PE

SAMPLING DATA

SAMPLED BY (PRINT): Ping Frank / Clarence		SAMPLER(S) SIGNATURE(S):
SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 1103	SAMPLING ENDED AT:
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	
3	CG	40mL	HCl	VOCs

Groundwater Parameter Tolerances (if possible):

Turbidity: <10 NTUs
Temperature: +/- 5 °F
pH: +/- 0.1 Units
Specific Conductance: +/- 5%

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-22	SAMPLE ID: MW-22 C 60'	DATE: 9/13/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 70'	STATIC DEPTH TO WATER (ft): 42.53	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 1016	PURGE ENDED AT:	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)
1022	0.25	0.25	<0.1	42.56	5.37	23.4	0.080	2.56	200.4	>1,000
1025	<0.125	~0.375	<0.1	42.52	5.35	23.5	0.077	1.07	206.4	815
1028	<0.125	~0.375	<0.1	42.52	5.28	23.2	0.075	0.72	206.9	527
1031	<0.125	~0.375	<0.1	42.56	5.29	23.0	0.074	0.54	202.3	454

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: Bladder Pump **Tubing Type:** PE

SAMPLING DATA

SAMPLED BY (PRINT): Perry Frey / Clearwater	SAMPLER(S) SIGNATURE(S):	
SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 1032	SAMPLING ENDED AT: 1036
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
3	CG	40 mL	HCl	VOCs
~~3~~	~~CG~~	~~40 mL~~	HCl	
~~3~~	~~CG~~	~~40 mL~~	HCl	MEE
~~1~~	~~PE~~	~~250 mL~~	HNO3	Total Metals

Groundwater Parameter Tolerances (if possible):
Turbidity: <10 NTUs
Temperature: +/- 5 °F
pH: +/- 0.1 Units
Specific Conductance: +/- 5%

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

REMARKS:

~~1 PE 500mL~~

1 PE 500mL

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: SOURCE AREA
WELL NO: MW-23	SAMPLE ID: MW-23C 60'	DATE: 9/13/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 64'	STATIC DEPTH TO WATER (ft): 48.06 ~~48.07~~	WELL CAPACITY (gal/ft):
1 WELL VOLUME (gal) = (TOTAL WELL DEPTH - DEPTH TO WATER) X WELL CAPACITY = 0.658			
PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 0928	PURGE ENDED AT:	TOTAL VOL PURGED (gal): ~~0.375~~ ~0.375

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)	
0947	0.25	0.25	<0.1	48.11	5.36	21.9	0.315	2.64	65.6	330	
0950	<0.125	~~<0.125~~	<0.1	48.11	5.35	22.0	0.313	1.12	50.1	327	
0953	<0.125	~~<0.125~~	<0.1	48.11	5.35	22.0	0.312	0.94	47.9	315	
0956	<0.125	~~<0.375~~	<0.1	48.11	5.35	22.1	0.312	0.86	47.7	305	

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: Bladder Pump **Tubing Type:** PE

SAMPLING DATA

SAMPLED BY (PRINT): Perry Frix / Clearwater	SAMPLER(S) SIGNATURE(S):	
SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 0957	SAMPLING ENDED AT: 1004
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	
~~2~~ 3	CG	40mL	HCl	VOCs
~~2~~	CG	40mL	HCl	
~~2~~ 4	CG	40mL	HCl	MEE
1	PE	~~250mL~~	HNO_3	Total Metals

Groundwater Parameter Tolerances (if possible):
Turbidity: <10 NTUs
Temperature: +/- 5 °F
pH: +/- 0.1 Units
Specific Conductance: +/- 5%

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

REMARKS:
~~1 PE 500mL~~ Diss Metals
1 ~~PE 500mL~~ Ions + Alk.

Clearwater Environmental Resources, LLC

GROUNDWATER SAMPLING LOG

SITE NAME: RAYLOC		SITE LOCATION: RAILROAD
WELL NO: MW-24	SAMPLE ID: MW-24@30'	DATE: 9/12/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): ~~21.99~~	STATIC DEPTH TO WATER (ft): 21.99	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 1130	PURGE ENDED AT: 1155	TOTAL VOL PURGED (gal): ~0.37

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)	
1143	0.25	0.25	<0.1	22.03	5.34	21.1	0.129	5.56	237.4	106	
1146	<0.125	~0.375	<0.1	22.03	5.41	20.9	0.128	5.35	238.6	56	
1149	<0.125	~0.375	<0.1	22.03	5.34	20.8	0.127	5.19	239.7	50	
1152	<0.125	~0.375	<0.1	22.03	5.34	20.6	0.126	5.19	242.8	42	
1155	<0.125	~0.375	<0.1	22.03	5.33	20.4	0.126	5.12	244.1	37	

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: Bladder Pump	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT): Penny Fox / Clearwater	SAMPLER(S) SIGNATURE(S):

SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 1156	SAMPLING ENDED AT: 1201
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
#3	CG	40 mL	HCl	VOCs

Groundwater Parameter Tolerances (if possible):

Turbidity: <10 NTUs
Temperature: +/- 5 °F
pH: +/- 0.1 Units
Specific Conductance: +/- 5%

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 C60'	DATE: 9/12/16

PURGING DATA

WELL DIAMETER (in.): 2	TOTAL WELL DEPTH (ft): 67.6'	STATIC DEPTH TO WATER (ft): 22.74	WELL CAPACITY (gal/ft):

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

PURGE METHOD: Bladder Pump	PURGE INITIATED AT: 1358	PURGE ENDED AT: 1410	TOTAL VOL PURGED (gal): ~0.375

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)	
1401	0.25	0.25	<0.1	22.75	6.19	22.4	0.130	6.22	152	277	
1404	~0.125	~0.375	<0.1	22.75	6.18	21.7	0.128	2.97	141	114	
1407	~0.125	~0.375	<0.1	22.75	6.16	21.4	0.125	2.82	134	96	
1410	~0.125	~0.375	<0.1	22.75	6.14	21.2	0.127	2.73	130	118	

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: Bladder Pump	Tubing Type: PE

SAMPLING DATA

SAMPLED BY (PRINT): Perry Frix / Clearwater	SAMPLER(S) SIGNATURE(S):	
SAMPLING METHOD(S): Bladder Pump	SAMPLING INITIATED AT: 1411	SAMPLING ENDED AT: 1417
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	
3	CG	40mL	HCl	VOCs
2	CG	40 mL	HCl	
2	CG	40 mL	HCl	MEE
1	PE	250mL	HNO_3	Total Metals

Groundwater Parameter Tolerances (if possible): Turbidity: <10 NTUs; Temperature: +/- 5 °F; pH: +/- 0.1 Units; Specific Conductance: +/- 5%

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

REMARKS:

1 PE 500mL — Diss. Metals

1 PE 500mL — ~~Ions~~ + Alk.

APPENDIX E
X_2 REMEDIAL SYSTEM REPORT

Soil Remediation Status Report

Former Rayloc Facility Parts Disassembly Area

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

October 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 September 2016 are summarized in Table 1 below; note that the percent reduction calculations are based on the 9 confirmation sampling points. The SVE system has continued to operate efficiently during this reporting period. The activated carbon filter was recharged in April 2016 and is anticipated to need change out in November 2016. Table 2 presents the monthly carbon filter exhaust VOC reading.

The ISCO pilot system has shown encouraging results during the first 6 months of operation. As indicated in Table 1A, PCE mass in the pilot area was reduced by 79% during the first 12 months of SVE operations; Table 1B reveals that a similar 79% reduction in PCE mass was achieved during the first 6 months of ISCO *pilot scale* injection. It is apparent from the monthly data that PCE is migrating into the treatment zone from outside fringe areas as PCE concentrations decline.

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 extracted vapor is processed through an air-water separator, an air cooled heat exchanger, followed by fixed bed activated carbon vessel.

Analysis of operating results 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 its effectiveness in accelerating the degradation of PCE in areas of higher concentration in the western portion of the treatment zone. 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 subsequently performed with the volume being adjusted based on observed results.

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.

The pilot study involved injection of oxidation reagents, sodium persulfate and hydrogen peroxide, in 3 existing injection wells as illustrated in Exhibit I. The existing injection wells are approximately 15 feet deep and are comprised of 1-inch diameter PVC riser pipe with a screened interval between 15-20 feet. Each injection well was fed by a single batch tank to allow for volume monitoring. Persulfate was injected as a 10 % solids solution in 30 gallon batches; Peroxide was injected as an 8% solution in 40 gallon batches; Ferrous iron was included as a catalyst. The injection was sequenced with alternating peroxide batches and 2 persulfate batches in each of the 3 wells. Approximately 1,800 gallons of persulfate and 1,152gallons of peroxide were used during the pilot study.

Table 1B provides a comparison of the March 2016 soil analytic levels with the September 2016 results. During the initial 6 months of operations, PCE mass in the pilot area was reduced by 79%. Exhibits 2 – 5 present the trend graphs for VOC, PCE, Cis-1,2 and TCE respectively.

Table 1A. PCE Mass Reduction Performance of SVE System

Location	Baseline 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*	33.79	1.92	38.3	2.18	-13.35
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
		139.27		264.32	-89.78

Table 1B. PCE Mass Reduction Performance of ISCO Pilot

Location	Baseline PCE Conc. mg/kg	3/10/2016 PCE Mass kg	Confirmation PCE Conc. mg/kg	9/7/2016 PCE Mass kg	% PCE Reduction
WD-2*	38.3	2.18	3.95	0.22	89.69
WD-4*	1280	29.14	99	2.25	92.27
WD-8*	2590	73.70	29	0.83	98.88
WD-11*	238	5.29	10.1	0.22	95.76
PD-2*	1.11	0.01	0	0.00	100.00
ADD1-6	22.5	0.77	27.2	0.93	-20.89
ADD1-10	13.7	0.78	40.2	2.29	-193.43
ADD2-5	3830	108.98	1690	48.09	55.87
ADD2-10	764	43.48	11.4	0.65	98.51
		264.32		55.48	79.01

Table 2. PDA Carbon Filter Exhaust VOC Concentrations ppm

5/10/2016	6/9/2016	7/6/2016	8/4/2016	9/7/2016
0	0	0	1.1	6.2

VOC readings are obtained at the exhaust pipe using a MultiRAE PID.

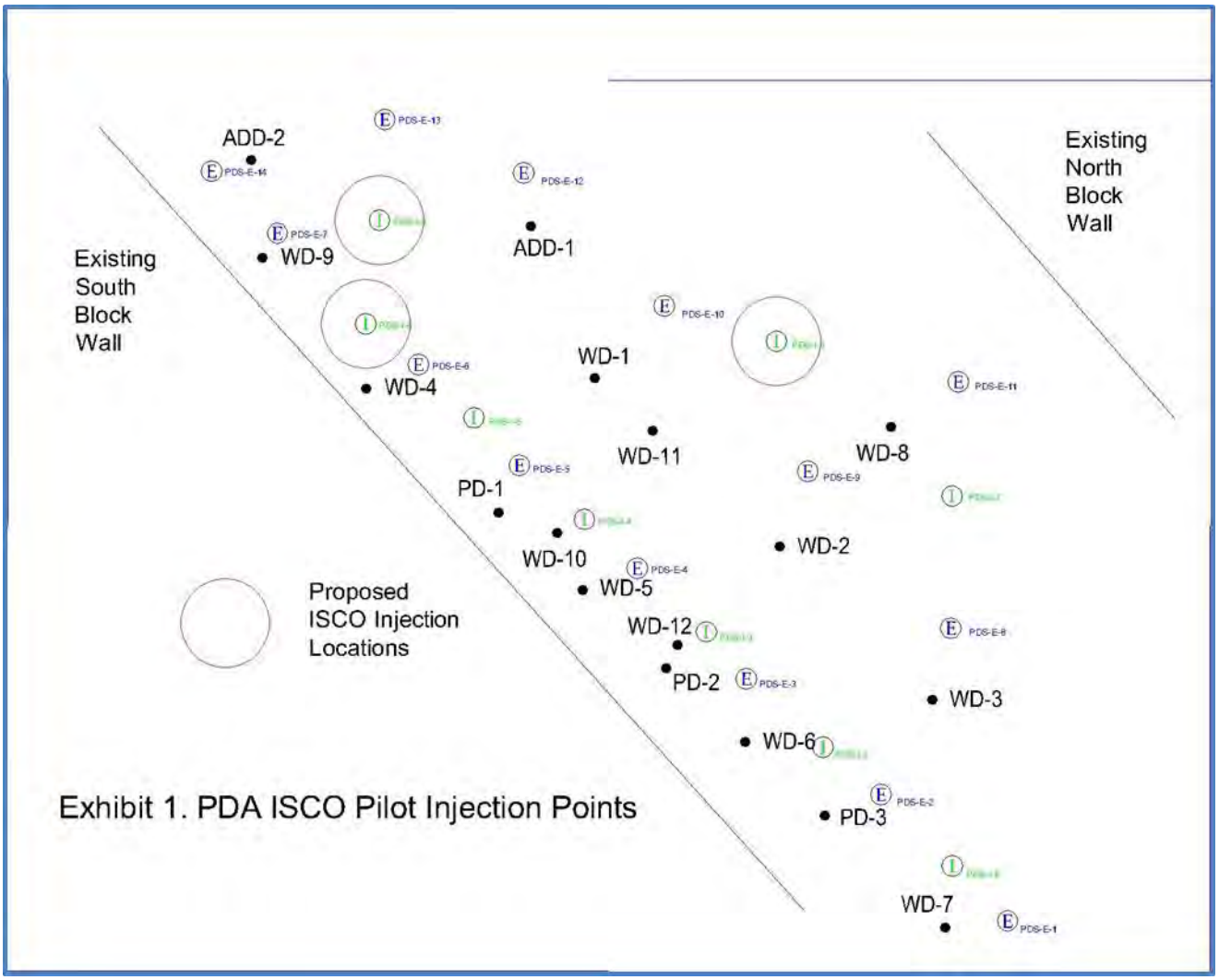


Exhibit 1. PDA ISCO Pilot Injection Points

Exhibit 2.

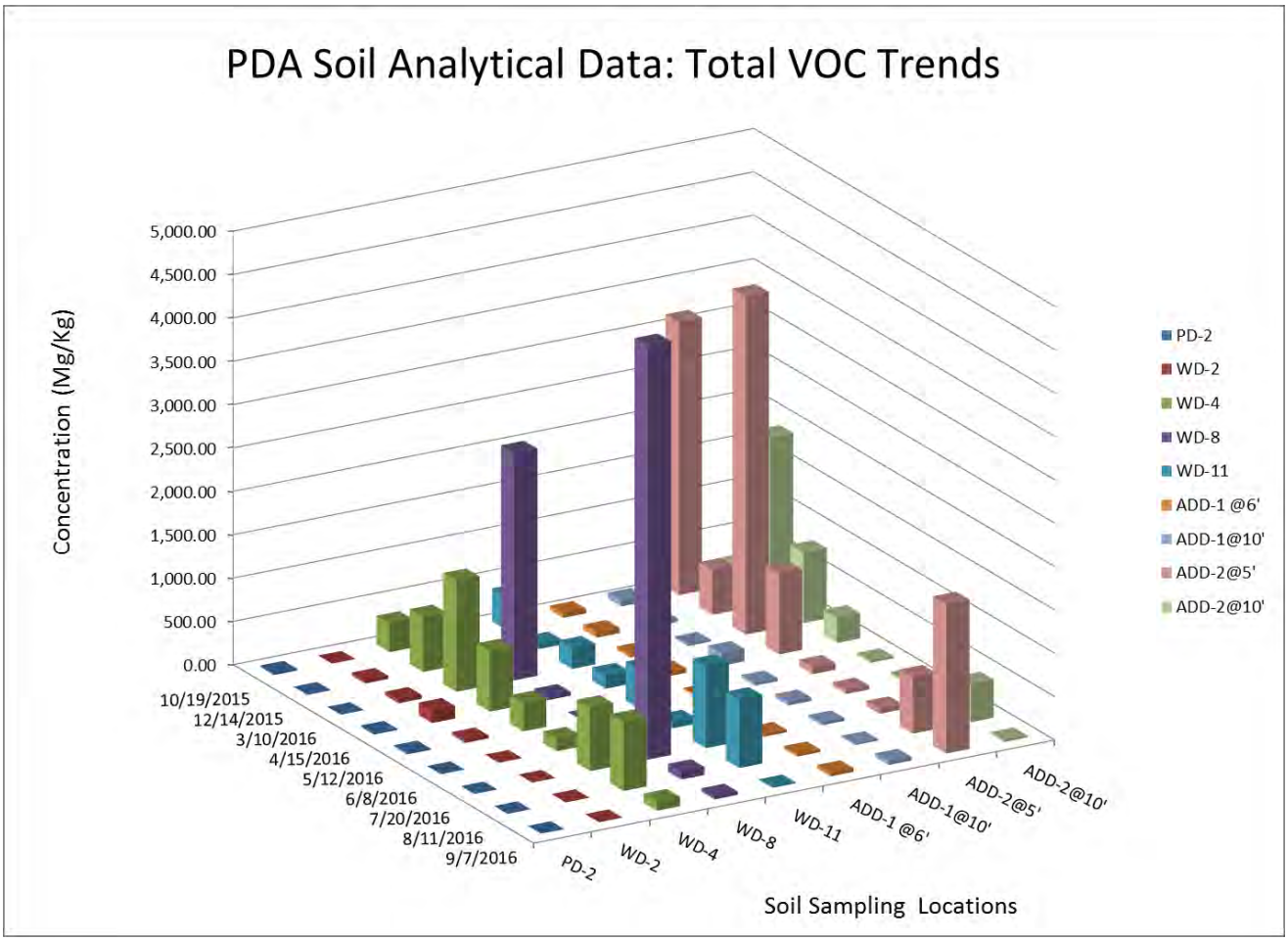

PDA Soil Analytical Data: Total VOC Trends
Concentration (Mg/Kg)
5,000.00
4,500.00
4,000.00
3,500.00
3,000.00
2,500.00
2,000.00
1,500.00
1,000.00
500.00
0.00
10/19/2015
12/14/2015
3/10/2016
4/15/2016
5/12/2016
6/8/2016
7/20/2016
8/11/2016
9/7/2016
PD-2
WD-2
WD-4
WD-8
WD-11
ADD-1 @6'
ADD-1@10'
ADD-2@5'
ADD-2@10'
Soil Sampling Locations

Exhibit 3.

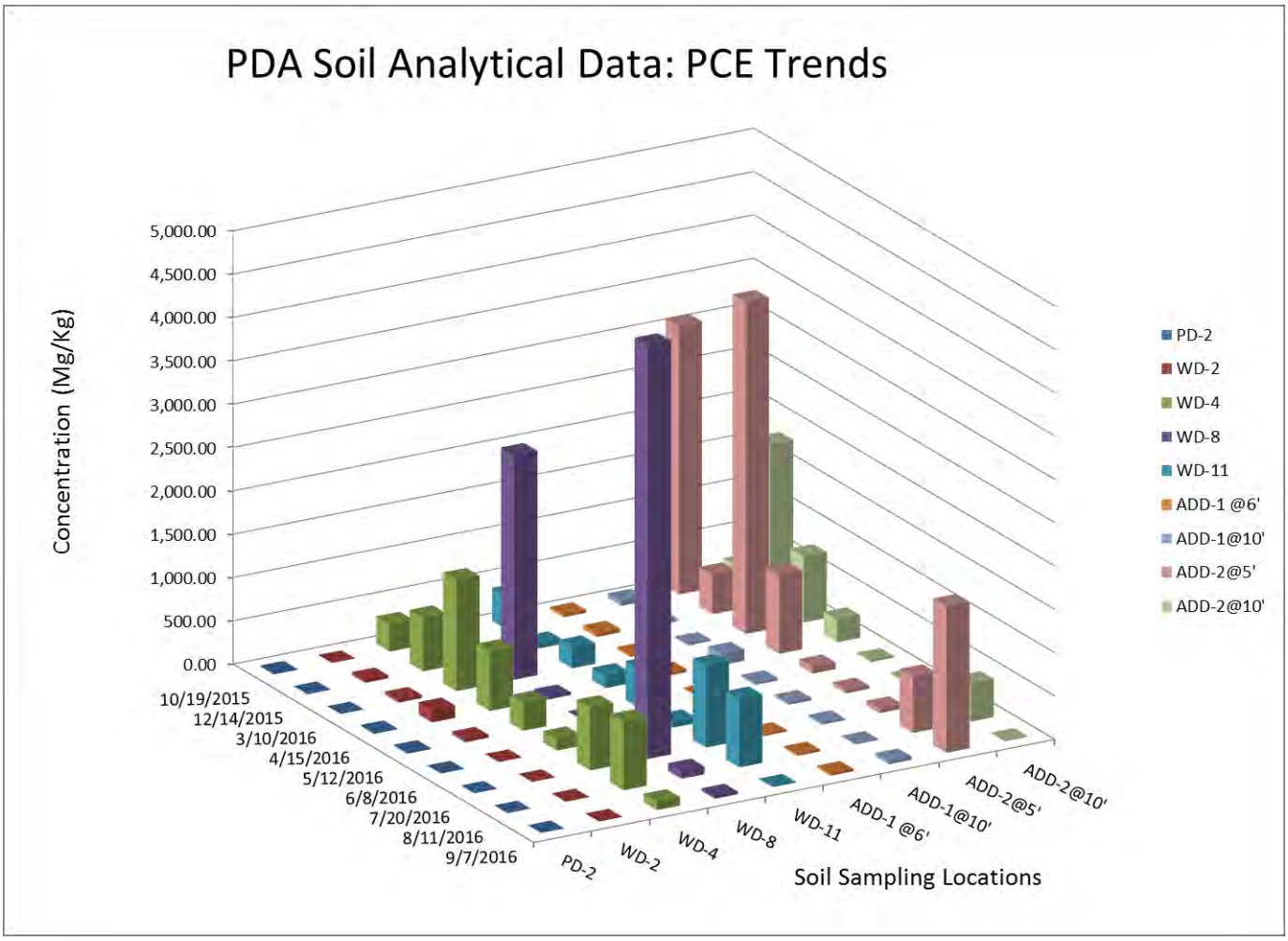

PDA Soil Analytical Data: PCE Trends
Concentration (Mg/Kg)
5,000.00
4,500.00
4,000.00
3,500.00
3,000.00
2,500.00
2,000.00
1,500.00
1,000.00
500.00
0.00
10/19/2015
12/14/2015
3/10/2016
4/15/2016
5/12/2016
6/8/2016
7/20/2016
8/11/2016
9/7/2016
PD-2
WD-2
WD-4
WD-8
WD-11
ADD-1 @6'
ADD-1@10'
ADD-2@5'
ADD-2@10'
Soil Sampling Locations

Exhibit 4.

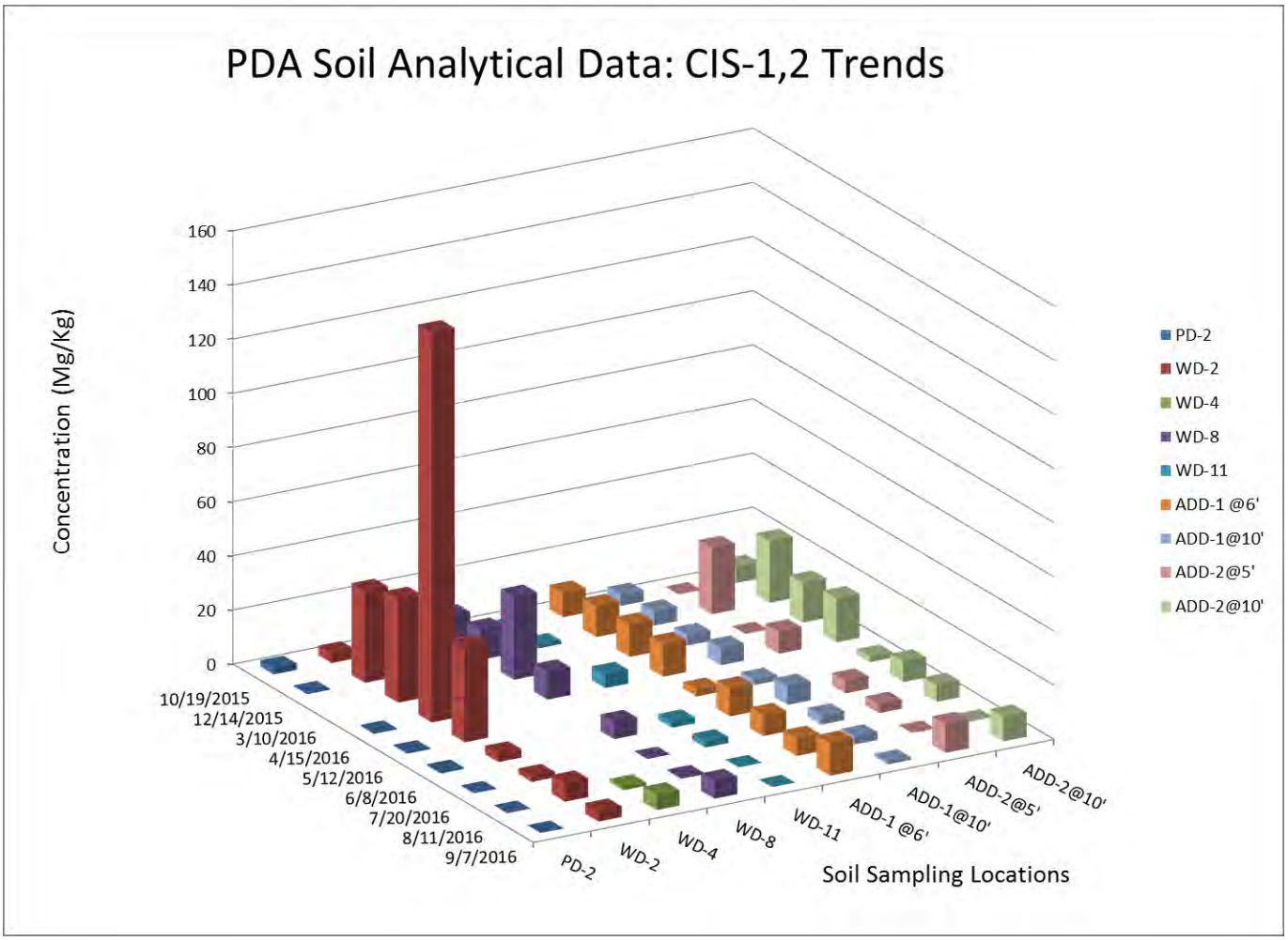
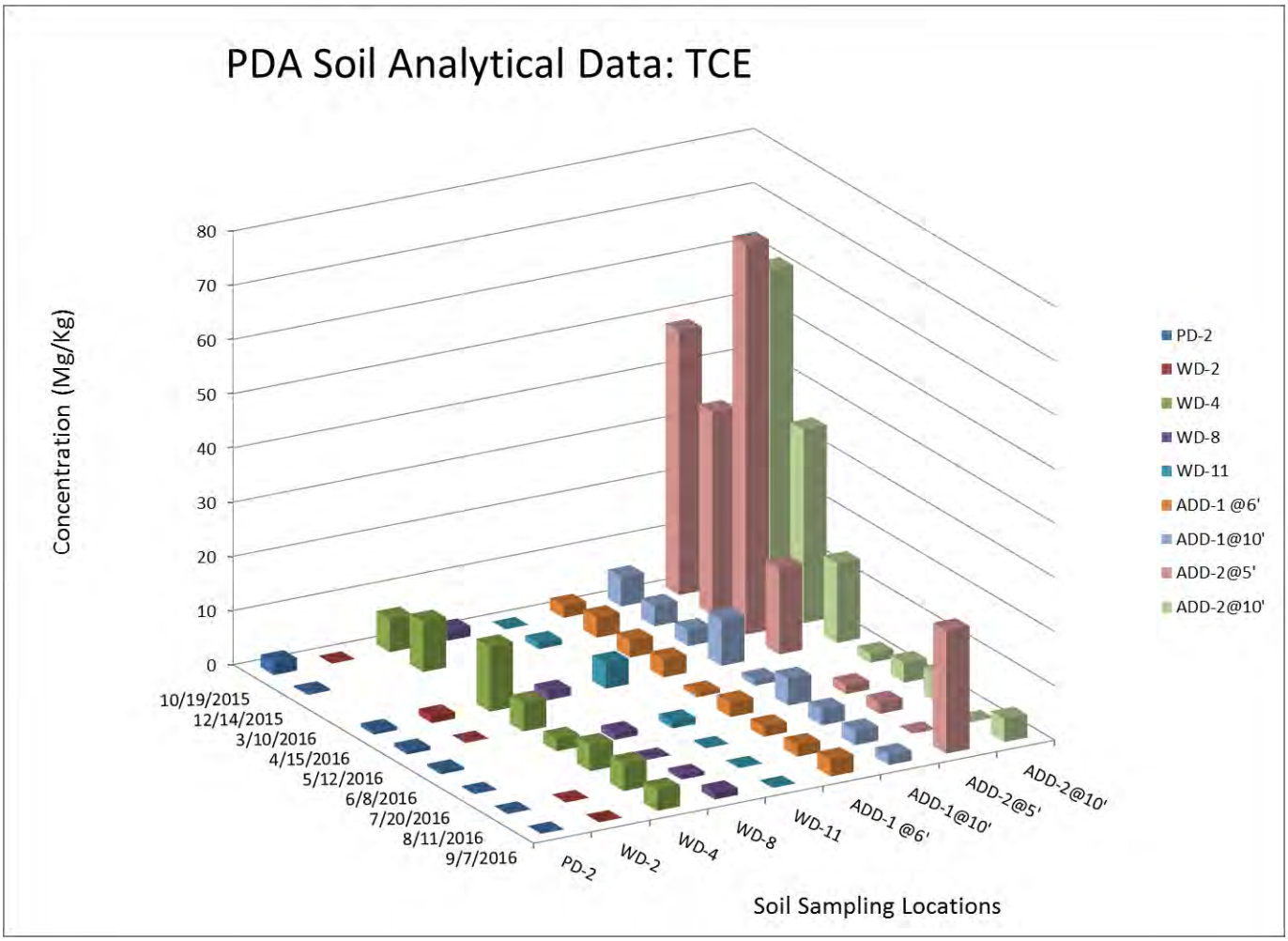

PDA Soil Analytical Data: CIS-1,2 Trends
Concentration (Mg/Kg)
160
140
120
100
80
60
40
20
0
10/19/2015
12/14/2015
3/10/2016
4/15/2016
5/12/2016
6/8/2016
7/20/2016
8/11/2016
9/7/2016
PD-2
WD-2
WD-4
WD-8
WD-11
ADD-1 @6'
ADD-1@10'
ADD-2@5'
ADD-2@10'
Soil Sampling Locations

Exhibit 5.


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
4/15/2016
5/12/2016
6/8/2016
7/20/2016
8/11/2016
9/7/2016
PD-2
WD-2
WD-4
WD-8
WD-11
ADD-1 @6'
ADD-1@10'
ADD-2@5'
ADD-2@10'
Soil Sampling Locations