CLEARWATER ENVIRONMENTAL RESOURCES, LLC

SEMI-ANNUAL
PROGRESS REPORT NO. 9
VOLUNTARY REMEDIATION PROGRAM

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

CLEARWATER PROJECT NO. 1502-1-3

Prepared For:

Genuine Parts Company
2999 Circle 75 Parkway
Atlanta, Georgia 30339

Prepared By:

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

APRIL 10, 2018

CLEARWATER ENVIRONMENTAL RESOURCES, LLC

April 10, 2018

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 1054 East
Atlanta, GA 30334

Subject: **Semi-Annual Progress Report No. 9**
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 9th Semi-Annual VRP Progress Report for the Rayloc facility. This report describes the actions taken at the site since the 8th Semi-Annual VRP Progress Report was submitted on October 4, 2017.

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 INTRODUCTI ON

A Voluntary Remediation Plan 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 an aerial map showing the site and surrounding area.

Clearwater has successfully completed excavation of impacted soils identified outside of the Rayloc building during the PPCAP investigation. A groundwater pilot study is underway to provide more effective groundwater remediation, the results of which will be discussed in the next VRP report.

1.1 Groundwater Sampling Protocol

Groundwater sampling activities at the Rayloc Facility are completed using Passive Diffusion Bags (PDBs) as approved by the Georgia EPD. Clearwater understands that PDBs may be used for periodic sampling but cannot be used to certify risk reduction standards (RRSs).

PDB samplers are made of low density polyethylene (LDPE), which acts as a semi-permeable membrane. Volatile organic compounds (VOCs), excluding certain ketones, ethers and alcohols, diffuse readily through the membrane. An equilibrium is established between the VOCs in the bag and those in the groundwater. The PDB Sampler is filled with analyte-free water and is in the shape of a long cylindrical tube.

Clearwater completes field sampling logs for each well which include the trade name of the PDB, the date, the height of the water column when deployed and again when recovered, the depth at which the PDB was suspended, the depth to the top and bottom of the screened interval, and finally the condition of the PDB when recovered.

The PDBs are suspended within the screened interval, and new PDBs are suspended at the same depth as the previous PDBs unless available data suggests one or more PDBs should be repositioned.

Upon retrieval (usually at least 14 days after deployment) bags are opened to fill vials that are submitted for laboratory analysis. This method was selected based on the target depth of the samples and the objective of minimizing investigation-derived waste (IDW).

Following collection in laboratory-supplied containers, groundwater samples are stored on ice as a preservative and delivered to the designated lab under chain-of-custody protocols.

2.0 MILESTONES COMPLETED SINCE OCTOBER 4, 2017

Although remedial activities are ongoing and under constant review for effectiveness, no milestones have been completed since October 4, 2017.

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 Vapor-Intrusion Investigation (offsite)

As requested in the March 16, 2018 Georgia Environmental Protection Division (EPD) *Request for Additional Vapor Intrusion Data* letter, Clearwater presents the requested information as follows. Please refer to Figure 2 for a Site Map illustrating Soil-Vapor Locations Showing Detections, Table 1 for a Summary of Soil-Vapor Sampling Results, and Appendix A for the Soil-Vapor Laboratory Reports and Risk Calculations.

The specific source for the EPA allowed indoor air values was the October 2002 Regional Screening Levels (RSLs).

The Atlas Geo-Sampling Company conducted the Vapor-Intrusion Sampling. Their sampling protocol is as follows:

Sub-slab vapor implant installation procedures (with Helium leak test)

1. Locate appropriate areas (clear of utilities) for the vapor implant installation.
2. Drill thru the concrete slab with a hand held hammer drill (1" diameter drill bit.)
3. Remove any sub-slab gravel or soil to allow placement of sub slab vapor implant (approximately 4" to 6" deep).
4. Install vapor implant (constructed of either steel or porous plastic) and attach 1/8" or ¼" tubing from the implant to above the concrete slab.
5. Place sand around the implant (to allow for porous zone for vapor migration), sand should be brought to approximately 1" above the top of the implant.
6. Place granular bentonite seal (approximately 2" to 3" thick) above the sand, hydrate bentonite with water.
7. Wait a minimum of 30 minutes to allow bentonite to hydrate.
8. Install grout seal above the bentonite layer and bring the grout seal to ground surface.
9. Allow a minimum of 8 hours for grout seal to set prior to conducting helium leak test.

Helium leak test procedure

1. Place helium leak test shroud over the sub-slab vapor implant and port the implant thru the shroud.
2. Fill the leak test shroud with helium and begin purging the vapor implant (using a syringe or low flow pump).
3. Fill a tedlar bag with the soil vapor coming from the implant, close the tedlar bag.
4. Check the soil vapor within the tedlar bag for the presence or absence of helium using a helium detector.
5. If the soil vapor within the tedlar bag indicates high levels (>10 % of the shroud concentration) of helium then the integrity of the grout seal around the implant should be checked and repaired (helium in the soil vapor indicates that there is air leakage between the implant and the indoor air). If the soil vapor indicates no helium is

present, the integrity of the borehole seal is good and the implant can be sampled. Low levels of helium may be present due to the fact that concrete is a semi-porous material.

The sampling locations chosen for each of the offsite buildings was based on two criteria: first Clearwater attempted to choose locations within the buildings nearest the Rayloc groundwater plume, and; second Clearwater attempted to minimize disrupting the business operations which was further restricted by access limitations imposed by the property owners.

At B&D Concrete the sample location was collected from the warehouse area due to the ease of access.

At the time that these samples were collected, there was not an established recommended standard for a number of samples. Clearwater planned to collect one sub-slab sample from each building, and if there were exceedances of concern then additional samples would be collected.

3.2 Source Area Remediation

Due to additional site work and contractual requirements necessary to prepare for the planned soil blending remediation of the source area discussed in previous reports, Clearwater has scheduled the soil blending work for 2018.

Clearwater is currently in the process of conducting an in-situ Pilot Study in the Source Area in order to ensure that the planned mechanical mixing process and the chemical formula to be used will provide the necessary results. This Pilot Study is being conducted in the worst case location near the floor of the former waste pit. Upon receipt of results of the confirmation laboratory samples, the decision will be made as to whether these processes and chemicals will be used or whether additional study needs to be conducted.

Once the Pilot Study has provided the necessary results, the full scale soil-blending activities will commence. This work will include excavation and treatment of the top 30 to 35 feet of impacted soil and in-situ treatment of impacted soil from 30 or 35 to 45 feet with the proven process and chemical formula. Clearwater anticipates that this work will be completed within two to three months, weather permitting.

Clearwater has continued the gravity fed in-situ chemical oxidation (ISCO) using sodium persulfate in six (6) existing injection wells in the source area in an attempt to accelerate the groundwater remedial process. This work was initiated in order to best utilize the existing groundwater injection wells in the source area prior to losing them to the soil blending project when they will be removed to allow the soil blending activities. Clearwater will continue this source area remedial effort until the soil blending activities begin.

3.2 Former Parts Disassembly and Cleaning Area (PDA) 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.

Since March 2016, 90% of the PCE mass in the treatment area has been reduced. To expedite the remaining PCE, a gravity fed in-situ chemical oxidation (ISCO) using sodium persulfate and hydrogen in existing injection wells was initiated in January 2017 in seven injection wells instead of just three. Effluent from the activated carbon exhaust was non-detect or minimal. Please refer to Table 8 for the Monthly Effluent Air Effluent Sampling Results.

Due to a lack of effectiveness likely attributable to the tight geologic formation, Clearwater terminated the X2 AS/SVE Remedial System in January 2018 and is in the process of determining a more effective solution.

Clearwater has collected verification soil samples from the same locations within the PDA area quarterly to compare results allowing X2 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 December 2017 sampling event results. December 2017 PDA laboratory data is located in Appendix B.

3.3 Groundwater Remedial System

In early October 2015, as part of the November 12, 2015 Performance Management Plan (PMP), Clearwater collected groundwater samples from the twenty (20) compliance wells at the Rayloc facility. These compliance wells were sampled again in November 2017. Please refer to Figure 5 for the November 2017 Compliance Groundwater Sampling Results, Table 5 for a Summary of the November 2017 Compliance Groundwater Sampling Results and the November 2017 Compliance Groundwater Laboratory Report and Sampling Logs are located in Appendix D. Please refer to Figure 6 for the October 2015 Potentiometric Surface Map, Figure 7 for the October 2017 Potentiometric Surface Map, Figure 8 for the October 2015 PCE Isoconcentration Map and Figure 9 for the November 2017 Isoconcentration Map.

As evidenced by the 2017 isoconcentration map, the results from the X2 Groundwater Remedial System, have not produced evidence of persistent dissolved constituent reduction. Therefore, in August of 2017 Clearwater terminated the X2 Groundwater Remedial System due to a lack of effectiveness likely attributable to the tight geologic formation and is in the process of performing a pilot study to determine a more effective solution that includes using a gravity fed system.

The detection of PCE in the new monitoring well MW-26 will be further investigated to determine whether this is due to Rayloc or may be due to another facility. Regardless, Clearwater will attempt to delineate this detection and ascertain its source.
Please refer to Table 3 for a Summary of Monitoring Well and Groundwater Elevations, Table 4 for the September 2017 X2 Remedial System Sampling Results. The September 2017 X2 Groundwater Remedial Laboratory Report and Sampling Logs are located in Appendix C.

3.4 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 (the PDA) is being addressed as discussed in Section 3.2.

3.5 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 PDA. This Area is located in a part of the Rayloc building that is not in use by the current owner. 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.

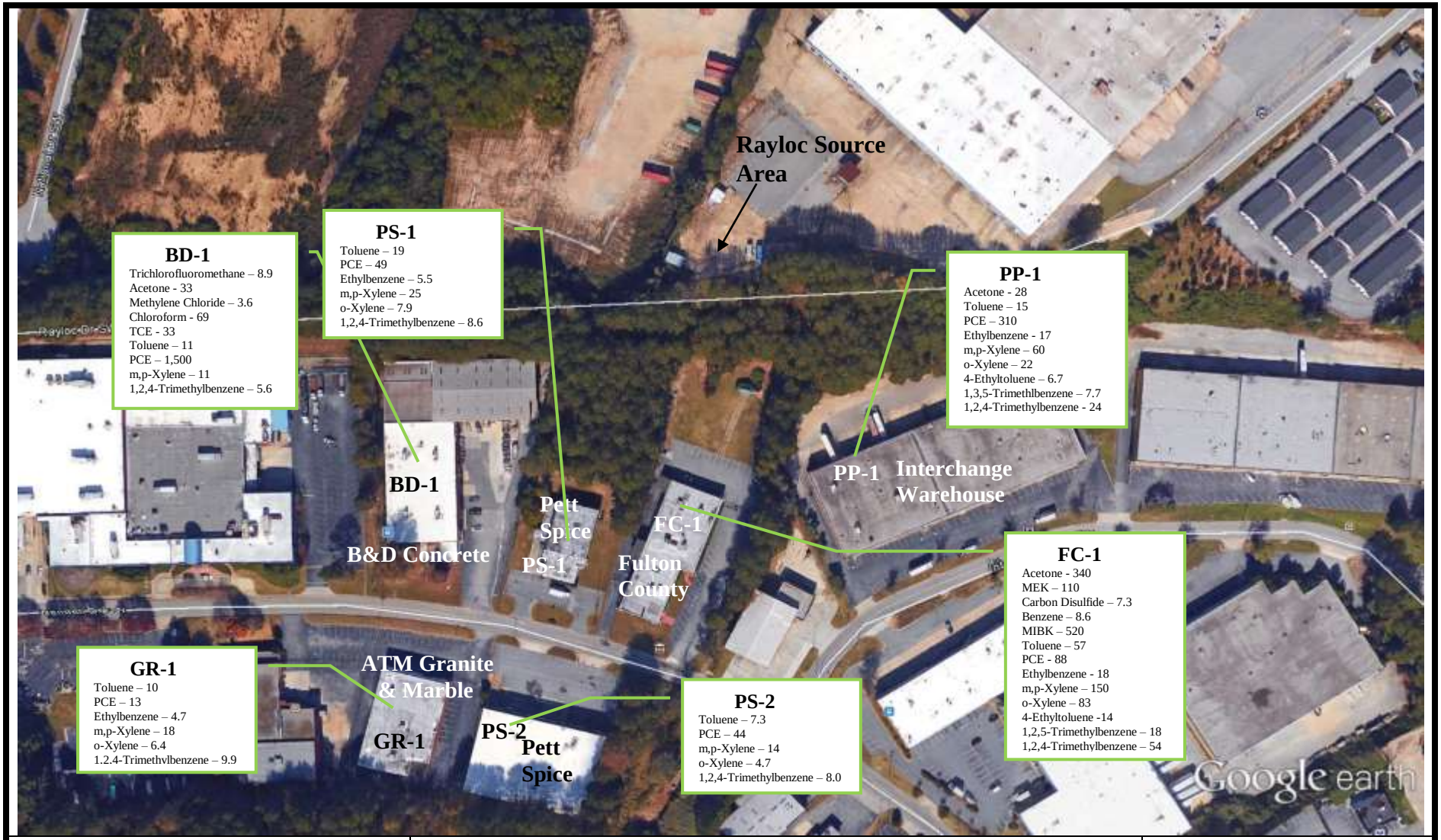
Jack A. Wintle P.G.
Senior Environmental Geologist

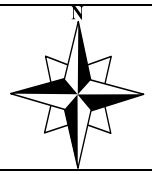
Date: April 10, 2018

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		



Legend	Figure 2 – Soil-Vapor Sample Locations w/Detections	Scale
Map Source: Google Earth - 1993 	600 Rayloc Drive Atlanta, Georgia	Not to Scale
Project No.: 1520-3-1	Prepared by: JAW	**CLEARWATER ENVIRONMENTAL RESOURCES, LLC** **3870 Peachtree Industrial Boulevard Suite 340139 Duluth, Georgia 30096**

ADD-2	5'	10'
Cis -	<2.34	3.65
PCE -	1,970	25.3
TCE -	3.09	3.48
VC -	<2.34	<0.250

ADD-1	6'	10'
Cis -	6.66	8.95
PCE -	197	318
TCE -	4.28	34.6
VC -	<2.33	<0.233

WD-11 @ 10'	
Cis -	10.30
PCE -	1970
TCE -	36.2
VC -	<2.34

WD-8 @ 5'	
Cis -	1.22
PCE -	86.9
TCE -	0.823
VC -	<0.244

WD-4 @ 10'	
Cis -	6.53
PCE -	840
TCE -	17.7
VC -	<0.231

WD-2 @ 10'	
Cis -	0.682
PCE -	75.3
TCE -	1.62
VC -	<0.237

PD-2 @ 10'	
Cis -	<0.222
PCE -	2.89
TCE -	<0.222
VC -	<0.222

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

LOCATION OF FORMER
PARTS DISASSEMBLY
AND CLEANING AREA

LEGEND

- Soil Sample Boring
- Injection/Extraction Well

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

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

Results in ppm

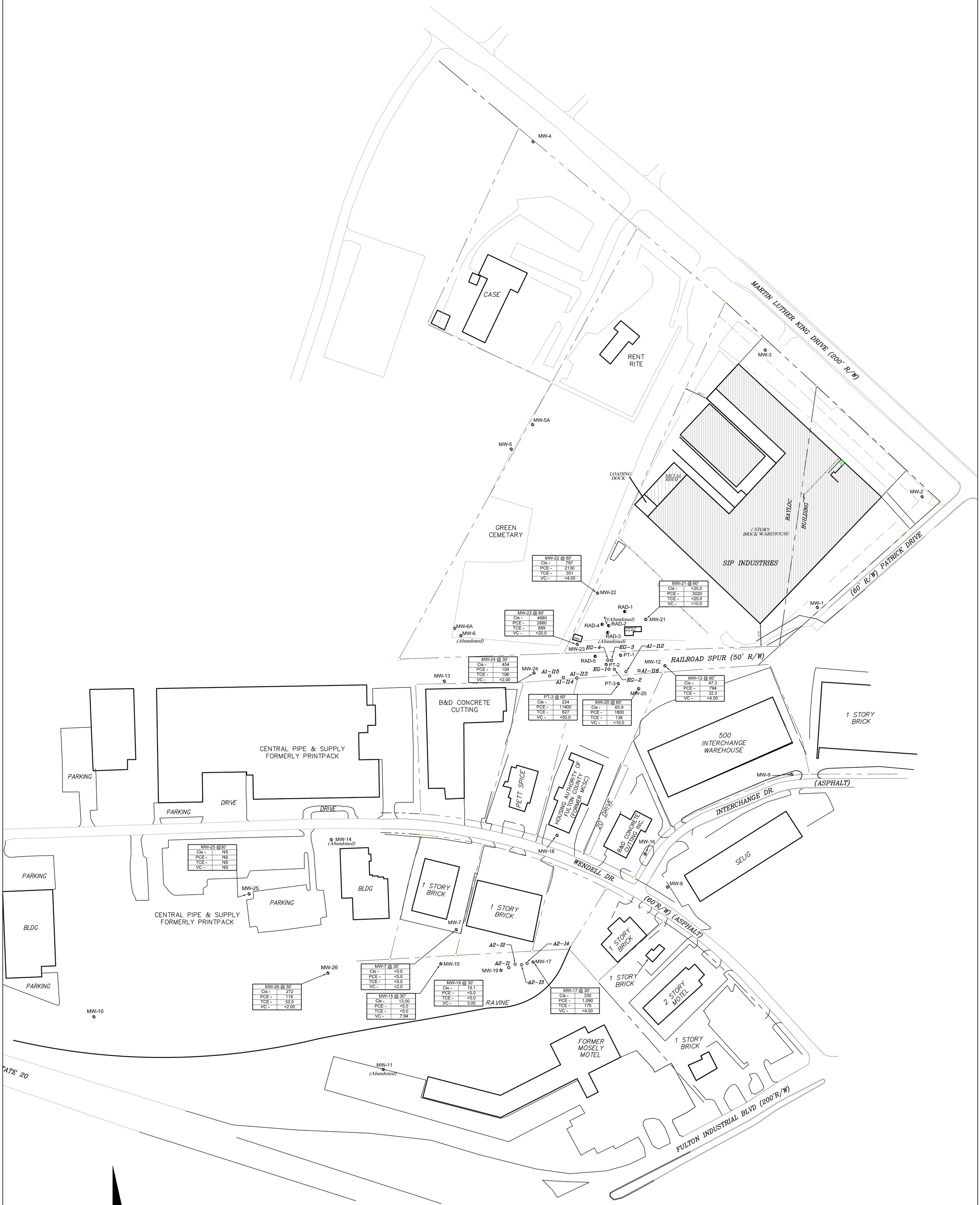
0 5' 10'
Approximate Scale In Feet

N

Note: PDA Sampling Results (Dec 2017)

CLEARWATER ENVIRONMENTAL RESOURCES, LLC	*Drawing:* Rayloc_PDA 4-9-2018.dwg	FIGURE 3
	Revision #: 0	DECEMBER 2017 PDA Sampling Results
	Date: 04/2018	RAYLOC FACILITY
	Project #: 1502-1-3	APRIL 2018 VRP

Rayloc_PDA 4-9-2018.dwg



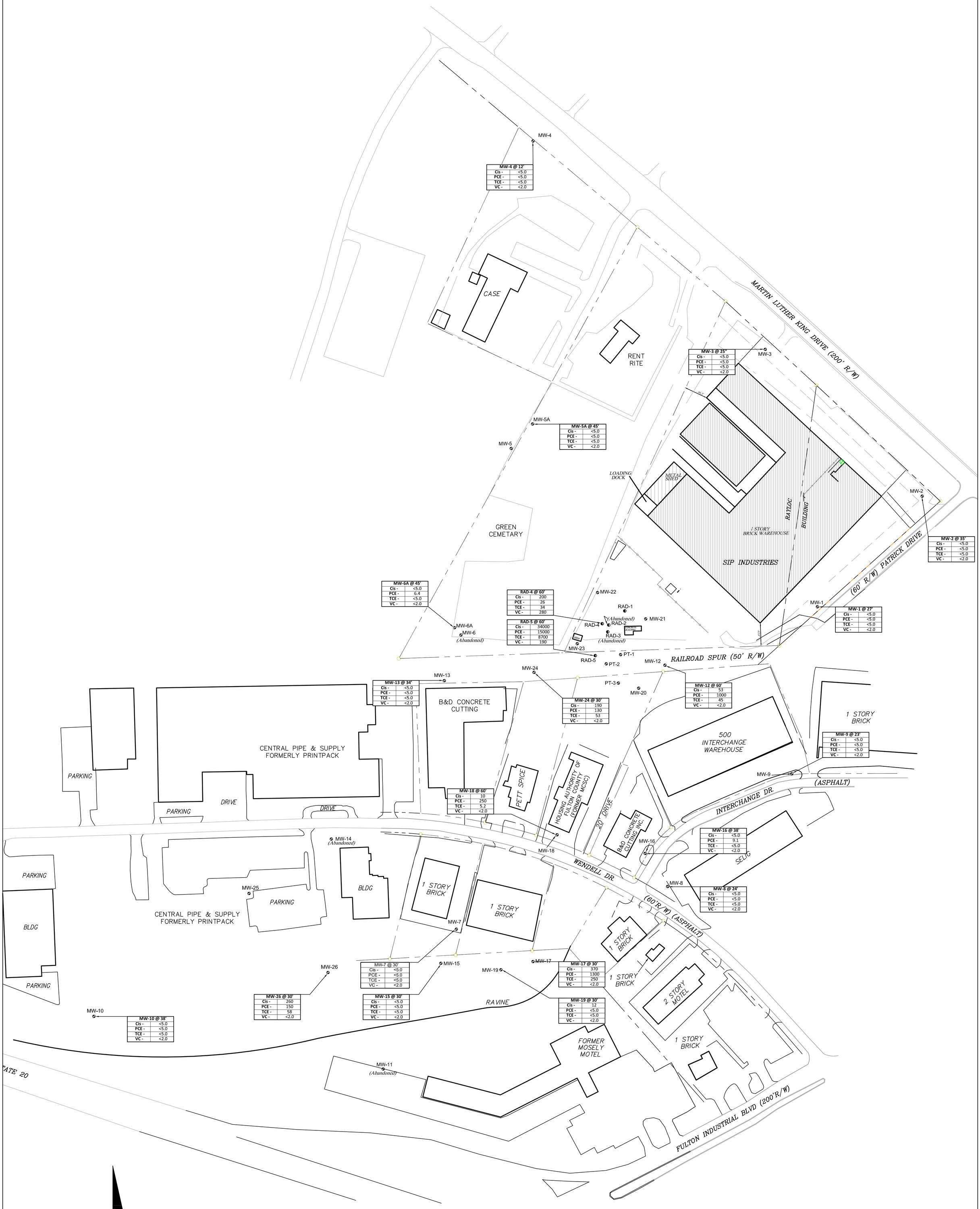
CLEARWATER ENVIRONMENTAL RESOURCES, LLC

Drawing:	Rayloc 04-03-2018.dwg	FIGURE 4
Revision #:	0	SEPTEMBER 2017 REMEDIAL SYSTEM SAMPLING RESULTS
Date:	09/2017	RAYLOC FACILITY
Project #:	1502-1-3	APRIL 2018 VRP

Rayloc 04-03-2018.dwg

Clearwater Environmental Resources, LLC
October 2015

Genuine Parts Company
Atlanta, GA



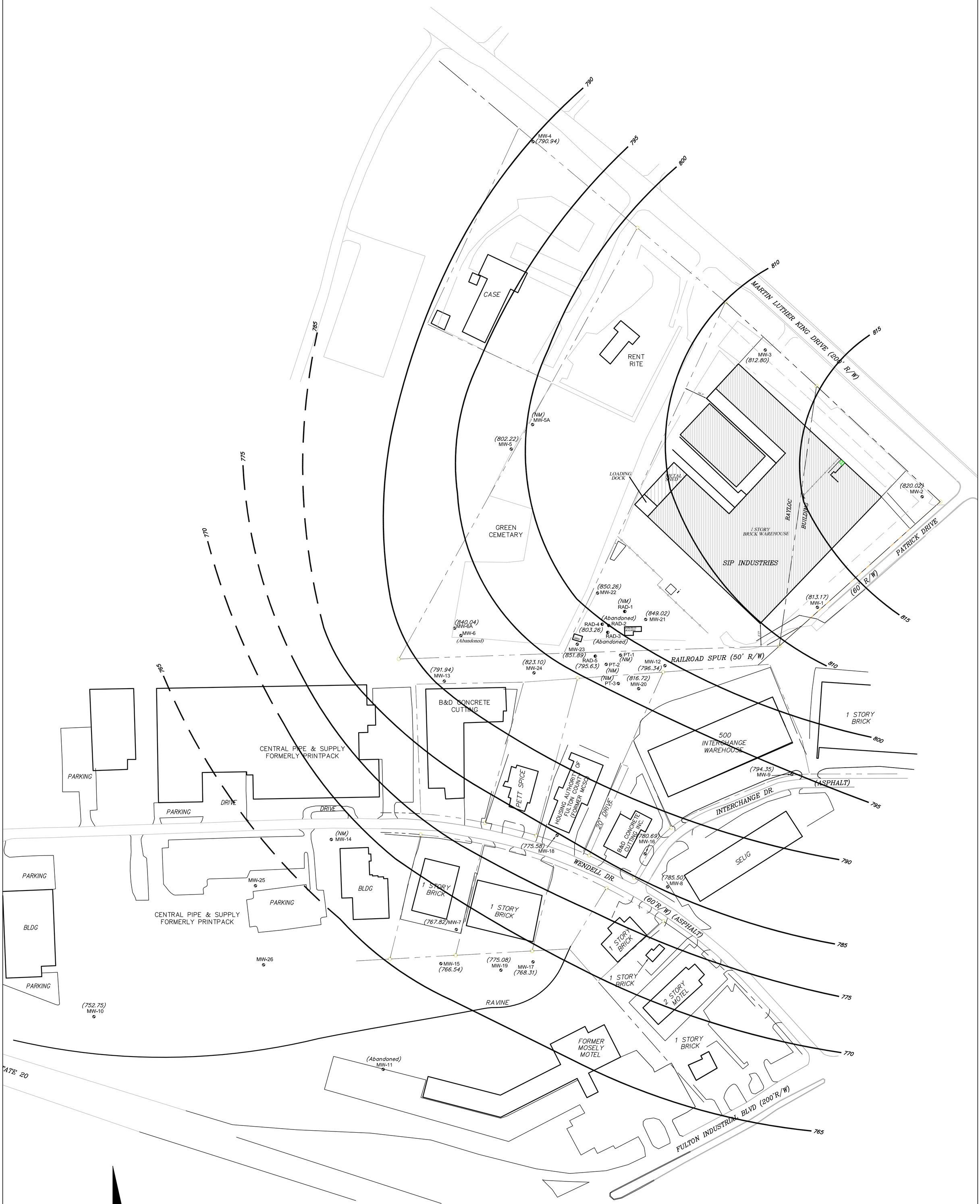
Rayloc 04-03-2018.dwg

CLEARWATER ENVIRONMENTAL RESOURCES, LLC

Drawing:	Rayloc 04-03-2018.dwg	FIGURE 5
Revision #:	0	NOVEMBER 2017 X_2 COMPLIANCE SAMPLING RESULTS
Date:	03/2017	RAYLOC FACILITY
Project #:	1502-1-3	APRIL 2018 VRP

Clearwater Environmental Resources, LLC
September 2016

Genuine Parts Company
Atlanta, GA



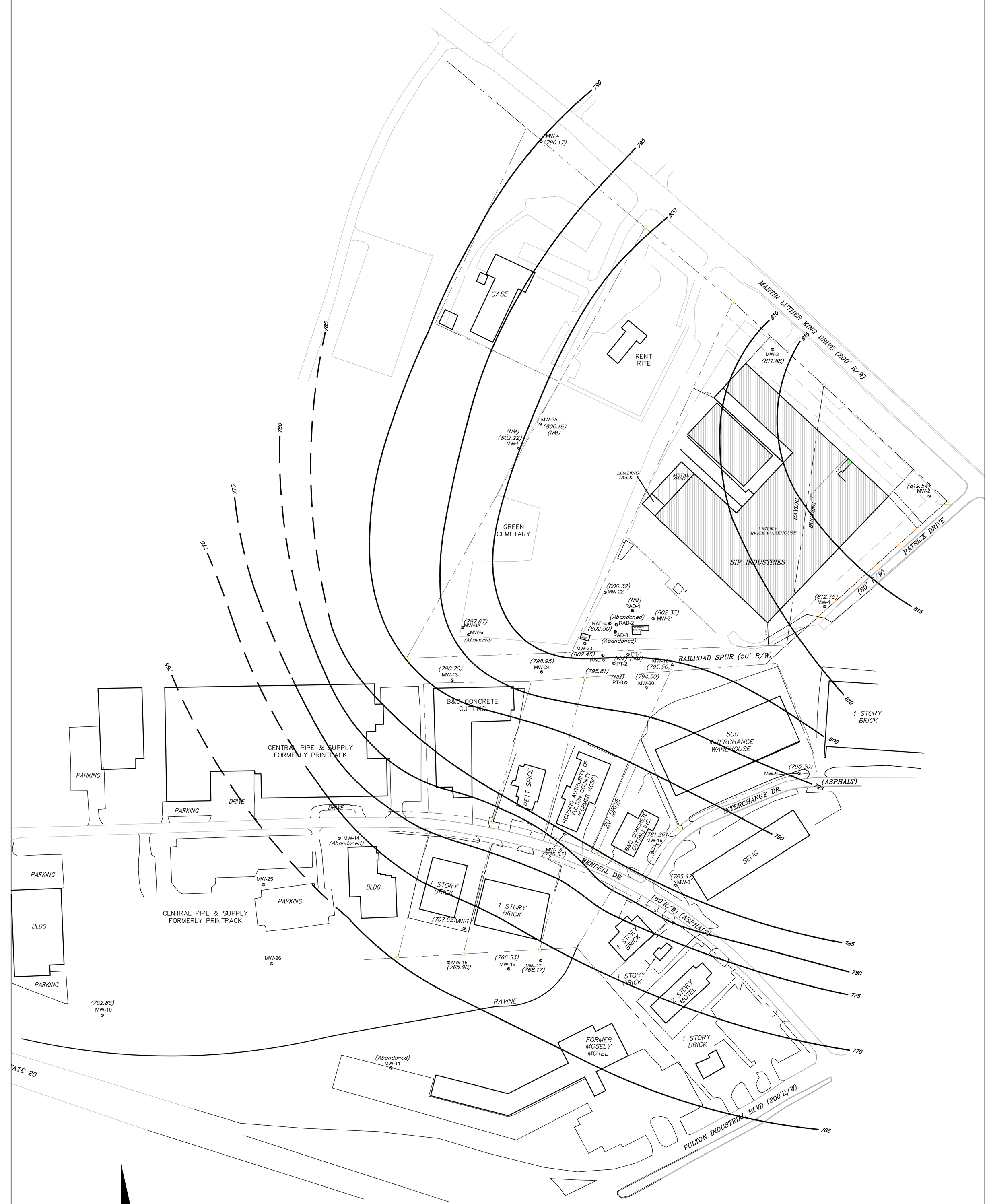
CLEARWATER ENVIRONMENTAL RESOURCES, LLC

Drawing: Rayloc 12-08-2017.dwg	FIGURE 6
Revision #: 0	OCTOBER 2015 POTENTIOMETRIC-SURFACE MAP
Date: 03/2017	RAYLOC FACILITY
Project #: 1502-1-3	APRIL 2018 VRP

Rayloc 12-08-2017.dwg

Clearwater Environmental Resources, LLC
October 2015

Genuine Parts Company
Atlanta, GA



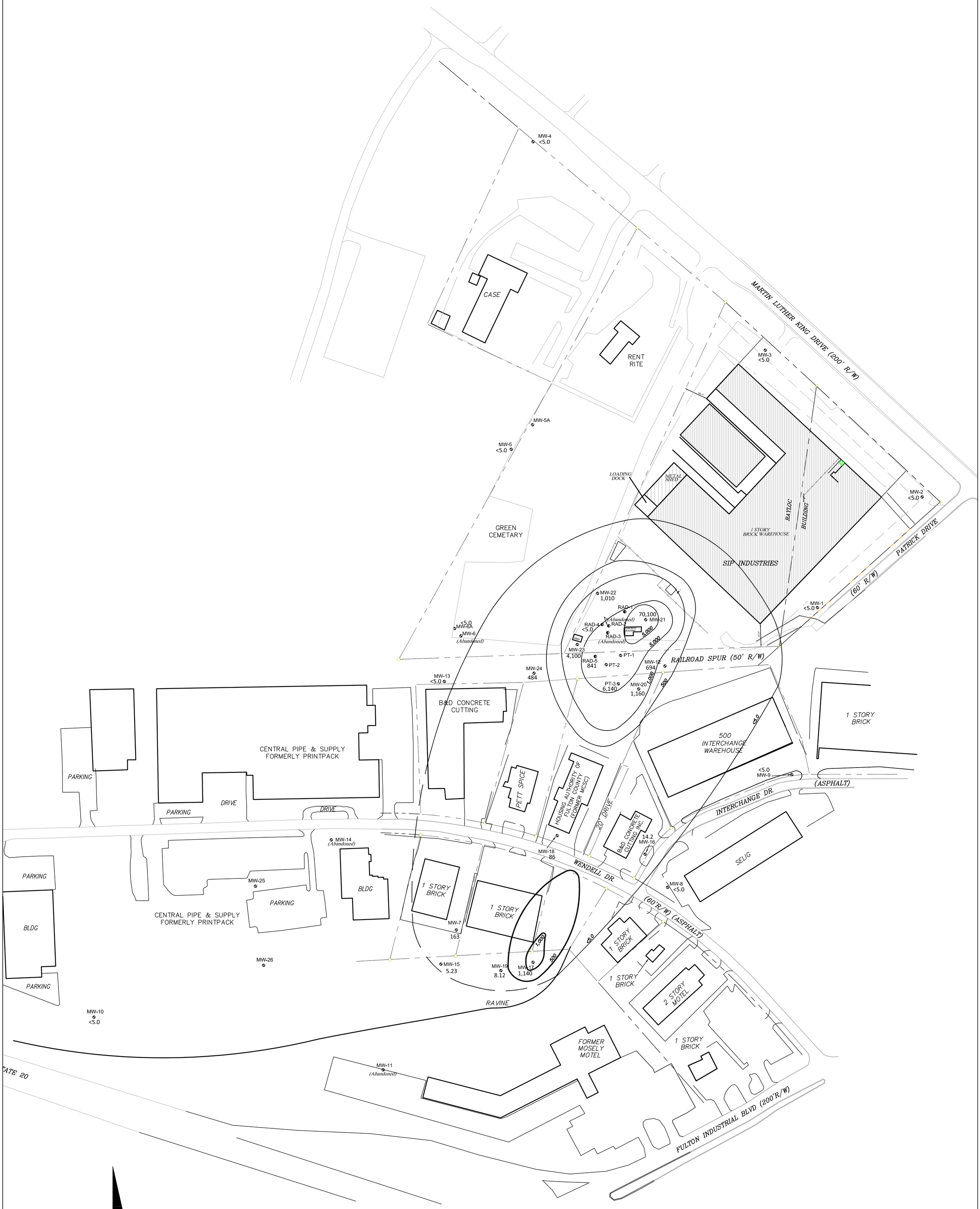
CLEARWATER ENVIRONMENTAL RESOURCES, LLC

Drawing: Rayloc 12-08-2017.dwg		FIGURE 7
Revision #:	0	**OCTOBER** 2017 POTENTIOMETRIC-SURFACE MAP
Date:	03/2017	RAYLOC FACILITY
Project #:	1502-1-3	**APRIL 2018 VRP**

Rayloc 12-08-2017.dwg

Clearwater Environmental Resources, LLC
October 2015

Genuine Parts Company
Atlanta, GA



LEGEND

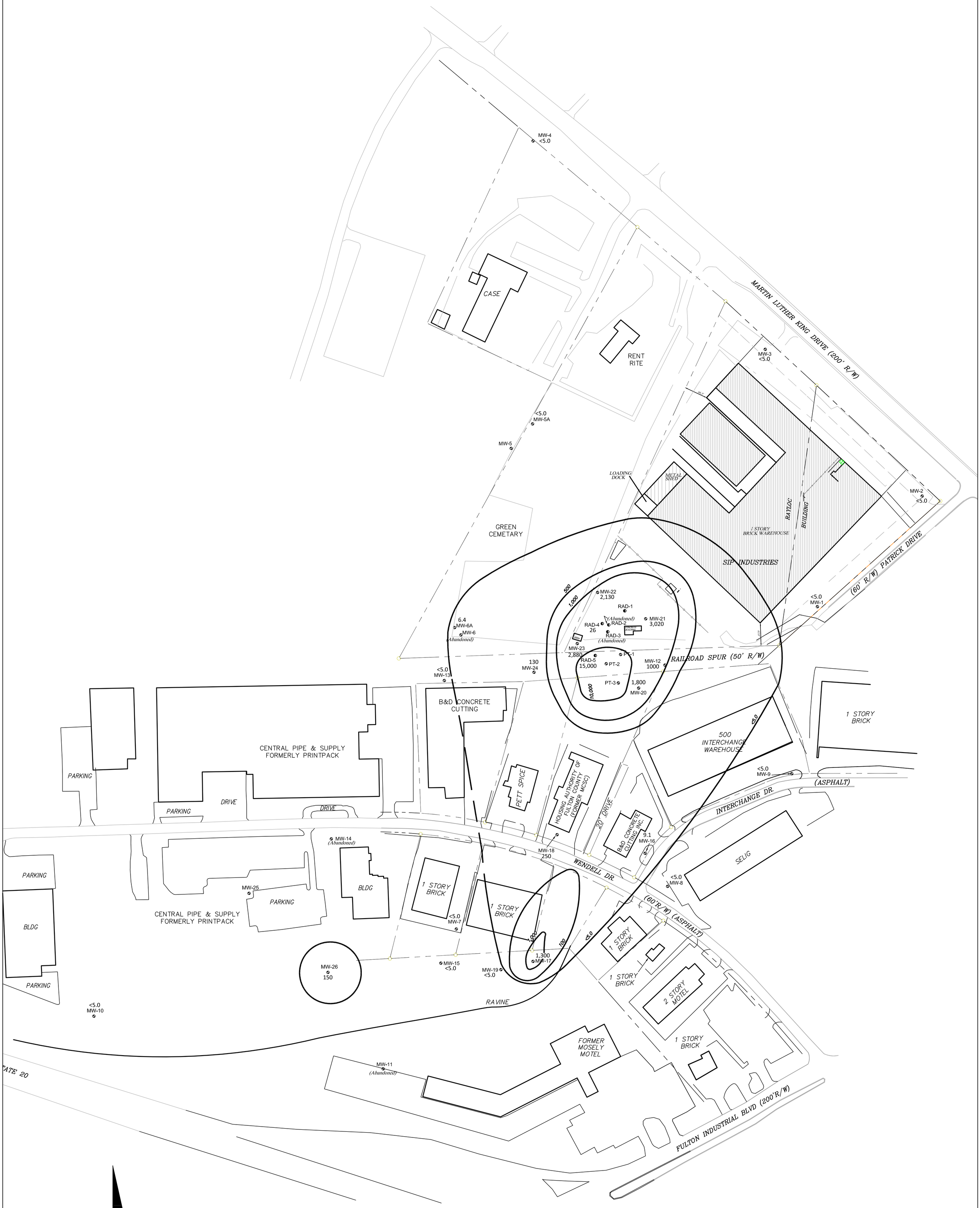
- Monitoring Well Location
- Indicates Readings from September 2015 Sampling Event
- Property Line

CLEARWATER ENVIRONMENTAL RESOURCES, LLC	*Drawing:* Rayloc 12-08-2017.dwg	FIGURE 8
	Revision #: 0	OCTOBER 2015 PCE ISOCONCENTRATION MAP
	Date: 03/2017	RAYLOC FACILITY
	Project #: 1502-1-3	APRIL 2018 VRP

Rayloc 12-08-2017.dwg

Sage Environmental Consulting, L.P.
October 2015

Genuine Parts Company
Atlanta, GA



Rayloc 04-03-2018.dwg

CLEARWATER ENVIRONMENTAL RESOURCES, LLC

Drawing:	Rayloc 04-03-2018.dwg	FIGURE 9
Revision #:	0	NOVEMBER 2017 DATA PCE ISOCONCENTRATION MAP
Date:	03/2017	RAYLOC FACILITY
Project #:	1502-1-3	APRIL 2018 VRP

Sage Environmental Consulting, L.P.
October 2015

Genuine Parts Company
Atlanta, GA

TABLES

Table 1
Sumary of Soil-Vapor Sampling Data
Semi-Annual Progress Report #9
April 2018
Rayloc Facility
HSI# 10547

Sample Location	FC-1	BD-1	GR-1	PS-1	PS-2	PP-1
Sample Date	**8/30/2012**	**3/6/2013**	**3/6/2013**	**3/6/2013**	**3/6/2013**	**3/6/2013**
Dichlorodifluoromethane (F12)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1
Vinyl Chloride	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1
Bromomethane	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6
Chloroethane	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Trichlorofluoromethane (F11)	<5.6	**8.9**	<5.6	<5.6	<5.6	<5.6
Acetone	**340**	**33**	<24	**27**	<24	**28**
1,1-Dichloroethene	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
1,1,2-Trichlorotrifluoroethane (F113)	<7.7	<7.7	<7.7	<7.7	<7.7	<7.7
Methylene chloride	<3.5	**3.6**	<3.5	<3.5	<3.5	<3.5
Carbon Disulfide	**7.3**	<6.3	<6.3	<6.3	<6.3	<6.3
trans-1,2-dichloroethene	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
1,1-Dichloroethane	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1
2-Butanone (MEK)	**110**	<30	<30	<30	<30	<30
Cis-1,2-dichloroethene	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Chloroform	<4.9	**69**	<4.9	**7.6**	<4.9	<4.9
1,1,1-Trichloroethane	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
1,2-Dichloroethane (EDC)	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1
Benzene	**8.6**	<3.2	<3.2	<3.2	<3.2	<3.2
Carbon tetrachloride	<6.4	<6.4	<6.4	<6.4	<6.4	<6.4
Trichloroethene	<5.5	**33**	<5.5	<5.5	<5.5	<5.5
1,2,-Dichloropropane	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4
Bromodichloromethane	<6.8	<6.8	<6.8	<6.8	<6.8	<6.8
cis-1,3-Dichloropropene	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6
4-Methyl-2-pentanone (MIBK)	**520**	<8.3	<8.3	<8.3	<8.3	<8.3
trans-1,3-Dichloropropene	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6
Toluene	**57**	**11**	**10**	**19**	**7.3**	**15**
1,1,2-Trichloroethane	<5.5	<5.5	<5.5	<5.5	<5.5	<5.5
2-Hexanone (MBK)	**16**	<5.5	<5.5	<5.5	<5.5	<5.5
Dibromochloromethane	<8.3	<8.3	<8.3	<8.3	<8.3	<8.3
Tetrachloroethene	**88**	**1,500**	**13**	**49**	**44**	**310**
1,2-Dibromoethane (EDB)	<7.8	<7.8	<7.8	<7.8	<7.8	<7.8
1,1,1,2-Tetrachloroethane	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0
Chlorobenzene	<4.7	<4.7	<4.7	<4.7	<4.7	<4.7
Ethylbenzene	**18**	<4.4	**4.7**	**5.5**	<4.4	**17**
m,p-Xylene	**150**	**11**	**18**	**25**	**14**	**60**
Styrene	**5.7**	<4.3	<4.3	<4.3	<4.3	<4.3
o-Xylene	**83**	<4.4	**6.4**	**7.9**	**4.7**	**22**
Bromoform	<10	<10	<10	<10	<10	<10
1,1,2,2-Tetrachloroethane	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0
4-Ethyltoluene	**14**	<5.0	<5.0	<5.0	<5.0	**6.7**
1,3,5-Trimethylbenzene	**18**	<5.0	<5.0	<5.0	<5.0	**7.7**
1,2,4-Trimethylbenzene	**54**	**5.6**	**9.9**	**8.6**	**8.0**	**24**
1,3-Dichlorobenzene	<12	<12	<12	<12	<12	<12
1,4-Dichlorobenzene	<12	<12	<12	<12	<12	<12
1,2-Dichlorobenzene	<12	<12	<12	<12	<12	<12
1,2,4-Trichlorbenzene	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5
Hexachlorobutadiene	<11	<11	<11	<11	<11	<11

Notes:
Matrix: soil-vapor
Units: ug/m3

Table 2
Historical Quarterly PDA Sampling Results
Semi-Annual Progress Report #9

April 2018
Rayloc Facility
HSI# 10547

Sample Location	PD-2	PD-2	PD-2	PD-2	PD-2	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**	**12/13/2016**	**3/9/2017**	**6/21/2017**	**8/30/2017**	**12/22/2017**
Sample Depth	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**
1,2,4-Trimethylbenzene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396	<0.004	<0.196	<0.005	<0.209	<0.222
1,2-Dichlorobenzene	--	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396	<0.004	<0.196	<0.005	<0.209	<0.222
1,2-Dichloroethane	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396	<0.004	<0.196	<0.005	<0.209	<0.222
1,2-Dichloroethene (Ttl)	--	<0.476	<0.193	<2.43	<0.183	<0.233	0.591	<0.792	<0.004	<0.196	<0.005	<0.209	<0.222
1,3,5-Trimethylbenzene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396	<0.004	<0.196	<0.005	<0.209	<0.222
1,4-Dichlorobenzene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396	<0.004	<0.196	<0.005	<0.209	<0.222
2-Butanone	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396	<0.004	<0.196	<0.005	<0.209	<0.222
Acetone	2.02	<1.19	<0.967	<1.03	<0.913	<1.16	<0.934	<1.98	<0.019	<0.980	0.37	<1.04	<4.44
Benzene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396	<0.004	<0.196	<0.005	<0.209	<0.222
Bromomethane	--	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396	<0.004	<0.196	<0.005	<0.209	<0.222
Carbon Disulfide	--	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396	<0.004	<0.196	<0.005	<0.209	<0.222
Cis-1,2-dichloroethene	1.73	0.312	0.197	2.35	0.366	<0.233	0.572	<0.396	0.006	<0.196	0.026	<0.209	<0.222
Ethylbenzene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396	<0.004	<0.196	<0.005	<0.209	<0.222
m,p-Xylene	--	<0.476	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396	<0.004	<0.196	<0.005	<0.209	<0.222
o-Xylene	--	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396	<0.004	<0.196	<0.005	<0.209	<0.222
Naphthalene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396	<0.004	<0.196	<0.005	<0.209	<1.11
Styrene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396	<0.004	<0.196	<0.005	<0.209	<0.222
Tetrachloroethene	**115**	**4.32**	**1.00**	**13.30**	**4.76**	**1.11**	**3.57**	<0.396	0.047	**2.59**	**0.706**	0.427	**2.9**
Toluene	0.404	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396	<0.004	<0.196	<0.005	<0.209	<1.11
Trichloroethene	**1.69**	0.445	0.415	**2.33**	0.259	<0.233	0.477	<0.396	<0.004	<0.196	0.019	<0.209	<0.222
Vinyl Chloride	**0.404**	<0.238	<0.193	<2.43	<0.183	<0.233	<0.187	<0.396	<0.004	<0.196	<0.005	<0.209	<0.222
Xylenes, Total	0.807	<0.714	<0.580	<0.618	<0.548	<0.699	<0.560	<1.19	<0.011	<0.588	<0.016	<0.626	<0.222

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

Table 1 (continued)

WD-2	WD-2	WD-2	WD-2	WD-2	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	12/13/2016	3/9/2017	6/21/2017	8/30/2017	12/22/2017
10	10	10	10	10	10	10	10	10	10	10	10	10
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201	<0.279	<0.197	<0.269	<0.211	<0.222
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201	<0.279	<0.197	<0.269	<0.211	< 0.222
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201	<0.279	<0.197	<0.269	<0.211	0.682
< 67.2	<0.419	<0.246	<0.265	<0.380	4.55	<0.460	<0.402	<0.279	<0.197	<0.269	<0.211	0.682
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201	<0.279	<0.197	<0.269	<0.211	< 0.222
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201	<0.279	<0.197	<0.269	<0.211	< 0.222
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201	<0.279	<0.197	<0.269	<0.211	< 0.222
< 168	<1.05	<1.23	<1.33	<1.90	<2.63	<1.15	<0.201	<1.40	<0.984	<1.34	<1.06	< 4.44
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201	<0.279	<0.197	<0.269	<0.211	< 0.222
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201	<0.279	<0.197	<0.269	<0.211	< 0.222
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201	<0.279	<0.197	<0.269	<0.211	< 0.222
< 33.6	0.242	<0.246	<0.265	0.737	4.55	<0.230	0.298	<0.279	0.263	<0.269	<0.211	< 0.222
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201	<0.279	<0.197	<0.269	<0.211	< 0.222
< 33.6	<0.419	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201	<0.279	<0.197	<0.269	<0.211	< 0.222
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201	<0.279	<0.197	<0.269	<0.211	< 0.222
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201	<0.279	<0.197	<0.269	<0.211	< 1.11
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201	<0.279	<0.197	<0.269	<0.211	<0.222
1,670	**15**	**42.2**	**3.46**	**33.9**	**38.3**	**3.13**	**3.95**	**2.71**	**5.30**	**4.09**	**0.55**	**75.3**
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201	<0.279	<0.197	<0.269	<0.211	<1.11
< 33.6	0.214		<0.265	**0.589**	**1.52**	<0.230	<0.201	<0.279	<0.197	<0.269	<0.211	**1.62**
< 33.6	<0.209	<0.246	<0.265	<0.380	<0.525	<0.230	<0.201	<0.279	<0.197	<0.269	<0.211	<0.222
< 67.2	<0.628	<0.739	<0.796	<1.14	<1.58	<0.690	<0.604	<0.838	<0.588	<0.807	<0.634	<0.222

Table 1 (continued)

WD-4	WD-4	WD-4	WD-4	WD-4	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	12/13/2016	3/9/2017	6/21/2017	8/30/2017	12/22/2017
10	10	10	10	10	10	10	10	10	10	10	10	10
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	3.38	<1.84	<4.37	<9.62	<0.187	<2.31
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725	<1.84	<4.37	<9.62	<0.187	<2.31
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725	<1.84	<4.37	<9.62	<0.187	<2.31
< 93.0	1.94	<0.205	<3.93	<4.04	<22.0	<4.33	6.01	<1.84	<4.37	<9.62	<0.187	6.53
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	0.833	<1.84	<4.37	<9.62	<0.187	<2.31
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725	<1.84	<4.37	<9.62	<0.187	<2.31
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725	<1.84	<4.37	<9.62	<0.187	<2.31
< 232	<4.06	<10.2	<3.93	<20.0	<110	<10.8	<3.62	<9.19	<21.8	<48.1	<0.933	<46.3
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725	<1.84	<4.37	<9.62	<0.187	<2.31
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725	<1.84	<4.37	<9.62	<0.187	<2.31
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725	<1.84	<4.37	<9.62	<0.187	<2.31
< 46.5	1.94	<0.205	**7.08**	6.51	<22.0	<2.17	5.74	2.98	<4.37	**14**	0.79	6.53
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725	<1.84	<4.37	<9.62	<0.187	<2.31
< 46.5	<1.62	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725	<1.84	<4.37	<9.62	<0.187	<2.31
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725	<1.84	<4.37	<9.62	<0.187	<4.63
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725	<1.84	<4.37	<9.62	<0.187	<11.6
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725	<1.84	<4.37	<9.62	<0.187	<2.31
2,190	**142**	**61.3**	**317**	**619**	**1280**	**137**	**99.2**	**218**	**487**	**1,060**	**3.04**	**840**
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725	<1.84	<4.37	<9.62	<0.187	<11.6
< 46.5	4.89	<0.205	**6.12**	**9.24**	**<22.0**	**2.28**	**3.91**	**3.39**	**33.2**	**16.3**	0.482	**17.7**
< 46.5	<0.812	<0.205	<3.93	<4.04	<22.0	<2.17	<0.725	<1.84	<4.37	<9.62	<0.187	<2.31
< 93.0	<2.43	<6.14	<11.8	<12.1	<66.0	<6.50	<2.17	<5.51	<13.1	<28.8	<0.560	<2.31

Table 1 (continued)

WD-8	WD-8	WD-8	WD-8	WD-8	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	12/13/2016	3/9/2017	6/21/2017	8/30/2017	12/2/2017
5	5	5	5	5	5	5	5	5	5	5	5	5
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232	<23.6	<7.24	<0.317	<0.227	<0.244
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232	<23.6	<7.24	<0.317	<0.227	<0.244
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232	<23.6	<7.24	<0.317	<0.227	<0.244
<2.53	<35.1	<24.7	<0.996	<0.474	<27.1	6.31	6.50	<23.6	<7.24	<0.317	<0.227	1.22
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232	<23.6	<7.24	<0.317	<0.227	<0.244
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232	<23.6	<7.24	<0.317	<0.227	<0.244
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232	<23.6	<7.24	<0.317	<0.227	<0.244
<6.32	<87.6	<123	<0.996	<2.37	<135	<1.26	<1.16	<118	<36.2	<1.59	<1.14	<4.89
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232	<23.6	<7.24	<0.317	<0.227	<0.244
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232	<23.6	<7.24	<0.317	<0.227	<0.244
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232	<23.6	<7.24	<0.317	<0.227	<0.244
<1.26	<17.5	<24.7	**8.74**	**11.1**	**30.6**	6.28	6.47	<23.6	<7.24	3.20	2.89	1.22
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232	<23.6	<7.24	<0.317	<0.227	<0.244
<1.26	<35.1	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232	<23.6	<7.24	<0.317	<0.227	<0.489
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232	<23.6	<7.24	<0.317	<0.227	<0.244
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232	<23.6	<7.24	<0.317	<0.227	<1.22
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232	<23.6	<7.24	<0.317	<0.227	<0.244
60.6	**1,660**	**1,920**	**43**	**52**	**2,590**	**34.8**	**29**	**2,880**	**526**	**26**	**22.2**	**86.9**
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232	<23.6	<7.24	<0.317	<0.227	<0.244
<1.26	**<17.5**	**<24.7**	**1.87**	**2.29**	**<27.1**	**1.21**	**1.25**	**<23.6**	<7.24	**0.66**	**0.552**	**0.823**
<1.26	<17.5	<24.7	<0.996	<0.474	<27.1	<0.251	<0.232	<23.6	<7.24	<0.317	<0.227	<0.244
<2.53	<52.6	<74	<2.99	<1.42	<81.2	<0.754	<0.697	<70.8	<21.7	<0.951	<0.682	<0.244

Table 1 (continued)

WD-11	WD-11	WD-11	WD-11	WD-11	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	12/13/2016	3/9/2017	6/21/2017	8/30/2017	12/22/2017
10	10	10	10	10	10	10	10	10	10	10	10	10
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282	<0.880	<2.18	<1.93	<0.203	<2.34
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282	<0.880	<2.18	<1.93	<0.203	<2.34
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282	<0.880	<2.18	<1.93	<0.203	<2.34
<1.85	<3.61	<20.3	<8.43	<0.414	<4.51	2.21	<0.563	<0.880	<2.18	<1.93	<0.203	10.3
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282	<0.880	<2.18	<1.93	<0.203	<2.34
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282	<0.880	<2.18	<1.93	<0.203	<2.34
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282	<0.880	<2.18	<1.93	<0.203	<2.34
<4.62	<4.16	<101	<21.1	<2.07	<22.6	<2.30	<1.41	<0.880	<10.9	<9.64	<1.01	<46.9
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282	<4.40	<2.18	<1.93	<0.203	<2.34
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282	<0.880	<2.18	<1.93	<0.203	<2.34
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282	<0.880	<2.18	<1.93	<0.203	<2.34
1.57	3.61	<20.3	<4.21	1.2	<4.51	2.21	<0.282	1.67	2.80	<1.93	0.278	**10.3**
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282	<0.880	<2.18	<1.93	<0.203	<2.34
<0.925	<1.66	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282	<0.880	<2.18	<1.93	<0.203	<4.69
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282	<0.880	<2.18	<1.93	<0.203	<2.34
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282	<0.880	<2.18	<1.93	<0.203	<11.7
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282	<0.880	<2.18	<1.93	<0.203	<2.34
150.0	**108**	**<20.3**	**381**	**56.2**	**238**	**68.8**	**10.1**	**140**	**141**	**173**	**3.19**	**1,970**
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282	<0.880	<2.18	<1.93	<0.203	<11.7
2.2	**2.53**	**<20.3**	**<4.21**	**1.08**	**<4.51**	**1.26**	<0.282	**1.4**	**2.79**	<1.93	<0.203	**36.2**
<0.925	<0.832	<20.3	<4.21	<0.414	<4.51	<0.460	<0.282	<0.880	<2.18	<1.93	<0.203	<2.34
<1.85	<2.50	<60.9	<12.6	<1.24	<13.5	<1.38	<0.845	<2.64	<6.53	<5.79	<0.608	<2.34

Table 1 (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	12/13/2016	3/9/2017	6/21/2017	8/30/2017	12/22/2017
6	6	6	6	6	6	6	6	6	6
<0.476	<0.389	<0.468	<0.275	<0.192	<0.338	<0.212	<0.443	<0.444	<2.33
<0.476	<0.389	<0.468	<0.275	<0.192	<0.338	<0.212	<0.443	<0.444	<2.33
<0.476	<0.389	<0.468	<0.275	<0.192	<0.338	<0.212	<0.443	<0.444	<2.33
9.05	11.4	11.9	10.4	12.9	<0.338	<0.212	<0.443	<0.444	6.66
<0.476	<0.389	<0.468	<0.275	<0.192	<0.338	<0.212	<0.443	<0.444	<2.33
<0.476	<0.389	<0.468	<0.275	<0.192	<0.338	<0.212	<0.443	<0.444	<2.33
<0.476	<0.389	<0.468	<0.275	<0.192	<0.338	<0.212	<0.443	<0.444	<2.33
<2.38	<1.95	<2.34	<1.38	<0.961	<0.338	<0.212	<2.21	<2.22	<46.6
<0.476	<0.389	<0.468	<0.275	<0.192	<1.69	<0.212	<0.443	<0.444	<2.33
<0.476	<0.389	<0.468	<0.275	<0.192	<0.338	<0.212	<0.443	<0.444	<2.33
<0.476	<0.389	<0.468	<0.275	<0.192	<0.338	<0.212	<0.443	<0.444	<2.33
9.05	**11.4**	**11.8**	**10.3**	**12.1**	4.1	5.14	**10.4**	**9.83**	6.66
<0.476	<0.389	<0.468	<0.275	<0.192	<0.338	<0.212	<0.443	<0.444	<2.33
<0.476	<0.389	<0.468	<0.275	<0.192	<0.338	<0.212	<0.443	<0.444	<4.66
<0.476	<0.389	<0.468	<0.275	<0.192	<0.338	<0.212	<0.443	<0.444	<2.33
<0.476	<0.389	<0.468	<0.275	<0.192	<0.338	<0.212	<0.443	<0.444	<11.6
<0.476	<0.389	<0.468	<0.275	<0.192	<0.338	<0.212	<0.443	<0.444	<2.33
30.4	**46.1**	**22.5**	**44.4**	**27.2**	**16**	**22.2**	**56.3**	**56.2**	**197**
<0.476	<0.389	<0.468	<0.275	<0.192	<0.338	<0.212	<0.443	<0.444	<11.6
2.19	**3.74**	**3.09**	**2.67**	**3.15**	**1.10**	**1.63**	**3.31**	**2.60**	**4.28**
<0.476	<0.389	<0.468	<0.275	<0.192	<0.338	<0.212	<0.443	<0.444	<2.33
<1.43	<1.17	<1.40	<0.825	<0.577	<1.01	<0.635	<1.33	<1.33	<2.33

Table 1 (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	12/13/2016	3/9/2017	6/21/2017	8/30/2017	12/22/2017
10	10	10	10	10	10	10	10	10	10
<0.500	<0.392	<0.223	<0.217	<0.276	<2.06	<0.430	<2.51	<0.186	<0.233
<0.500	<0.392	<0.223	<0.217	<0.276	<2.06	<0.430	<2.51	<0.186	<0.233
<0.500	<0.392	<0.223	<0.217	<0.276	<2.06	<0.430	<2.51	<0.186	<0.233
<0.500	5.53	3.88	7.12	1.02	<2.06	<0.430	<2.51	<0.186	9.72
<0.500	<0.392	<0.223	<0.217	<0.276	<2.06	<0.430	<2.51	<0.186	<0.233
<0.500	<0.392	<0.223	<0.217	<0.276	<2.06	<0.430	<2.51	<0.186	<0.233
<0.500	<0.392	<0.223	<0.217	<0.276	<2.06	<0.430	<2.51	<0.186	<0.233
<2.50	<1.96	<1.12	<1.09	<1.38	<2.06	<2.15	<12.6	<0.928	<4.66
<0.500	<0.392	<0.223	<0.217	<0.276	<1.03	<0.430	<2.51	<0.186	<0.233
<0.500	<0.392	<0.223	<0.217	<0.276	<2.06	<0.430	<2.51	<0.186	<0.233
<0.500	<0.392	<0.223	<0.217	<0.276	<2.06	<0.430	<2.51	<0.186	<0.233
<0.500	5.21	3.81	6.98	1.02	0.661	2.34	3.35	2.51	**8.95**
<0.500	<0.392	<0.223	<0.217	<0.276	<2.06	<0.430	<2.51	<0.186	<0.233
<0.500	<0.392	<0.223	<0.217	<0.276	<2.06	<0.430	<2.51	<0.186	<0.466
<0.500	<0.392	<0.223	<0.217	<0.276	<2.06	<0.430	<2.51	<0.186	<0.233
<0.500	<0.392	<0.223	<0.217	<0.276	<2.06	<0.430	<2.51	<0.186	<1.17
<0.500	<0.392	<0.223	<0.217	<0.276	<2.06	<0.430	<2.51	<0.186	<0.233
54.9	**31.7**	**13.7**	**29.7**	**40.2**	**53.3**	**56.9**	**162**	**24.6**	**318**
<0.500	<0.392	<0.223	<0.217	<0.276	<2.06	<0.430	<2.51	<0.186	<1.17
5.36	**3.73**	**2.92**	**4.92**	**1.81**	**0.699**	**1.79**	**6.33**	**4.26**	**34.6**
<0.500	<0.392	<0.223	<0.217	<0.276	<2.06	<0.430	<2.51	<0.186	<0.233
<1.50	<1.18	<0.670	<0.651	<0.829	<0.617	<1.29	<7.53	<0.557	<0.233

Table 1 (continued)

ADD-2	ADD-2	ADD-2	ADD-2	ADD-2	ADD-2	ADD-2	ADD-2	ADD-2	ADD-2
10/19/2015	12/14/2015	3/10/2016	6/8/2016	9/7/2016	12/13/2016	3/9/2017	6/21/2017	8/30/2017	12/22/2017
5	5	5	5	5	5	5	5	5	5
<44.9	<4.26	<47.2	<0.210	<8.77	<0.697	<0.216	<24.5	<0.221	7.61
<44.9	<4.26	<47.2	<0.210	<8.77	<0.697	<0.216	<24.5	<0.221	<2.34
<44.9	<4.26	<47.2	<0.210	<8.77	<0.697	<0.216	<24.5	<0.221	<2.34
<89.8	24.5	<47.2	4.7	<17.5	<0.697	<0.216	<24.5	<0.221	<2.34
<44.9	<4.26	<47.2	<0.210	<8.77	<0.697	<0.216	<24.5	<0.221	<2.34
<44.9	<4.26	<47.2	<0.210	<8.77	<0.697	<0.216	<24.5	<0.221	<2.34
<44.9	<4.26	<47.2	<0.210	<8.77	<0.697	<0.216	<24.5	<0.221	<2.34
<225	<21.3	<236	<1.05	<43.8	<0.697	<1.08	<123	<1.11	<46.9
<44.9	<4.26	<47.2	<0.210	<8.77	<3.49	<0.216	<24.5	<0.221	<2.34
<44.9	<4.26	<47.2	<0.210	<8.77	<0.697	<0.216	<24.5	<0.221	<2.34
<44.9	<4.26	<47.2	<0.210	<8.77	<0.697	<0.216	<24.5	<0.221	<2.34
<44.9	**24.5**	**<47.2**	4.7	**10.6**	4.11	4.22	<24.5	3.32	<2.34
<44.9	<4.26	<47.2	<0.210	<8.77	<0.697	<0.216	<24.5	<0.221	<2.34
<44.9	<4.26	<47.2	<0.210	<8.77	<0.697	<0.216	<24.5	<0.221	<4.69
<44.9	<4.26	<47.2	<0.210	<8.77	<0.697	<0.216	<24.5	<0.221	<2.34
<44.9	<4.26	<47.2	<0.210	<8.77	<0.697	<0.216	<24.5	<0.221	<11.7
<44.9	<4.26	<47.2	<0.210	<8.77	<0.697	<0.216	<24.5	<0.221	<2.34
3100	**455**	**3830**	**39.6**	**1690**	**51.6**	**26.2**	**2320**	**31.4**	**1,970**
<44.9	<4.26	<47.2	<0.210	<8.77	<0.697	<0.216	<24.5	<0.221	<11.7
48.7	**37.4**	**72.1**	**1.63**	**22.7**	**2.18**	**1.61**	**32.3**	**1.79**	**3.09**
<44.9	<4.26	<47.2	<0.210	<8.77	<0.697	<0.216	<24.5	<0.221	<2.34
<135	<12.8	<141	<0.631	<26.3	<2.09	<0.647	<73.5	<0.663	<2.34

Table 1 (continued)

ADD-2 10/19/2015 10	ADD-2 12/14/2015 10	ADD-2 3/10/2016 10	ADD-2 6/8/2016 10	ADD-2 9/7/2016 10	ADD-2 12/13/2016 10	ADD-2 3/9/2017 10	ADD-2 6/21/2017 10	ADD-2 8/30/2017 10	ADD-2 12/22/2017 10	Type 3 RRS
<2.68	<10.5	<12.4	<0.207	<0.198	NS	<0.201	<0.249	<0.222	<0.250	NA[2]
<2.68	<10.5	<12.4	<0.207	<0.198	NS	<0.201	<0.249	<0.222	<0.250	NA[2]
<2.68	<10.5	<12.4	<0.207	<0.198	NS	<0.201	<0.249	<0.222	<0.250	NA[2]
6.01	22.8	<12.4	7.55	9.92	NS	<0.201	<0.249	<0.222	3.65	NA[2]
<2.68	<10.5	<12.4	<0.207	<0.198	NS	<0.201	<0.249	<0.222	<0.250	NA[2]
<2.68	<10.5	<12.4	<0.207	<0.198	NS	<0.201	<0.249	<0.222	<0.250	NA[2]
<2.68	<10.5	<12.4	<0.207	<0.198	NS	<0.201	<0.249	<0.222	<0.250	200
<2.68	<52.4	<62.1	<1.04	<0.988	NS	<1.00	<1.25	<1.11	<4.99	400
<2.68	<10.5	<12.4	<0.207	<0.198	NS	<0.201	<0.249	<0.222	<0.250	NA[2]
<2.68	<10.5	<12.4	<0.207	<0.198	NS	<0.201	<0.249	<0.222	<0.250	NA[2]
<2.68	<10.5	<12.4	<0.207	<0.198	NS	<0.201	<0.249	<0.222	<0.250	NA[2]
6.01	**22.8**	**14.7**	**7.50**	**9.08**	NS	**7.10**	**7.35**	5.20	3.65	7
<2.68	**<10.5**	<12.4	<0.207	<0.198	NS	<0.201	<0.249	<0.222	<0.250	70
<2.68	<10.5	<12.4	<0.207	<0.198	NS	<0.201	<0.249	<0.222	<0.499	NA[2]
<2.68	<10.5	<12.4	<0.207	<0.198	NS	<0.201	<0.249	<0.222	<0.250	NA[2]
<2.68	<10.5	<12.4	<0.207	<0.198	NS	<0.201	<0.249	<0.222	<0.250	NA[2]
<2.68	<10.5	<12.4	<0.207	<0.198	NS	<0.201	<0.249	<0.222	<0.250	14
198	**1830**	**764**	**21.7**	**11.4**	NS	**8.89**	**15.2**	**11.5**	**25.3**	0.5
<2.68	<10.5	<12.4	<0.207	<0.198	NS	<0.201	<0.249	<0.222	<1.25	100
6.26	**61.6**	**35.7**	**3.61**	**4.26**	NS	**3.52**	**4.43**	**3.55**	**3.48**	0.5
<2.68	<10.5	<12.4	<0.207	<0.198	NS	<0.201	<0.249	<0.222	<0.250	0.2
<8.03	<31.4	<37.3	<0.622	<0.593	NS	<0.602	<0.748	<0.666	<0.250	1,000

TABLE 3
Summary of Monitoring Well and Groundwater Elevations
Semi-Annual Progress Report #9

April 2018
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	Static Water Level On 10/17 & 18/2017	Groundwater Elevation On 10/17 & 18/2017
MW-1	33	23 - 33	837.17	24.00	813.17	24.42	812.75
MW-2	41	31 - 41	852.76	32.74	820.02	33.22	819.54
MW-3	29	19 - 29	832.66	19.86	812.80	20.78	811.88
MW-4	17	7 - 17	797.56	6.62	790.94	7.39	790.17
MW-5	25	15 - 25	828.15	NM	NM	NM	NM
MW-5A	75	15 - 75	827.08	24.86	802.22	26.92	800.16
MW-6	37	27 - 37	840.42	Abandoned	Abandoned	Abandoned	Abandoned
MW-6A	50	40 - 50	840.04	39.92	800.12	42.37	797.67
MW-7	35	25 - 35	794.47	26.65	767.82	26.85	767.62
MW-8	27	17 - 27	806.23	20.73	785.50	20.26	785.97
MW-9	34	14 - 34	810.98	16.63	794.35	15.68	795.30
MW-10	44	34 -44	775.15	22.4	752.75	22.3	752.85
MW-11	75	70 - 75	850.81	Abandoned	Abandoned	Abandoned	Abandoned
MW-12	96	26 - 96	823.15	26.81	796.34	27.63	795.52
MW-13	43	23 - 43	822.30	30.36	791.94	31.60	790.70
MW-14	77	19 - 77	803.93	Abandoned	Abandoned	Abandoned	Abandoned
MW-15	40	5 - 40	775.29	8.75	766.54	9.39	765.90
MW-16	39	14 - 39	803.56	22.87	780.69	22.30	781.26
MW-17	31	5 - 31	776.86	8.55	768.31	8.69	768.17
MW-18	88	20 -88	801.82	26.24	775.58	26.29	775.53
MW-19	35	10 - 35	775.08	8.42	766.66	8.55	766.53
MW-20	70	20 - 70	816.72	22.13	794.59	22.22	794.50
MW-21	75	40 - 75	849.02	46.62	802.40	46.69	802.33
MW-22	70	40 - 70	850.26	43.86	806.40	43.94	806.32
MW-23	60	30 - 60	851.89	49.32	802.57	49.44	802.45
MW-24	35	25 - 35	823.1	23.42	799.68	24.15	798.95
MW-25	40	20 - 40	NS	NI	NI	NM	NM
MW-26	30	25 - 30	NS	NI	NI	10.42	NM
PT-1	59	9 - 59	824.43	NM	NM	NM	NM
PT-2	63	8 - 63	825.28	NM	NM	NM	NM
PT-3	67.6	12.6 - 67.6	NM	22.59	NM	22.59	NM
RAD-1	75	70 - 75	850.81	NM	NM	NM	NM
RAD-2	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned
RAD-3	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned
RAD-4	103	NI	852.12	48.86	803.26	49.62	802.50
RAD-5	88	NI	822.87	27.24	795.63	27.06	795.81

NI - Not Installed
NM - Not measured
NS - Not Surveyed

Table 4

Summary of X² Groundwater Remedial System Sampling Results
Semi-Annual Progress Report #9

April 2018

HSI Site Numbers 10547

Atlanta, Georgia

Analyte		1,1-Dichloroethane	1,1-Dichloroethene	Acetone	Benzene	cis-1,2-DCE	Dichloroflouromethane	Methylene Chloride	Tetrachloroethene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Xylenes (Total)	1,2-Dichlorobenzene	Chlorobenzene	Chloroform	Ethylbenzene	Isopropylbenzene	Styrene	Toluene	Trans-1,2-dichloroethene	Carbon Disulfide
Sample Location	**Date**																					
MW-7 @ 30'	Mar-15	<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	<5.0	<5.0	<5.0
	Jun-15	<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	<5.0	<5.0	<5.0
	Sep-15	<5.0	<5.0	<5.0	<5.0	**9.72**	<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	<5.0	<5.0	<5.0
	Dec-15	<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	<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	<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	6.9	<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
	Sep-16	<5.0	<5.0	<5.0	<5.0	**7.87**	<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
	Dec-16	<5.0	<5.0	<5.0	<5.0	**16.2**	<5.0	<5.0	**42**	**9.85**	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-17	<5.0	<5.0	**12.5**	<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
	Jun-17	<5.0	<5.0	**11.7**	<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	<5.0	<5.0	<5.0
	Sep-17	<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	<5.0	<5.0	<5.0
MW-12 @ 60'	Mar-15	<10.0	<10.0	<10.0	<10.0	**34.3**	<10.0	<10.0	**901**	<10.0	<10.0	<10.0	<10.0	<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	**1600**	<25.0	<25.0	<25.0	<25.0	<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	**538**	12.6	<25.0	<25.0	<25.0	<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	**667**	10.9	<25.0	<25.0	<25.0	<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	**867**	<10.0	<10.0	<4.0	<10.0	<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	**1400**	**19**	<10.0	<4.0	<10.0	<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	**28.5**	<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	<10.0	<10.0	<10.0
	Dec-16	<5.0	<5.0	<5.0	<5.0	**24.2**	<5.0	<5.0	**327**	**16.4**	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-17	<5.0	<5.0	**18.1**	<5.0	**29.8**	<5.0	<5.0	**1490**	**16.2**	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-17	<5.0	<5.0	**7.5**	<5.0	**39**	<5.0	<5.0	**431**	**16.8**	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-17	<10.0	<10.0	<10.0	<10.0	**47.3**	<10.0	<10.0	**794**	**32.3**	<10.0	<4.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
MW-15 @ 30'	Mar-15	<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
	Jun-15	<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
	Sep-15	<5.0	<5.0	<5.0	<5.0	16.9	<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	<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	**2.18**	<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	<2.0	<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	24	<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	**194**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-16	<5.0	<5.0	<5.0	<5.0	**132**	<5.0	<5.0	<5.0	<5.0	<5.0	**147**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-17	<5.0	<5.0	**26.2**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-17	<5.0	<5.0	**11.4**	<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	<5.0	<5.0	<5.0
	Sep-17	<5.0	<5.0	**5.41**	<5.0	**13.0**	<5.0	<5.0	<5.0	<5.0	<5.0	**7.94**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
MW-17 @ 25'	Mar-17	<5.0	<5.0	<5.0	<5.0	**361**	<5.0	<5.0	**969**	**161**	<5.0	<10.0	<15.0	<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	**916**	**235**	<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-15	<10.0	<10.0	<10.0	<10.0	**409**	<10.0	<10.0	**1090**	**219**	<10.0	<10.0	<30.0	<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	**952**	**206**	<10.0	**3.56**	<30.0	<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	**978**	**179**	<10.0	<4.0	<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	**470**	<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	<10.0	<10.0	<10.0
	Sep-16	<10.0	<10.0	<10.0	<10.0	**375**	<10.0	<10.0	**862**	**189**	<10.0	<4.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Dec-16	<10.0	<10.0	<10.0	<10.0	**399**	<10.0	<10.0	**920**	**172**	<10.0	<4.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Mar-17	<5.0	<5.0	**16.7**	<5.0	**399**	<5.0	<5.0	**1,590**	**251**	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-17	<10.0	<10.0	<10.0	<10.0	**390**	<10.0	<10.0	**1,320**	**225**	<10.0	<4.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
	Sep-17	<10.0	<10.0	<10.0	<10.0	**330**	<10.0	<10.0	**1,090**	**175**	<10.0	<4.0	<30.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	**4**	<10.0
MW-19 @ 30'	Mar-17	<5.0	<5.0	<5.0	<5.0	**53.9**	<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	<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**	<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	**7.49**	<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	**6.62**	<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	**2.84**	<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	**3**	<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	**49.8**	<5.0	<5.0	**14.8**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Dec-16	<5.0	<5.0	<5.0	<5.0	**59.7**	<5.0	<5.0	<5.0	<5.0	<5.0	**9.5**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Mar-17	<5.0	<5.0	**28.7**	<5.0	**56.2**	<5.0	<5.0	<5.0	<5.0	<5.0	**9.1**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Jun-17	<5.0	<5.0	**11.7**	<5.0	**24.2**	<5.0	<5.0	<5.0	<5.0	<5.0	**4.9**	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	Sep-17	<5.0	<5.0	**6.82**	<5.0	**19.1**	<5.0	<5.0	<5.0	<5.0	<5.0	**3.00**	<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
Summary of Historical Groundwater Sampling Results
Semi-Annual Progress Report #9
April 2018
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-dichloroethene	1,4-dichlorbenzene	4 Methyl 2-pentanone	Carbon Disulfide	1,1,2-trichloroethane	2-Butanone	1,1,2,2-Tetrachloroethane
Type 3 RRS	µg/L	**4,000**	NA	**4,000**	NA	**0.07**	NA	NA	**5**	**5**	**5**	NA	**2**	**10,000**	NA	NA	NA	**700**	NA	NA	NA	**100**	**1,000**	NA	NA	NA	NA	NA	**2,000**	NA
Sample Location	**Date**																													
MW-1	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	23.9	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-17	<5.0	<5.0	<50	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<5.0
MW-2	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-17	<5.0	<5.0	<50	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<5.0
MW-3	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-17	<5.0	<5.0	<50	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<5.0
MW-4	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-15	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-17	<5.0	<5.0	<50	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<5.0
MW-5	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
	Oct-15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-17	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5A	Feb-09	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-15	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-17	<5.0	<5.0	<50	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<5.0
MW-6 / MW-6A	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**32.7**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**20.4**	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-17	<5.0	<5.0	<50	<5.0	<5.0	<10	<10	<5.0	**6.4**	<5.0	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<5.0
MW-7	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**20**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	11	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**9.2**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	**16**	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	19.8	<10	<10	<5.0	**114**	**32.6**	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	42.2	<10	<10	<5.0	**163**	**34.7**	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-17	<5.0	<5.0	<50	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<5.0
MW-8	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-17	<5.0	<5.0	<50	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<5.0
MW-9	Nov-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-17	<5.0	<5.0	<50	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<5.0
MW-10	Oct-03	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Sep-06	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Jan-10	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-12	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Oct-15	<5.0	<5.0	<20	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<15.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0
	Nov-17	<5.0	<5.0	<50	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<5.0

Table 4 Continued

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
	Nov-17	<5.0	<5.0	<50	<5.0	**53**	<10	<10	<5.0	**1,000**	**45**	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<5.0
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
	Nov-17	<5.0	<5.0	<50	<5.0	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<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
	Nov-17	<5.0	<5.0	<50	<5.0	**<5.0**	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<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
	Nov-17	<5.0	<5.0	<50	<5.0	<5.0	<10	<10	<5.0	**9.1**	<5.0	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<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
	Nov-17	<5.0	<5.0	<50	<5.0	**370**	<10	<10	<5.0	**1,300**	**250**	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<5.0
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
	Nov-17	<5.0	<5.0	<50	<5.0	**10**	<10	<10	<5.0	**250**	**5.2**	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<5.0
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**	<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-17	<5.0	<5.0	<50	<5.0	**12**	<10	<10	<5.0	<5.0	<5.0	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<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
	Nov-17	<5.0	<5.0	<50	<5.0	**190**	<10	<10	<5.0	**130**	**53**	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<5.0
MW-25	Nov-17	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-26	Nov-17	<5.0	<5.0	<50	<5.0	**260**	<10	<10	<5.0	**150**	**58**	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<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
	Nov-17	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
	Nov-17	<5.0	<5.0	<50	<5.0	**200**	<10	<10	<5.0	**26**	**34**	<5.0	<2.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<50	<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
	Nov-17	13	**71**	<50	**21**	**34,000**	<10	<10	**13**	**15,000**	**8,700**	<5.0	**190**	44.1	200	14	8.7	11	<5.0	8.1	36	11	61	470	18	<10	<5.0	10	<50	18

TABLE 6

Summary of Professional Oversight Hours

Semi-Annual Progress Report #9

April 11, 2018

Rayloc Facility

HSI# 10547

Month	Hours
November	62
December	58
January	64
February	74
March	68
April	24

TABLE 7

Monthly PDA Area Air Effluent Sampling

Semi-Annual Progress Report #9

April 2018

Rayloc Facility

HSI# 10547

Sample Date	VOC ppm
4/12/2017	296.77
5/17/2017	0
6/19/2017	0.1
7/11/2017	0.8
8/18/2017	0.6
9/21/2017	1.1
10/24/2017	0.9
11/22/2017	1.2

APPENDIX A
2012/2013 SOIL-VAPOR LABORATORY REPORTS & RISK CALCULATIONS

Mobile Geochemistry Inc.

13 September 2012

Mr. Jim Fineis
Atlas Geo-Sampling Company
120 Nottaway Lane
Alpharetta, GA 30009

H&P Project: AG090412-13
Client Project: Rayloc / FC Housing Auth.

Dear Mr. Jim Fineis:

Enclosed is the analytical report for the above referenced project. The data herein applies to samples as received by H&P Mobile Geochemistry, Inc. on 04-Sep-12 which were analyzed in accordance with the attached Chain of Custody record(s).

The results for all sample analyses and required QA/QC analyses are presented in the following sections and summarized in the documents:

- Sample Summary
- Case Narrative (if applicable)
- Sample Results
- Quality Control Summary
- Notes and Definitions / Appendix
- Chain of Custody

Unless otherwise noted, all analyses were performed and reviewed in compliance with our Quality Systems Manual and Standard Operating Procedures. This report shall not be reproduced, except in full, without the written approval of H&P Mobile Geochemistry, Inc.

We at H&P Mobile Geochemistry, Inc. sincerely appreciate the opportunity to provide analytical services to you on this project. If you have any questions or concerns regarding this analytical report, please contact me at your convenience at 760-804-9678.

Sincerely,

Janis Villarreal

Janis Villarreal
Laboratory Director

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Atlas Geo-Sampling Company 120 Nottaway Lane Alpharetta, GA 30009	Project: AG090412-13 Project Number: Rayloc / FC Housing Auth. Project Manager: Mr. Jim Fineis	Reported: 13-Sep-12 10:36

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FCSG-1	E209006-01	Vapor	30-Aug-12	04-Sep-12

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Atlas Geo-Sampling Company	Project: AG090412-13	
120 Nottaway Lane	Project Number: Rayloc / FC Housing Auth.	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	13-Sep-12 10:36

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
FCSG-1 (E209006-01) Vapor Sampled: 30-Aug-12	**Received: 04-Sep-12**								
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EI21105	10-Sep-12	10-Sep-12	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	**340**	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**7.3**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	**110**	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	**8.6**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	**520**	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**57**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	**16**	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**88**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	**18**	4.4	"	"	"	"	"	"	
m,p-Xylene	**150**	8.8	"	"	"	"	"	"	
Styrene	**5.7**	4.3	"	"	"	"	"	"	

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Atlas Geo-Sampling Company	Project: AG090412-13	
120 Nottaway Lane	Project Number: Rayloc / FC Housing Auth.	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	13-Sep-12 10:36

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
FCSG-1 (E209006-01) Vapor Sampled: 30-Aug-12	**Received: 04-Sep-12**								
o-Xylene	**83**	4.4	ug/m3	1	EI21105	10-Sep-12	10-Sep-12	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	**14**	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	**18**	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**54**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	7.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	11	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*123 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*112 %*		*77-127*	"	"	"	"	

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Atlas Geo-Sampling Company	Project: AG090412-13	
120 Nottaway Lane	Project Number: Rayloc / FC Housing Auth.	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	13-Sep-12 10:36

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI21105 - TO-15										
Blank (EI21105-BLK1)	Prepared & Analyzed: 10-Sep-12									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3							
Chloromethane	ND	2.1	"							
Dichlorotetrafluoroethane (F114)	ND	7.1	"							
Vinyl chloride	ND	2.6	"							
Bromomethane	ND	16	"							
Chloroethane	ND	8.0	"							
Trichlorofluoromethane (F11)	ND	5.6	"							
Acetone	ND	24	"							
1,1-Dichloroethene	ND	4.0	"							
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"							
Methylene chloride (Dichloromethane)	ND	3.5	"							
Carbon disulfide	ND	6.3	"							
trans-1,2-Dichloroethene	ND	8.0	"							
1,1-Dichloroethane	ND	4.1	"							
2-Butanone (MEK)	ND	30	"							
cis-1,2-Dichloroethene	ND	4.0	"							
Chloroform	ND	4.9	"							
1,1,1-Trichloroethane	ND	5.5	"							
1,2-Dichloroethane (EDC)	ND	4.1	"							
Benzene	ND	3.2	"							
Carbon tetrachloride	ND	6.4	"							
Trichloroethene	ND	5.5	"							
1,2-Dichloropropane	ND	9.4	"							
Bromodichloromethane	ND	6.8	"							
cis-1,3-Dichloropropene	ND	4.6	"							
4-Methyl-2-pentanone (MIBK)	ND	8.3	"							
trans-1,3-Dichloropropene	ND	4.6	"							
Toluene	ND	3.8	"							
1,1,2-Trichloroethane	ND	5.5	"							
2-Hexanone (MBK)	ND	8.3	"							
Dibromochloromethane	ND	8.6	"							
Tetrachloroethene	ND	6.9	"							
1,2-Dibromoethane (EDB)	ND	7.8	"							
1,1,1,2-Tetrachloroethane	ND	7.0	"							

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Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI21105 - TO-15										
Blank (EI21105-BLK1)				Prepared & Analyzed: 10-Sep-12						
Chlorobenzene	ND	4.7	ug/m3							
Ethylbenzene	ND	4.4	"							
m,p-Xylene	ND	8.8	"							
Styrene	ND	4.3	"							
o-Xylene	ND	4.4	"							
Bromoform	ND	10	"							
1,1,2,2-Tetrachloroethane	ND	7.0	"							
4-Ethyltoluene	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	12	"							
1,4-Dichlorobenzene	ND	12	"							
1,2-Dichlorobenzene	ND	12	"							
1,2,4-Trichlorobenzene	ND	7.5	"							
Hexachlorobutadiene	ND	11	"							
Surrogate: 1,2-Dichloroethane-d4	*225*		"	*214*		*105*	*76-134*			
Surrogate: Toluene-d8	*209*		"	*207*		*101*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*385*		"	*364*		*106*	*77-127*			
LCS (EI21105-BS1)				Prepared & Analyzed: 10-Sep-12						
Dichlorodifluoromethane (F12)	120	5.0	ug/m3	101		118	65-135		35	
Vinyl chloride	59	2.6	"	52.0		114	65-135		35	
Chloroethane	64	8.0	"	53.6		119	65-135		35	
Trichlorofluoromethane (F11)	140	5.6	"	113		120	65-135		35	
1,1-Dichloroethene	87	4.0	"	80.8		108	65-135		35	
1,1,2-Trichlorotrifluoroethane (F113)	180	7.7	"	155		114	65-135		35	
Methylene chloride (Dichloromethane)	78	3.5	"	70.8		110	65-135		35	
trans-1,2-Dichloroethene	84	8.0	"	80.8		104	65-135		35	
1,1-Dichloroethane	90	4.1	"	82.4		109	65-135		35	
cis-1,2-Dichloroethene	82	4.0	"	80.0		103	65-135		35	
Chloroform	110	4.9	"	99.2		116	65-135		35	
1,1,1-Trichloroethane	130	5.5	"	111		113	65-135		35	
1,2-Dichloroethane (EDC)	97	4.1	"	82.4		118	65-135		35	

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Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	13-Sep-12 10:36

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI21105 - TO-15										
LCS (EI21105-BS1)				Prepared & Analyzed: 10-Sep-12						
Benzene	65	3.2	ug/m3	64.8		101	65-135		35	
Carbon tetrachloride	140	6.4	"	128		111	65-135		35	
Trichloroethene	120	5.5	"	110		109	65-135		35	
Toluene	80	3.8	"	76.8		104	65-135		35	
1,1,2-Trichloroethane	120	5.5	"	111		107	65-135		35	
Tetrachloroethene	150	6.9	"	138		112	65-135		35	
1,1,1,2-Tetrachloroethane	150	7.0	"	140		107	65-135		35	
Ethylbenzene	93	4.4	"	88.4		105	65-135		35	
m,p-Xylene	190	8.8	"	177		108	65-135		35	
o-Xylene	96	4.4	"	88.4		108	65-135		35	
1,1,2,2-Tetrachloroethane	160	7.0	"	140		114	65-135		35	
Surrogate: 1,2-Dichloroethane-d4	*247*		"	*214*		*115*	*76-134*			
Surrogate: Toluene-d8	*210*		"	*207*		*101*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*401*		"	*364*		*110*	*77-127*			
LCS Dup (EI21105-BSD1)				Prepared & Analyzed: 10-Sep-12						
Dichlorodifluoromethane (F12)	120	5.0	ug/m3	101		121	65-135	2.12	35	
Vinyl chloride	60	2.6	"	52.0		116	65-135	2.08	35	
Chloroethane	65	8.0	"	53.6		122	65-135	2.07	35	
Trichlorofluoromethane (F11)	140	5.6	"	113		121	65-135	0.827	35	
1,1-Dichloroethene	88	4.0	"	80.8		109	65-135	0.597	35	
1,1,2-Trichlorotrifluoroethane (F113)	180	7.7	"	155		115	65-135	0.130	35	
Methylene chloride (Dichloromethane)	79	3.5	"	70.8		111	65-135	0.947	35	
trans-1,2-Dichloroethene	86	8.0	"	80.8		107	65-135	2.74	35	
1,1-Dichloroethane	91	4.1	"	82.4		110	65-135	1.05	35	
cis-1,2-Dichloroethene	84	4.0	"	80.0		105	65-135	2.42	35	
Chloroform	120	4.9	"	99.2		117	65-135	1.20	35	
1,1,1-Trichloroethane	120	5.5	"	111		112	65-135	0.660	35	
1,2-Dichloroethane (EDC)	97	4.1	"	82.4		117	65-135	0.635	35	
Benzene	64	3.2	"	64.8		98.7	65-135	1.95	35	
Carbon tetrachloride	140	6.4	"	128		111	65-135	0.180	35	
Trichloroethene	110	5.5	"	110		105	65-135	3.82	35	
Toluene	79	3.8	"	76.8		102	65-135	1.64	35	

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120 Nottaway Lane	Project Number: Rayloc / FC Housing Auth.	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	13-Sep-12 10:36

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI21105 - TO-15										
LCS Dup (EI21105-BSD1)				Prepared & Analyzed: 10-Sep-12						
1,1,2-Trichloroethane	120	5.5	ug/m3	111		106	65-135	1.35	35	
Tetrachloroethene	150	6.9	"	138		109	65-135	2.34	35	
1,1,1,2-Tetrachloroethane	150	7.0	"	140		104	65-135	2.27	35	
Ethylbenzene	90	4.4	"	88.4		102	65-135	3.17	35	
m,p-Xylene	180	8.8	"	177		104	65-135	3.07	35	
o-Xylene	93	4.4	"	88.4		106	65-135	2.42	35	
1,1,2,2-Tetrachloroethane	150	7.0	"	140		108	65-135	5.36	35	
Surrogate: 1,2-Dichloroethane-d4	*256*		"	*214*		*119*	*76-134*			
Surrogate: Toluene-d8	*213*		"	*207*		*103*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*399*		"	*364*		*110*	*77-127*			

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120 Nottaway Lane	Project Number: Rayloc / FC Housing Auth.	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	13-Sep-12 10:36

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Laboratory in conformance with the Environmental Laboratory Accreditation Program (CA) for the category of Volatile and Semi-Volatile Organic Chemistry of Hazardous Waste for the following methods:

Certificate# 2741, 2743, 2579, 2754 & 2740 approved for EPA 8260 and LUFT GC/MS
Certificate# 2742, 2745, & 2741 approved for LUFT
Certificate# 2745 & 2742 approved for EPA 418.1

H&P Mobile Geochemistry, Inc. is approved as an Environmental Laboratory in conformance with the National Environmental Accreditation Conference Standards for the category Environmental Analysis Air and Emissions for the following analytes and methods:

1,2,4-Trichlorobenzene by EPA TO-15 & TO-14A
Hexachlorobutadiene by EPA TO-15 & TO-14A
1,2,4-Trimethylbenzene by EPA TO -14A
1,2-Dichlorobenzene by EPA TO-15 & TO-14A
1,3,5-Trimethylbenzene by EPA TO -14A
1,4-Dichlorobenzene by EPA TO-15 & TO-14A
Benzene by EPA TO-15 & TO-14A
Chlorobenzene by EPA TO-15 & TO-14A
Ethyl benzene by EPA TO-15 & TO-14A
Styrene by EPA TO-15 & TO-14A
Toluene by EPA TO-15 & TO-14A
Total Xylenes by EPA TO-15 & TO-14A
1,1,1-Trichloroethane by EPA TO-15 & TO-14A
1,1,2,2-Tetrachloroethane by EPA TO-15 & TO-14A
1,1,2-Trichloroethane by EPA TO-15 & TO-14A
1,1-Dichloroethane by EPA TO-15 & TO-14A
1,1-Dichloroethene by EPA TO-15 & TO-14A
1,2-Dichloroethane by EPA TO-15 & TO-14A
1,2-Dichloropropane by EPA TO-15 & TO-14A
Benzyl Chloride by EPA TO-15 & TO-14A
Bromoform by EPA TO-15
Bromomethane by EPA TO-15 & TO-14A
Carbon tetrachloride by EPA TO-15 & TO-14A
Chloroethane by EPA TO-15
Chloroform by EPA TO-15 & TO-14A
Chloromethane by EPA TO-15 & TO-14A
cis-1,2-Dichloroethene by EPA TO-15
cis-1,2-Dichloropropene by EPA TO-15 & TO-14A
Methylene chloride by EPA TO -15 & TO-14A
Tetrachloroethane by EPA TO-15 & TO-14A
trans-1,2-Dichloroethene by EPA TO-15
trans-1,2-Dichloropropene by EPA TO-15 & TO-14A
Trichloroethene by EPA TO-15 & TO-14A
Vinyl chloride by EPA TO -15 & TO-14A
2-Butanone by EPA TO-15
4-Methyl-2-Pentanone by EPA TO-15
Hexane by EPA TO-15
Methyl tert-butyl ether by EPA TO-15
Vinyl acetate by EPA TO-15
Dibromochloromethane by EPA TO-15
Dichlorodifluoromethane by EPA TO-15 & TO-14A
Trichlorofluoromethane by EPA TO-15 & TO-14A
Naphthalene by EPA TO-15 & TO-14A
m&p Xylenes by EPA TO-15
o-Xylene by EPA TO-15
1,3-Butadiene by EPA TO-15
1,1,2-Trichlorotrifluoroethane by EPA TO-15 & TO-14A
Carbon disulfide by EPA TO-15
1,4-Dioxane by EPA TO-15
Cyclohexane by EPA TO-15
tert-Butyl Alcohol by EPA TO-15
1,3-Dichlorobenzene by EPA TO-15 & TO-14A
Heptane by EPA TO-15
Bromodichloromethane by EPA TO-15 & TO-14A

Chain of Custody Record

H&P Mobile Geochemistry Inc.
2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159
1855 Coronado Ave., Signal Hill, CA 90755 • ph 800.834.9888

Date:
H&P Project # AG090412-13
Outside Lab:

Client: Atlas Geo Sampling Company
Address: 126 Nottingham Lane, Alpharetta, GA 30009
Email: jwintle@oasis-cs.com + jimfinels@att.net
Collector: Jim Finers
Client Project # Rayloc
Location: FC Housing Auth.
Phone: 770 883 3372
Page: 1 of 1
Project Contact:
Fax:
Turn around time: STD

Geotracker EDF: Yes ☐ No ☐
Global ID:
Excel EDD: Yes ☐ No ☐

Sample Receipt
Intact: ☑ Yes ☐ No
Seal Intact: ☑ Yes ☐ No ☐ N/A
Cold: ☐ Yes ☐ No ☑ N/A
Temperature: RT

Special Instructions:
UPS TRACK# 1Z 93T T61 87 4833 1486

Lab Work Order # E209006

Sample Name	Field Point Name	Purge Vol	Time	Date	Sample Type	Container Type	Total # of containers	8260B Full List ☐ BTEX/OXY ☐ TPH gas	8260B ☐ ☐ ☐	8015M TPH ☐ g ☐ d ☐ ext	418.1 TRPH	VOC's: Full List ☑ 8260B ☑ TO-15	VOC's: Short List/DTSC ☐ 8260B ☐ TO-15	VOC's: SAM, 8260B ☐ SAM A ☐ SAM B	Naphthalene ☐ 8260B ☐ TO-15	Oxygenates ☐ 8260B ☐ TO-15	TPHv gas ☐ 8260B ☐ TO-15	Ketones ☐ 8260B ☐ TO-15	Other ____ ☐ 8260B ☐ TO-15	Leak Check Compound ☐ 1,1 DFA ☐ OTHER	Methane	Fixed Gases ☐ CO_2 ☐ O_2 ☐ N_2	CA ☐ VA ☐	
								SOIL/GW				SOIL VAPOR/AIR ANALYSIS											
FC SG-1		75m	1038	8-30-12	SG	Summa	1					✓											267-2.3

Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:
[signature]	Atlas			8.30.12	335
Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:
		[signature]	H&P	9.4.12	0950
Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:

*Signature constitutes authorization to proceed with analysis and acceptance of condition on back.

Sample disposal instruction: ☐ Disposal ☐ Return to client ☐ Pickup

Mobile Geochemistry Inc.

18 March 2013

Mr. Jim Fineis
Atlas Geo-Sampling Company
120 Nottaway Lane
Alpharetta, GA 30009

H&P Project: AG030813-11
Client Project: Rayloc / Atlanta, GA

Dear Mr. Jim Fineis:

Enclosed is the analytical report for the above referenced project. The data herein applies to samples as received by H&P Mobile Geochemistry, Inc. on 08-Mar-13 which were analyzed in accordance with the attached Chain of Custody record(s).

The results for all sample analyses and required QA/QC analyses are presented in the following sections and summarized in the documents:

- Sample Summary
- Case Narrative (if applicable)
- Sample Results
- Quality Control Summary
- Notes and Definitions / Appendix
- Chain of Custody

Unless otherwise noted, all analyses were performed and reviewed in compliance with our Quality Systems Manual and Standard Operating Procedures. This report shall not be reproduced, except in full, without the written approval of H&P Mobile Geochemistry, Inc.

We at H&P Mobile Geochemistry, Inc. sincerely appreciate the opportunity to provide analytical services to you on this project. If you have any questions or concerns regarding this analytical report, please contact me at your convenience at 760-804-9678.

Sincerely,

Janis Villarreal

Janis Villarreal
Laboratory Director

H&P Mobile Geochemistry, Inc. operates under CA Environmental Lab Accreditation Program Numbers 2579, 2740, 2741, 2742, 2743, 2745 and 2754. National Environmental Laboratory Accreditation Conference (NELAC) Standards Lab #11845

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Atlas Geo-Sampling Company	Project: AG030813-11	
120 Nottaway Lane	Project Number: Rayloc / Atlanta, GA	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	18-Mar-13 10:00

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PS-1	E303033-01	Vapor	06-Mar-13	08-Mar-13
PS-2	E303033-02	Vapor	06-Mar-13	08-Mar-13
BD-1	E303033-03	Vapor	06-Mar-13	08-Mar-13
CH-1	E303033-04	Vapor	06-Mar-13	08-Mar-13
GR-1	E303033-05	Vapor	06-Mar-13	08-Mar-13
PP-1	E303033-06	Vapor	06-Mar-13	08-Mar-13

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Atlas Geo-Sampling Company 120 Nottaway Lane Alpharetta, GA 30009	Project: AG030813-11 Project Number: Rayloc / Atlanta, GA Project Manager: Mr. Jim Fineis	Reported: 18-Mar-13 10:00

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
PS-1 (E303033-01) Vapor Sampled: 06-Mar-13 Received: 08-Mar-13									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EC31305	12-Mar-13	12-Mar-13	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	**27**	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**7.6**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**19**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**49**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	**5.5**	4.4	"	"	"	"	"	"	
m,p-Xylene	**25**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	18-Mar-13 10:00

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
PS-1 (E303033-01) Vapor Sampled: 06-Mar-13 Received: 08-Mar-13									
o-Xylene	**7.9**	4.4	ug/m3	1	EC31305	12-Mar-13	12-Mar-13	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**8.6**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	7.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	11	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*105 %*		*76-134*		"	"	"	
Surrogate: Toluene-d8		*95.5 %*		*78-125*		"	"	"	
Surrogate: 4-Bromofluorobenzene		*103 %*		*77-127*		"	"	"	
PS-2 (E303033-02) Vapor Sampled: 06-Mar-13 Received: 08-Mar-13									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EC31305	12-Mar-13	12-Mar-13	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	ND	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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Atlas Geo-Sampling Company	Project: AG030813-11	
120 Nottaway Lane	Project Number: Rayloc / Atlanta, GA	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	18-Mar-13 10:00

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
PS-2 (E303033-02) Vapor Sampled: 06-Mar-13 Received: 08-Mar-13									
Trichloroethene	ND	5.5	ug/m3	1	EC31305	12-Mar-13	12-Mar-13	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**7.3**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**44**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	**14**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	**4.7**	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**8.0**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	7.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	11	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*109 %*	*76-134*		"	"	"	"	
Surrogate: Toluene-d8		*96.4 %*	*78-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*77-127*		"	"	"	"	

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Atlas Geo-Sampling Company 120 Nottaway Lane Alpharetta, GA 30009	Project: AG030813-11 Project Number: Rayloc / Atlanta, GA Project Manager: Mr. Jim Fineis	Reported: 18-Mar-13 10:00

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
BD-1 (E303033-03) Vapor Sampled: 06-Mar-13 Received: 08-Mar-13									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EC31305	12-Mar-13	12-Mar-13	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	**8.9**	5.6	"	"	"	"	"	"	
Acetone	**33**	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**3.6**	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	**69**	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	**33**	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**11**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**1500**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	**11**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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Atlas Geo-Sampling Company 120 Nottaway Lane Alpharetta, GA 30009	Project: AG030813-11 Project Number: Rayloc / Atlanta, GA Project Manager: Mr. Jim Fineis	Reported: 18-Mar-13 10:00

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
GR-1 (E303033-05) Vapor Sampled: 06-Mar-13 Received: 08-Mar-13									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EC31305	12-Mar-13	12-Mar-13	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	ND	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**10**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**13**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	**4.7**	4.4	"	"	"	"	"	"	
m,p-Xylene	**18**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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Atlas Geo-Sampling Company	Project: AG030813-11	
120 Nottaway Lane	Project Number: Rayloc / Atlanta, GA	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	18-Mar-13 10:00

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
GR-1 (E303033-05) Vapor Sampled: 06-Mar-13 Received: 08-Mar-13									
o-Xylene	**6.4**	4.4	ug/m3	1	EC31305	12-Mar-13	12-Mar-13	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**9.9**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	7.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	11	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*108 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*96.4 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*103 %*		*77-127*	"	"	"	"	
PP-1 (E303033-06) Vapor Sampled: 06-Mar-13 Received: 08-Mar-13									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EC31305	12-Mar-13	12-Mar-13	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	**28**	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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Atlas Geo-Sampling Company	Project: AG030813-11	
120 Nottaway Lane	Project Number: Rayloc / Atlanta, GA	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	18-Mar-13 10:00

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
PP-1 (E303033-06) Vapor Sampled: 06-Mar-13 Received: 08-Mar-13									
Trichloroethene	ND	5.5	ug/m3	1	EC31305	12-Mar-13	12-Mar-13	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**15**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**310**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	**17**	4.4	"	"	"	"	"	"	
m,p-Xylene	**60**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	**22**	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	**6.7**	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	**7.7**	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**24**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	7.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	11	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*110 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*98.5 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*		*77-127*	"	"	"	"	

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Atlas Geo-Sampling Company	Project: AG030813-11	
120 Nottaway Lane	Project Number: Rayloc / Atlanta, GA	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	18-Mar-13 10:00

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC31305 - TO-15										
Blank (EC31305-BLK1)	Prepared & Analyzed: 12-Mar-13									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3							
Chloromethane	ND	2.1	"							
Dichlorotetrafluoroethane (F114)	ND	7.1	"							
Vinyl chloride	ND	2.6	"							
Bromomethane	ND	16	"							
Chloroethane	ND	8.0	"							
Trichlorofluoromethane (F11)	ND	5.6	"							
Acetone	ND	24	"							
1,1-Dichloroethene	ND	4.0	"							
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"							
Methylene chloride (Dichloromethane)	ND	3.5	"							
Carbon disulfide	ND	6.3	"							
trans-1,2-Dichloroethene	ND	8.0	"							
1,1-Dichloroethane	ND	4.1	"							
2-Butanone (MEK)	ND	30	"							
cis-1,2-Dichloroethene	ND	4.0	"							
Chloroform	ND	4.9	"							
1,1,1-Trichloroethane	ND	5.5	"							
1,2-Dichloroethane (EDC)	ND	4.1	"							
Benzene	ND	3.2	"							
Carbon tetrachloride	ND	6.4	"							
Trichloroethene	ND	5.5	"							
1,2-Dichloropropane	ND	9.4	"							
Bromodichloromethane	ND	6.8	"							
cis-1,3-Dichloropropene	ND	4.6	"							
4-Methyl-2-pentanone (MIBK)	ND	8.3	"							
trans-1,3-Dichloropropene	ND	4.6	"							
Toluene	ND	3.8	"							
1,1,2-Trichloroethane	ND	5.5	"							
2-Hexanone (MBK)	ND	8.3	"							
Dibromochloromethane	ND	8.6	"							
Tetrachloroethene	ND	6.9	"							
1,2-Dibromoethane (EDB)	ND	7.8	"							
1,1,1,2-Tetrachloroethane	ND	7.0	"							

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Atlas Geo-Sampling Company	Project: AG030813-11	
120 Nottaway Lane	Project Number: Rayloc / Atlanta, GA	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	18-Mar-13 10:00

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC31305 - TO-15										
Blank (EC31305-BLK1)	Prepared & Analyzed: 12-Mar-13									
Chlorobenzene	ND	4.7	ug/m3							
Ethylbenzene	ND	4.4	"							
m,p-Xylene	ND	8.8	"							
Styrene	ND	4.3	"							
o-Xylene	ND	4.4	"							
Bromoform	ND	10	"							
1,1,2,2-Tetrachloroethane	ND	7.0	"							
4-Ethyltoluene	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	12	"							
1,4-Dichlorobenzene	ND	12	"							
1,2-Dichlorobenzene	ND	12	"							
1,2,4-Trichlorobenzene	ND	7.5	"							
Hexachlorobutadiene	ND	11	"							
Surrogate: 1,2-Dichloroethane-d4	*227*		"	*214*		*106*	*76-134*			
Surrogate: Toluene-d8	*198*		"	*207*		*95.5*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*370*		"	*364*		*102*	*77-127*			
LCS (EC31305-BS1)	Prepared & Analyzed: 12-Mar-13									
Dichlorodifluoromethane (F12)	100	5.0	ug/m3	101		99.4	65-135			
Vinyl chloride	50	2.6	"	52.0		96.5	65-135			
Chloroethane	51	8.0	"	53.6		94.2	65-135			
Trichlorofluoromethane (F11)	100	5.6	"	113		92.3	65-135			
1,1-Dichloroethene	68	4.0	"	80.8		84.0	65-135			
1,1,2-Trichlorotrifluoroethane (F113)	140	7.7	"	155		88.5	65-135			
Methylene chloride (Dichloromethane)	57	3.5	"	70.8		79.9	65-135			
trans-1,2-Dichloroethene	75	8.0	"	80.8		92.5	65-135			
1,1-Dichloroethane	78	4.1	"	82.4		95.2	65-135			
cis-1,2-Dichloroethene	76	4.0	"	80.0		94.4	65-135			
Chloroform	98	4.9	"	99.2		98.5	65-135			
1,1,1-Trichloroethane	110	5.5	"	111		99.3	65-135			
1,2-Dichloroethane (EDC)	85	4.1	"	82.4		103	65-135			

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Atlas Geo-Sampling Company	Project: AG030813-11	
120 Nottaway Lane	Project Number: Rayloc / Atlanta, GA	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	18-Mar-13 10:00

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC31305 - TO-15										
LCS (EC31305-BS1)				Prepared & Analyzed: 12-Mar-13						
Benzene	61	3.2	ug/m3	64.8		93.7	65-135			
Carbon tetrachloride	130	6.4	"	128		100	65-135			
Trichloroethene	110	5.5	"	110		102	65-135			
Toluene	75	3.8	"	76.8		97.2	65-135			
1,1,2-Trichloroethane	110	5.5	"	111		98.6	65-135			
Tetrachloroethene	140	6.9	"	138		99.7	65-135			
1,1,1,2-Tetrachloroethane	150	7.0	"	140		106	65-135			
Ethylbenzene	95	4.4	"	88.4		107	65-135			
m,p-Xylene	190	8.8	"	177		108	65-135			
o-Xylene	98	4.4	"	88.4		111	65-135			
1,1,2,2-Tetrachloroethane	150	7.0	"	140		105	65-135			
Surrogate: 1,2-Dichloroethane-d4	*211*		"	*214*		*98.7*	*76-134*			
Surrogate: Toluene-d8	*196*		"	*207*		*94.4*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*379*		"	*364*		*104*	*77-127*			
LCS Dup (EC31305-BSD1)				Prepared & Analyzed: 12-Mar-13						
Dichlorodifluoromethane (F12)	110	5.0	ug/m3	101		108	65-135	7.89	35	
Vinyl chloride	56	2.6	"	52.0		107	65-135	10.3	35	
Chloroethane	55	8.0	"	53.6		103	65-135	9.29	35	
Trichlorofluoromethane (F11)	110	5.6	"	113		100	65-135	8.18	35	
1,1-Dichloroethene	79	4.0	"	80.8		97.3	65-135	14.7	35	
1,1,2-Trichlorotrifluoroethane (F113)	160	7.7	"	155		100	65-135	12.2	35	
Methylene chloride (Dichloromethane)	67	3.5	"	70.8		94.2	65-135	16.4	35	
trans-1,2-Dichloroethene	72	8.0	"	80.8		89.6	65-135	3.17	35	
1,1-Dichloroethane	78	4.1	"	82.4		94.8	65-135	0.367	35	
cis-1,2-Dichloroethene	82	4.0	"	80.0		103	65-135	8.47	35	
Chloroform	100	4.9	"	99.2		103	65-135	4.54	35	
1,1,1-Trichloroethane	120	5.5	"	111		105	65-135	5.35	35	
1,2-Dichloroethane (EDC)	89	4.1	"	82.4		108	65-135	4.59	35	
Benzene	65	3.2	"	64.8		101	65-135	7.34	35	
Carbon tetrachloride	140	6.4	"	128		106	65-135	5.80	35	
Trichloroethene	110	5.5	"	110		102	65-135	0.634	35	
Toluene	75	3.8	"	76.8		98.2	65-135	1.07	35	

H&P Mobile
Geochemistry Inc.

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Atlas Geo-Sampling Company 120 Nottaway Lane Alpharetta, GA 30009	Project: AG030813-11 Project Number: Rayloc / Atlanta, GA Project Manager: Mr. Jim Fineis	Reported: 18-Mar-13 10:00

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
BD-1 (E303033-03) Vapor Sampled: 06-Mar-13 Received: 08-Mar-13									
o-Xylene	ND	4.4	ug/m3	1	EC31305	12-Mar-13	12-Mar-13	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**5.6**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	7.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	11	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*109 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*96.5 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*103 %*		*77-127*	"	"	"	"	

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Atlas Geo-Sampling Company	Project: AG030813-11	
120 Nottaway Lane	Project Number: Rayloc / Atlanta, GA	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	18-Mar-13 10:00

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC31305 - TO-15										
LCS Dup (EC31305-BSD1)				Prepared & Analyzed: 12-Mar-13						
1,1,2-Trichloroethane	110	5.5	ug/m3	111		98.9	65-135	0.302	35	
Tetrachloroethene	140	6.9	"	138		99.1	65-135	0.600	35	
1,1,1,2-Tetrachloroethane	150	7.0	"	140		105	65-135	0.849	35	
Ethylbenzene	95	4.4	"	88.4		107	65-135	0.186	35	
m,p-Xylene	190	8.8	"	177		107	65-135	0.715	35	
o-Xylene	97	4.4	"	88.4		110	65-135	0.675	35	
1,1,2,2-Tetrachloroethane	150	7.0	"	140		107	65-135	1.74	35	
Surrogate: 1,2-Dichloroethane-d4	*223*		"	*214*		*104*	*76-134*			
Surrogate: Toluene-d8	*199*		"	*207*		*95.9*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*377*		"	*364*		*104*	*77-127*			

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Atlas Geo-Sampling Company	Project: AG030813-11	
120 Nottaway Lane	Project Number: Rayloc / Atlanta, GA	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	18-Mar-13 10:00

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Laboratory in conformance with the Environmental Laboratory Accreditation Program (CA) for the category of Volatile and Semi-Volatile Organic Chemistry of Hazardous Waste for the following methods:

Certificate# 2741, 2743, 2579, 2754 & 2740 approved for EPA 8260 and LUFT GC/MS
Certificate# 2742, 2745, & 2741 approved for LUFT
Certificate# 2745 & 2742 approved for EPA 418.1

H&P Mobile Geochemistry, Inc. is approved as an Environmental Laboratory in conformance with the National Environmental Accreditation Conference Standards for the category Environmental Analysis Air and Emissions for the following analytes and methods:

1,2,4-Trichlorobenzene by EPA TO-15 & TO-14A
Hexachlorobutadiene by EPA TO-15 & TO-14A
Bromodichloromethane by EPA TO-15 & TO-14A
1,2-Dichlorobenzene by EPA TO-15 & TO-14A
Dichlorotetrafluoroethane by EPA TO-14A
1,4-Dichlorobenzene by EPA TO-15 & TO-14A
Benzene by EPA TO-15 & TO-14A
Chlorobenzene by EPA TO-15 & TO-14A
Ethyl benzene by EPA TO-15 & TO-14A
Styrene by EPA TO-15 & TO-14A
Toluene by EPA TO-15 & TO-14A
Total Xylenes by EPA TO-15 & TO-14A
1,1,1-Trichloroethane by EPA TO-15 & TO-14A
1,1,2,2-Tetrachloroethane by EPA TO-15 & TO-14A
1,1,2-Trichloroethane by EPA TO-15 & TO-14A
1,1-Dichloroethane by EPA TO-15 & TO-14A
1,1-Dichloroethene by EPA TO-15 & TO-14A
1,2-Dichloroethane by EPA TO-15 & TO-14A
1,2-Dichloropropane by EPA TO-15 & TO-14A
Benzyl Chloride by EPA TO-15 & TO-14A
Bromoform by EPA TO-15
Bromomethane by EPA TO-15 & TO-14A
Carbon tetrachloride by EPA TO-15 & TO-14A
Chloroethane by EPA TO-15 & TO-14A
Chloroform by EPA TO-15 & TO-14A
Chloromethane by EPA TO-15 & TO-14A
cis-1,2-Dichloroethene by EPA TO-15 & TO-14A
cis-1,3-Dichloropropene by EPA TO-15 & TO-14A
Methylene chloride by EPA TO -15 & TO-14A
Tetrachloroethane by EPA TO-15 & TO-14A
trans-1,2-Dichloroethene by EPA TO-15
trans-1,3-Dichloropropene by EPA TO-15 & TO-14A
Trichloroethene by EPA TO-15 & TO-14A
Vinyl chloride by EPA TO -15 & TO-14A
2-Butanone by EPA TO-15
4-Methyl-2-Pentanone by EPA TO-15
Hexane by EPA TO-15
Methyl tert-butyl ether by EPA TO-15
Vinyl acetate by EPA TO-15

Dibromochloromethane by EPA TO-15
1,3-Dichlorobenzene by EPA TO-15 & TO-14A
Trichlorofluoromethane by EPA TO-14A
Naphthalene by H&P SOP TO-15/GC-MS
1,2-Dibromoethane (EDB) by EPA TO-15 & TO-14A
1,2-Dibromo-3-chloropropane by EPA TO-15
1,3-Butadiene by EPA TO-15
1,1,2-Trichlorotrifluoroethane by EPA TO-15 & TO-14A
Carbon disulfide by EPA TO-15
1,4-Dioxane by EPA TO-15

This certification applies to samples analyzed in summa canisters.

Chain of Custody Record

H&P Mobile Geochemistry Inc.
☐ 2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159
☐ 1855 Coronado Ave., Signal Hill, CA 90755 • ph 800.834.9888

Date: _____
H&P Project # AG030813-11
Outside Lab: _____

Client: Atlas Geo Sampling
Address: 120 Nottaway Lane
Alpharetta, GA 30004
Email: jimfinnes@atlas-geo.com

Collector: Jim Finnes
Client Project # Raytoc
Location: Atlanta, GA
Phone: 770 823 3372
Fax: _____

Page: ____ of ____
Project Contact: Jim Finnes
Turn around time: STD

Geotracker EDF: Yes ☐ No ☐
Global ID: _____
Excel EDD: Yes ☐ No ☐

Sample Receipt
Intact: ☑ Yes ☐ No
Seal Intact: ☑ Yes ☐ No ☐ N/A
Cold: ☐ Yes ☐ No ☑ N/A
Temperature: RT

Special Instructions:
UPS TRACK# 1Z 93T T61 87 4711 1680

Lab Work Order # E303033

Sample Name	Field Point Name	Purge Vol	Time	Date	Sample Type	Container Type	Total # of containers	8260B Full List	8260B ☐ BTEX/OXY ☐ TPH gas	8015M TPH ☐ g ☐ d ☐ ext	418.1 TRPH	VOC's: Full List ☐ 8260B ☑ TO-15	VOC's: Short List/DTSC ☐ 8260B ☐ TO-15	VOC's: SAM, 8260B ☐ SAM A ☐ SAM B	Naphthalene ☐ 8260B ☐ TO-15	Oxygenates ☐ 8260B ☐ TO-15	TPHv gas ☐ 8260B ☐ TO-15	Ketones ☐ 8260B ☐ TO-15	Other ____ ☐ 8260B ☐ TO-15	Leak Check Compound ☐ 1,1 DFA ☐ OTHER	Methane	Fixed Gases ☐ CO_2 ☐ O_2 ☐ N_2	CAN#	VAC#
								SOIL/GW				SOIL VAPOR/AIR ANALYSIS												
PS-1	PS-1	120	822	3/6/13		Summa	1					1											105-2.2	
PS-2	PS-2	120	855	↓		"	1					1											079-2.0	
BD-1	~~BD~~ BD1	120	9.10	3-6-13	SG	"	1					1											095-1.7	
CH-1	CH-1	120	1015	↓		"	1					1											228-3.5	
GR-1	GR-1	120	942	↓		"	1					1											093-1.3	
PP-1	PP-1	120	1035	3-6-13	SG	"	1					1											072-3.0	

Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date: 3-6-13	Time: 1235
Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date: 3-8-13	Time: 1050
Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:

Atlas — HAP

*Signature constitutes authorization to proceed with analysis and acceptance of condition on back

Sample disposal instruction: ☐ Disposal ☐ Return to client ☐ Pickup

HARTMAN
ENVIRONMENTAL GEOSCIENCE

April 1, 2013

Mr. Jim Fineis
Atlas Geosampling Inc.
120 Nottaway Lane
Alpharetta, GA 30009

SUBJECT: Vapor Intrusion Pathway Risk Evaluation –B&D Concrete Cutting Bldg (BD-1)

Mr. Fineis:

I have performed risk calculations for the sub-slab soil gas data collected at one location on March 6, 2013 by Atlas Geo-Sampling and analyzed by H&P Mobile Geochemistry on March 13, 2013.

Of the volatile organic compounds (VOCs) detected in the sub-slab soil gas sample, the calculated risk is dominated by three compounds: chloroform, trichloroethylene (TCE) and tetrachloroethylene (PCE) since they are by far the most toxic of the VOCs detected. Hence, I limited the evaluation to these three compounds.

I performed the calculations using allowed indoor air values from the EPA Regional Screening Levels assuming a commercial receptor, a risk level of 1 in 100,000 and a hazard quotient of 1.0.
I determined an allowable sub-slab soil gas screening level assuming a very conservative sub-slab attenuation factor of 0.1, which is probably at least 10 times higher (more conservative) for a commercial building . For TCE and PCE, allowed sub-slab values are lower for the non-cancer case versus the 1 in 100,000 cancer risk level.

Chloroform: allowed sub-slab value (1e-5 risk): 53 ug/m3; measured value: 69 ug/m3

Trichloroethylene: allowed sub-slab value (nc): 88 ug/m3; measured value: 33 ug/m3

Tetrachloroethylene: allowed sub-slab value (nc): 1,800 ug/m3; measured value: 1,500 ug/m3

The cumulative cancer risk for these three compounds is 2 in 100,000, which is just above the Georgia allowed standard of 1 in 100,000. The cumulative non-cancer risk (hazard quotient) for these three compounds is 1.3, which is just above the Georgia allowed standard of 1.0.

Based upon this single sub-slab soil gas sample, there are elevated levels of some VOCs under the building which could pose a slight risk from vapor intrusion to the current commercial structure.

Feel free to contact me if you have any questions on this evaluation.

Blayne Hartman

Blayne Hartman, Ph.D.

717 Seabright Lane, Solana Beach, CA (858) 204-6170

HARTMAN
ENVIRONMENTAL GEOSCIENCE

April 1, 2013

Mr. Jim Fineis
Atlas Geosampling Inc.
120 Nottaway Lane
Alpharetta, GA 30009

SUBJECT: Vapor Intrusion Pathway Risk Evaluation – Pett Spice Bldg (PS-1)

Mr. Fineis:

I have performed risk calculations for the sub-slab soil gas data collected at one location on March 6, 2013 by Atlas Geo-Sampling and analyzed by H&P Mobile Geochemistry on March 13, 2013.

Of the volatile organic compounds (VOCs) detected in the sub-slab soil gas sample, the calculated risk is dominated by two compounds: chloroform and tetrachloroethylene (PCE) since they are by far the most toxic of the VOCs detected. Hence, I limited the evaluation to these two compounds.

I performed the calculations using allowed indoor air values from the EPA Regional Screening Levels assuming a commercial receptor, a risk level of 1 in 100,000 and a hazard quotient of 1.0. I determined an allowable sub-slab soil gas screening level assuming a very conservative sub-slab attenuation factor of 0.1, which is probably at least 10 times higher (more conservative) for a commercial building . For tetrachloroethylene (PCE), allowed sub-slab values are lower for the non-cancer case versus the 1 in 100,000 cancer risk level.

Chloroform: allowed sub-slab value (1e-5 risk): 53 ug/m3; measured value: 7.6 ug/m3

Tetrachloroethylene: allowed sub-slab value (nc): 1800 ug/m3; measured value: 49 ug/m3

The measured sub-slab values for both compounds are well below the allowed screening levels.

Based upon this single sub-slab soil gas sample, there appears to be no risk from vapor intrusion to the current commercial structure.

Feel free to contact me if you have any questions on this evaluation.

Blayne Hartman

Blayne Hartman, Ph.D.

717 Seabright Lane, Solana Beach, CA (858) 204-6170

HARTMAN
ENVIRONMENTAL GEOSCIENCE

April 1, 2013

Mr. Jim Fineis
Atlas Geosampling Inc.
120 Nottaway Lane
Alpharetta, GA 30009

SUBJECT: Vapor Intrusion Pathway Risk Evaluation: N. GA Granite & Marble (GR-1)

Mr. Fineis:

I have performed risk calculations for the sub-slab soil gas data collected at one location on March 6, 2013 by Atlas Geo-Sampling and analyzed by H&P Mobile Geochemistry on March 13, 2013.

Of the volatile organic compounds (VOCs) detected in the sub-slab soil gas sample, the calculated risk is dominated by one compound, tetrachloroethylene (PCE), since it is by far the most toxic of the VOCs detected. Hence, I limited the evaluation to this compound.

I performed the calculations using allowed indoor air values from the EPA Regional Screening Levels assuming a commercial receptor, a risk level of 1 in 100,000 and a hazard quotient of 1.0. I determined an allowable sub-slab soil gas screening level assuming a very conservative sub-slab attenuation factor of 0.1, which is probably at least 10 times higher (more conservative) for a commercial building . For tetrachloroethylene (PCE), allowed sub-slab values are lower for the non-cancer case versus the 1 in 100,000 cancer risk level.

Tetrachloroethylene: allowed sub-slab value (nc): 1,800 ug/m3; measured value: 13 ug/m3

The measured sub-slab value is well below the allowed screening level.

Based upon this single sub-slab soil gas sample, there appears to be no risk from vapor intrusion to the current commercial structure.

Feel free to contact me if you have any questions on this evaluation.

Blayne Hartman

Blayne Hartman, Ph.D.

717 Seabright Lane, Solana Beach, CA (858) 204-6170

HARTMAN
ENVIRONMENTAL GEOSCIENCE

April 1, 2013

Mr. Jim Fineis
Atlas Geosampling Inc.
120 Nottaway Lane
Alpharetta, GA 30009

SUBJECT: Vapor Intrusion Pathway Risk Evaluation – Interchange Warehouse (PP-1)

Mr. Fineis:

I have performed risk calculations for the sub-slab soil gas data collected at one location on March 6, 2013 by Atlas Geo-Sampling and analyzed by H&P Mobile Geochemistry on March 13, 2013.

Of the volatile organic compounds (VOCs) detected in the sub-slab soil gas sample, the calculated risk is dominated by one compound, tetrachloroethylene (PCE), since it is by far the most toxic of the VOCs detected. Hence, I limited the evaluation to this compound.

I performed the calculations using allowed indoor air values from the EPA Regional Screening Levels assuming a commercial receptor, a risk level of 1 in 100,000 and a hazard quotient of 1.0. I determined an allowable sub-slab soil gas screening level assuming a very conservative sub-slab attenuation factor of 0.1, which is probably at least 10 times higher (more conservative) for a commercial building . For tetrachloroethylene (PCE), allowed sub-slab values are lower for the non-cancer case versus the 1 in 100,000 cancer risk level.

Tetrachloroethylene: allowed sub-slab value (nc): 1800 ug/m3; measured value: 310 ug/m3

The measured sub-slab value is well below the allowed screening level.

Based upon this single sub-slab soil gas sample, there appears to be no risk from vapor intrusion to the current commercial structure.

Feel free to contact me if you have any questions on this evaluation.

Blayne Hartman

Blayne Hartman, Ph.D.

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HARTMAN
ENVIRONMENTAL GEOSCIENCE

April 1, 2013

Mr. Jim Fineis
Atlas Geosampling Inc.
120 Nottaway Lane
Alpharetta, GA 30009

SUBJECT: Vapor Intrusion Pathway Risk Evaluation – Fulton Industrial Bldg (PS-2)

Mr. Fineis:

I have performed risk calculations for the sub-slab soil gas data collected at one location on March 6, 2013 by Atlas Geo-Sampling and analyzed by H&P Mobile Geochemistry on March 13, 2013.

Of the volatile organic compounds (VOCs) detected in the sub-slab soil gas sample, the calculated risk is dominated by one compound, tetrachloroethylene (PCE), since it is by far the most toxic of the VOCs detected. Hence, I limited the evaluation to this compound.

I performed the calculations using allowed indoor air values from the EPA Regional Screening Levels assuming a commercial receptor, a risk level of 1 in 100,000 and a hazard quotient of 1.0. I determined an allowable sub-slab soil gas screening level assuming a very conservative sub-slab attenuation factor of 0.1, which is probably at least 10 times higher (more conservative) for a commercial building . For tetrachloroethylene (PCE), allowed sub-slab values are lower for the non-cancer case versus the 1 in 100,000 cancer risk level.

Tetrachloroethylene: allowed sub-slab value (nc): 1800 ug/m3; measured value: 44 ug/m3

The measured sub-slab value is well below the allowed screening level.

Based upon this single sub-slab soil gas sample, there appears to be no risk from vapor intrusion to the current commercial structure.

Feel free to contact me if you have any questions on this evaluation.

Blayne Hartman

Blayne Hartman, Ph.D.

717 Seabright Lane, Solana Beach, CA (858) 204-6170

HARTMAN
ENVIRONMENTAL GEOSCIENCE

September 20, 2012

Mr. Jim Fineis
Atlas Geosampling Inc.
120 Nottaway Lane
Alpharetta, GA 30009

SUBJECT: Vapor Intrusion Pathway Risk Calculations
Rayloc/FC Housing Authority

Mr. Fineis:

I have performed risk calculations for the sub-slab soil gas data collected at one location on August 30, 2012 by Atlas Geo-Sampling and analyzed by H&P Mobile Geochemistry on September 10, 2012.

Of the volatile organic compounds (VOCs) detected in the soil gas sample, the calculated risk is due to four compounds: benzene, ethylbenzene, tetrachloroethylene (PCE) and 1,2,4 trimethylbenzene since they are by far the most toxic. Hence, I limited the risk calculations to these four compounds.

I performed the calculations using allowed indoor air values from the EPA Regional Screening Levels assuming a residential receptor and a risk level of 1 in 100,000. I determined an allowable sub-slab soil gas screening level assuming a conservative sub-slab attenuation factor of 0.1. The calculations are summarized in the attached spreadsheet. The measured sub-slab concentration is in the first column and the allowed sub-slab screening level is in the column labeled SL. For tetrachloroethylene (PCE), calculations were also done for the non-cancer case since the non-cancer screening level is lower than the cancer level at a 1 in 100,000 risk level.

The calculated cumulative cancer risk is 4 in 1,000,000 (0.4 in 100,000) and the calculated non-cancer hazard quotient (HQ) is 0.2. Both these values are below the State of Georgia allowed risk of 1 in 100,000 and HQ of 1.0.

Based upon these calculations, there appears to be no risk from vapor intrusion to the current structure at this site assuming the structure is a residence. As the current use of the structure is commercial/industrial, the calculated risks would be even lower.

Feel free to contact me if you have any questions on this evaluation.

Blayne Hartman

Blayne Hartman, Ph.D.

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APPENDIX B
DECEMBER 2017
PDA LABORATORY REPORT

Waypoint ANALYTICAL

2790 Whitten Road, Memphis, TN 38133
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1/8/2018

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

Ref: Analytical Testing
Lab Report Number: 17-362-0235
Client Project Description: RAYLOC
Atlanta, GA
Project #1502-1-3

Dear Mr. Jack Wintle:
Waypoint Analytical, Inc. received sample(s) on 12/28/2017 for the analyses presented in the following report.

The above referenced project has been analyzed per your instructions. The analyses were performed in accordance with the applicable analytical method.

The analytical data has been validated using standard quality control measures performed as required by the analytical method. Quality Assurance, method validations, instrumentation maintenance and calibration for all parameters (NELAP and non-NELAP) were performed in accordance with guidelines established by the USEPA (including 40 CFR 136 Method Update Rule May 2012) and NELAC unless otherwise indicated. Any parameter for which the laboratory is not officially NELAP accredited is indicated by a '~' symbol. These are not included in the scope because NELAP accreditation is either not available or has not been applied for. Additional certifications may be held/are available for parameters, where NELAP accreditation is not required or applicable. A full list of certifications is available upon request.

Certain parameters (chlorine, pH, dissolved oxygen, sulfite...) are required to be analyzed within 15 minutes of sampling. Usually, but not always, any field parameter analyzed at the laboratory is outside of this holding time. Refer to sample analysis time for confirmation of holding time compliance.

The results are shown on the attached Report of Analysis(s). Results for solid matrices are reported on an as-received basis unless otherwise indicated. This report shall not be reproduced except in full and relates only to the samples included in this report.

Please do not hesitate to contact me or client services if you have any questions or need additional information.

Sincerely,

Rebekah Ross

Rebekah Ross
Project Manager

Laboratory's liability in any claim relating to analyses performed shall be limited to, at laboratory's option, repeating the analysis in question at laboratory's expense, or the refund of the charges paid for performance of said analysis.

Alabama	#40750	Louisiana	#04015	VA NELAP	#460181	Texas	#T104704180-11-6	Arkansas	#88-0650
Mississippi		California	#2904	NC	#415	Oklahoma	#9311	Virginia	#00106
Kentucky	#90047	Tennessee	#TN02027	EPA	#TN00012	Kentucky UST	#41		

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Sample Summary Table

Report Number: **17-362-0235**

Client Project Description: **RAYLOC**
Atlanta, GA
Project #1502-1-3

Lab No	Client Sample ID	Matrix	Date Collected	Date Received
97737	PD-2 @ 10'	Solids	12/22/2017 08:52	12/28/2017
97738	WD-2 @ 10'	Solids	12/22/2017 09:04	12/28/2017
97739	WD-4 @ 10'	Solids	12/22/2017 09:38	12/28/2017
97740	WD-8 @ 5'	Solids	12/22/2017 09:26	12/28/2017
97741	WD-11 @ 10'	Solids	12/22/2017 09:16	12/28/2017
97742	ADD-1 @ 6'	Solids	12/22/2017 09:43	12/28/2017
97743	ADD-1 @ 10"	Solids	12/22/2017 09:48	12/28/2017
97744	ADD-2 @ 5'	Solids	12/22/2017 09:59	12/28/2017
97745	ADD-2 @ 10'	Solids	12/22/2017 10:15	12/28/2017

Waypoint ANALYTICAL
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Summary of Detected Analytes

Project RAYLOC
Report 17-362-0235

Summary of Detected Analytes

Sample Id	Lab Number	Sample Date	Analyte Description	Result	Unit of Measure	DF	Quant Limit	Method
PD-2 @ 10	97737	12/22/17	Tetrachloroethene	2.89	mg/Kg - dry	100	0.222	SW-8260B
WD-2 @ 10	97738	12/22/17	12-Dichloroethene (Total)	0.682	mg/Kg - dry	100	0.237	SW-8260B
WD-2 @ 10	97738	12/22/17	cis-12-Dichloroethene	0.682	mg/Kg - dry	100	0.237	SW-8260B
WD-2 @ 10	97738	12/22/17	Tetrachloroethene	75.3	mg/Kg - dry	1000	2.37	SW-8260B
WD-2 @ 10	97738	12/22/17	Trichloroethene	1.62	mg/Kg - dry	100	0.237	SW-8260B
WD-4 @ 10	97739	12/22/17	12-Dichloroethene (Total)	6.53	mg/Kg - dry	1000	2.31	SW-8260B
WD-4 @ 10	97739	12/22/17	cis-12-Dichloroethene	6.53	mg/Kg - dry	1000	2.31	SW-8260B
WD-4 @ 10	97739	12/22/17	Tetrachloroethene	840	mg/Kg - dry	10000	23.1	SW-8260B
WD-4 @ 10	97739	12/22/17	Trichloroethene	17.7	mg/Kg - dry	1000	2.31	SW-8260B
WD-8 @ 5	97740	12/22/17	12-Dichloroethene (Total)	1.22	mg/Kg - dry	100	0.244	SW-8260B
WD-8 @ 5	97740	12/22/17	cis-12-Dichloroethene	1.22	mg/Kg - dry	100	0.244	SW-8260B
WD-8 @ 5	97740	12/22/17	Tetrachloroethene	86.9	mg/Kg - dry	1000	2.44	SW-8260B
WD-8 @ 5	97740	12/22/17	Trichloroethene	0.823	mg/Kg - dry	100	0.244	SW-8260B
WD-11 @ 10	97741	12/22/17	12-Dichloroethene (Total)	10.3	mg/Kg - dry	1000	2.34	SW-8260B
WD-11 @ 10	97741	12/22/17	cis-12-Dichloroethene	10.3	mg/Kg - dry	1000	2.34	SW-8260B
WD-11 @ 10	97741	12/22/17	Tetrachloroethene	1970	mg/Kg - dry	10000	23.4	SW-8260B
WD-11 @ 10	97741	12/22/17	Trichloroethene	36.2	mg/Kg - dry	1000	2.34	SW-8260B
ADD-1 @ 6	97742	12/22/17	12-Dichloroethene (Total)	6.66	mg/Kg - dry	1000	2.33	SW-8260B
ADD-1 @ 6	97742	12/22/17	cis-12-Dichloroethene	6.66	mg/Kg - dry	1000	2.33	SW-8260B
ADD-1 @ 6	97742	12/22/17	Tetrachloroethene	197	mg/Kg - dry	1000	2.33	SW-8260B
ADD-1 @ 6	97742	12/22/17	Trichloroethene	4.28	mg/Kg - dry	1000	2.33	SW-8260B
ADD-1 @ 10'	97743	12/22/17	12-Dichloroethene (Total)	9.72	mg/Kg - dry	100	0.233	SW-8260B
ADD-1 @ 10'	97743	12/22/17	cis-12-Dichloroethene	8.95	mg/Kg - dry	100	0.233	SW-8260B
ADD-1 @ 10'	97743	12/22/17	Tetrachloroethene	318	mg/Kg - dry	1000	2.33	SW-8260B

Summary of Detected Analytes

Sample Id	Lab Number	Sample Date	Analyte Description	Result	Unit of Measure	DF	Quant Limit	Method
ADD-1 @ 10'	97743	12/22/17	trans-12-Dichloroethene	0.773	mg/Kg - dry	100	0.233	SW-8260B
ADD-1 @ 10'	97743	12/22/17	Trichloroethene	34.6	mg/Kg - dry	1000	2.33	SW-8260B
ADD-2 @ 5	97744	12/22/17	124-Trimethylbenzene	7.61	mg/Kg - dry	1000	2.34	SW-8260B
ADD-2 @ 5	97744	12/22/17	Tetrachloroethene	1970	mg/Kg - dry	1000	2.34	SW-8260B
ADD-2 @ 5	97744	12/22/17	Trichloroethene	3.09	mg/Kg - dry	1000	2.34	SW-8260B
ADD-2 @ 10	97745	12/22/17	12-Dichloroethene (Total)	3.65	mg/Kg - dry	100	0.25	SW-8260B
ADD-2 @ 10	97745	12/22/17	cis-12-Dichloroethene	3.65	mg/Kg - dry	100	0.25	SW-8260B
ADD-2 @ 10	97745	12/22/17	Tetrachloroethene	25.3	mg/Kg - dry	100	0.25	SW-8260B
ADD-2 @ 10	97745	12/22/17	Trichloroethene	3.48	mg/Kg - dry	100	0.25	SW-8260B

DF - Dilution Factor

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23106
Clearwater Environmental Resources, LLC
Mr. Jack Wintle
3870 Peachtree Industrial Blvd.
Duluth , GA 30096

Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97737**
Sample ID : **PD-2 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 8:52**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
% Moisture	**10.0**	%		1	01/03/18 10:57	CJH	2540G-2011

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97737**
Sample ID : **PD-2 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 8:52**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<4.44	mg/Kg - dry	4.44	100	01/03/18 15:29	ELM	L363758
Benzene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Bromobenzene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Bromochloromethane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Bromodichloromethane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Bromoform	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Bromomethane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Methyl Ethyl Ketone (MEK)	<4.44	mg/Kg - dry	4.44	100	01/03/18 15:29	ELM	L363758
n-Butylbenzene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
sec-Butyl benzene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
tert-Butyl benzene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Carbon Disulfide	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Carbon Tetrachloride	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Chlorobenzene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Chlorodibromomethane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Chloroethane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Chloroform	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Chloromethane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
2-Chlorotoluene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
4-Chlorotoluene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
1,2-Dibromo-3-Chloropropane	<1.11	mg/Kg - dry	1.11	100	01/03/18 15:29	ELM	L363758
1,2-Dibromoethane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97737**
Sample ID : **PD-2 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 8:52**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Dibromomethane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
trans-1,4-Dichloro-2-butene	<1.11	mg/Kg - dry	1.11	100	01/03/18 15:29	ELM	L363758
1,2-Dichlorobenzene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
1,3-Dichlorobenzene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
1,4-Dichlorobenzene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Dichlorodifluoromethane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
1,1-Dichloroethane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
1,2-Dichloroethane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
1,1-Dichloroethene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
cis-1,2-Dichloroethene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
trans-1,2-Dichloroethene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
1,2-Dichloroethene (Total)	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29		L363758
1,2-Dichloropropane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
1,3-Dichloropropane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
2,2-Dichloropropane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
1,1-Dichloropropene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
cis-1,3-Dichloropropene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
trans-1,3-Dichloropropene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Ethylbenzene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Hexachlorobutadiene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
2-Hexanone	<1.11	mg/Kg - dry	1.11	100	01/03/18 15:29	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Clearwater Environmental Resources, LLC
Mr. Jack Wintle
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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97737**
Sample ID : **PD-2 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 8:52**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Isopropylbenzene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
4-Isopropyl toluene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Methyl tert-butyl ether (MTBE)	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
4-Methyl-2-Pentanone	<1.11	mg/Kg - dry	1.11	100	01/03/18 15:29	ELM	L363758
Methylene Chloride	<2.22	mg/Kg - dry	2.22	100	01/03/18 15:29	ELM	L363758
Naphthalene	<1.11	mg/Kg - dry	1.11	100	01/03/18 15:29	ELM	L363758
n-Propylbenzene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Styrene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
1,1,1,2-Tetrachloroethane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
1,1,2,2-Tetrachloroethane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Tetrachloroethene	**2.89**	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Toluene	<1.11	mg/Kg - dry	1.11	100	01/03/18 15:29	ELM	L363758
1,2,3-Trichlorobenzene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
1,2,4-Trichlorobenzene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
1,1,1-Trichloroethane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
1,1,2-Trichloroethane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Trichloroethene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Trichlorofluoromethane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
1,2,3-Trichloropropane	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
1,2,4-Trimethylbenzene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
1,3,5-Trimethylbenzene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
Vinyl Chloride	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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23106
Clearwater Environmental Resources, LLC
Mr. Jack Wintle
3870 Peachtree Industrial Blvd.
Duluth , GA 30096

Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97737**
Sample ID : **PD-2 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 8:52**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
o-Xylene	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29	ELM	L363758
m,p-Xylene	<0.444	mg/Kg - dry	0.444	100	01/03/18 15:29	ELM	L363758
Xylene (Total)	<0.222	mg/Kg - dry	0.222	100	01/03/18 15:29		L363758
Surrogate: 4-Bromofluorobenzene	104		Limits: 40-140%	100	01/03/18 15:29	ELM	L363758
Surrogate: 1,2-Dichloroethane - d4	84.6		Limits: 40-140%	100	01/03/18 15:29	ELM	L363758
Surrogate: Toluene-d8	101		Limits: 40-140%	100	01/03/18 15:29	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97738**
Sample ID : **WD-2 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 9:04**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
% Moisture	**15.5**	%		1	01/03/18 10:57	CJH	2540G-2011

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97738**
Sample ID : **WD-2 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 9:04**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<4.73	mg/Kg - dry	4.73	100	01/03/18 16:10	ELM	L363758
Benzene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Bromobenzene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Bromochloromethane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Bromodichloromethane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Bromoform	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Bromomethane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Methyl Ethyl Ketone (MEK)	<4.73	mg/Kg - dry	4.73	100	01/03/18 16:10	ELM	L363758
n-Butylbenzene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
sec-Butyl benzene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
tert-Butyl benzene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Carbon Disulfide	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Carbon Tetrachloride	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Chlorobenzene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Chlorodibromomethane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Chloroethane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Chloroform	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Chloromethane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
2-Chlorotoluene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
4-Chlorotoluene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
1,2-Dibromo-3-Chloropropane	<1.18	mg/Kg - dry	1.18	100	01/03/18 16:10	ELM	L363758
1,2-Dibromoethane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97738**
Sample ID : **WD-2 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 9:04**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Dibromomethane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
trans-1,4-Dichloro-2-butene	<1.18	mg/Kg - dry	1.18	100	01/03/18 16:10	ELM	L363758
1,2-Dichlorobenzene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
1,3-Dichlorobenzene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
1,4-Dichlorobenzene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Dichlorodifluoromethane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
1,1-Dichloroethane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
1,2-Dichloroethane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
1,1-Dichloroethene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
cis-1,2-Dichloroethene	**0.682**	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
trans-1,2-Dichloroethene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
1,2-Dichloroethene (Total)	**0.682**	mg/Kg - dry	0.237	100	01/03/18 16:10		L363758
1,2-Dichloropropane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
1,3-Dichloropropane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
2,2-Dichloropropane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
1,1-Dichloropropene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
cis-1,3-Dichloropropene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
trans-1,3-Dichloropropene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Ethylbenzene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Hexachlorobutadiene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
2-Hexanone	<1.18	mg/Kg - dry	1.18	100	01/03/18 16:10	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97738**
Sample ID : **WD-2 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 9:04**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Isopropylbenzene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
4-Isopropyl toluene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Methyl tert-butyl ether (MTBE)	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
4-Methyl-2-Pentanone	<1.18	mg/Kg - dry	1.18	100	01/03/18 16:10	ELM	L363758
Methylene Chloride	<2.37	mg/Kg - dry	2.37	100	01/03/18 16:10	ELM	L363758
Naphthalene	<1.18	mg/Kg - dry	1.18	100	01/03/18 16:10	ELM	L363758
n-Propylbenzene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Styrene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
1,1,1,2-Tetrachloroethane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
1,1,2,2-Tetrachloroethane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Tetrachloroethene	**75.3**	mg/Kg - dry	2.37	1000	01/03/18 16:52	ELM	L363758
Toluene	<1.18	mg/Kg - dry	1.18	100	01/03/18 16:10	ELM	L363758
1,2,3-Trichlorobenzene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
1,2,4-Trichlorobenzene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
1,1,1-Trichloroethane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
1,1,2-Trichloroethane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Trichloroethene	**1.62**	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Trichlorofluoromethane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
1,2,3-Trichloropropane	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
1,2,4-Trimethylbenzene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
1,3,5-Trimethylbenzene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
Vinyl Chloride	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97738**
Sample ID : **WD-2 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 9:04**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
o-Xylene	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10	ELM	L363758
m,p-Xylene	<0.473	mg/Kg - dry	0.473	100	01/03/18 16:10	ELM	L363758
Xylene (Total)	<0.237	mg/Kg - dry	0.237	100	01/03/18 16:10		L363758
Surrogate: 4-Bromofluorobenzene	90.3		Limits: 40-140%	100	01/03/18 16:10	ELM	L363758
Surrogate: 1,2-Dichloroethane - d4	74.2		Limits: 40-140%	100	01/03/18 16:10	ELM	L363758
Surrogate: Toluene-d8	85.0		Limits: 40-140%	100	01/03/18 16:10	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Report Date : 01/08/2018
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Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97739**
Sample ID : **WD-4 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 9:38**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
% Moisture	**13.6**	%		1	01/03/18 10:57	CJH	2540G-2011

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97739**
Sample ID : **WD-4 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 9:38**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<46.3	mg/Kg - dry	46.3	1000	01/03/18 17:34	ELM	L363758
Benzene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Bromobenzene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Bromochloromethane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Bromodichloromethane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Bromoform	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Bromomethane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Methyl Ethyl Ketone (MEK)	<46.3	mg/Kg - dry	46.3	1000	01/03/18 17:34	ELM	L363758
n-Butylbenzene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
sec-Butyl benzene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
tert-Butyl benzene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Carbon Disulfide	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Carbon Tetrachloride	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Chlorobenzene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Chlorodibromomethane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Chloroethane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Chloroform	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Chloromethane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
2-Chlorotoluene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
4-Chlorotoluene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
1,2-Dibromo-3-Chloropropane	<11.6	mg/Kg - dry	11.6	1000	01/03/18 17:34	ELM	L363758
1,2-Dibromoethane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97739**
Sample ID : **WD-4 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 9:38**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Dibromomethane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
trans-1,4-Dichloro-2-butene	<11.6	mg/Kg - dry	11.6	1000	01/03/18 17:34	ELM	L363758
1,2-Dichlorobenzene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
1,3-Dichlorobenzene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
1,4-Dichlorobenzene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Dichlorodifluoromethane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
1,1-Dichloroethane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
1,2-Dichloroethane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
1,1-Dichloroethene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
cis-1,2-Dichloroethene	**6.53**	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
trans-1,2-Dichloroethene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
1,2-Dichloroethene (Total)	**6.53**	mg/Kg - dry	2.31	1000	01/03/18 17:34		L363758
1,2-Dichloropropane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
1,3-Dichloropropane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
2,2-Dichloropropane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
1,1-Dichloropropene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
cis-1,3-Dichloropropene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
trans-1,3-Dichloropropene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Ethylbenzene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
1,1,2-Trichloro-1,2,2-trifluoroethane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Hexachlorobutadiene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
2-Hexanone	<11.6	mg/Kg - dry	11.6	1000	01/03/18 17:34	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97739**
Sample ID : **WD-4 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 9:38**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Isopropylbenzene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
4-Isopropyl toluene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Methyl tert-butyl ether (MTBE)	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
4-Methyl-2-Pentanone	<11.6	mg/Kg - dry	11.6	1000	01/03/18 17:34	ELM	L363758
Methylene Chloride	<23.1	mg/Kg - dry	23.1	1000	01/03/18 17:34	ELM	L363758
Naphthalene	<11.6	mg/Kg - dry	11.6	1000	01/03/18 17:34	ELM	L363758
n-Propylbenzene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Styrene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
1,1,1,2-Tetrachloroethane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
1,1,2,2-Tetrachloroethane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Tetrachloroethene	**840**	mg/Kg - dry	23.1	10000	01/03/18 18:16	ELM	L363758
Toluene	<11.6	mg/Kg - dry	11.6	1000	01/03/18 17:34	ELM	L363758
1,2,3-Trichlorobenzene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
1,2,4-Trichlorobenzene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
1,1,1-Trichloroethane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
1,1,2-Trichloroethane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Trichloroethene	**17.7**	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Trichlorofluoromethane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
1,2,3-Trichloropropane	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
1,2,4-Trimethylbenzene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
1,3,5-Trimethylbenzene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
Vinyl Chloride	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97739**
Sample ID : **WD-4 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 9:38**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
o-Xylene	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34	ELM	L363758
m,p-Xylene	<4.63	mg/Kg - dry	4.63	1000	01/03/18 17:34	ELM	L363758
Xylene (Total)	<2.31	mg/Kg - dry	2.31	1000	01/03/18 17:34		L363758
Surrogate: 4-Bromofluorobenzene	130		Limits: 40-140%	1000	01/03/18 17:34	ELM	L363758
Surrogate: 1,2-Dichloroethane - d4	103		Limits: 40-140%	1000	01/03/18 17:34	ELM	L363758
Surrogate: Toluene-d8	119		Limits: 40-140%	1000	01/03/18 17:34	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

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Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97740**
Sample ID : **WD-8 @ 5'**

Matrix: **Solids**
Sampled: **12/22/2017 9:26**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
% Moisture	**18.2**	%		1	01/03/18 10:57	CJH	2540G-2011

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97740**
Sample ID : **WD-8 @ 5'**

Matrix: **Solids**
Sampled: **12/22/2017 9:26**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<4.89	mg/Kg - dry	4.89	100	01/03/18 18:57	ELM	L363758
Benzene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Bromobenzene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Bromochloromethane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Bromodichloromethane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Bromoform	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Bromomethane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Methyl Ethyl Ketone (MEK)	<4.89	mg/Kg - dry	4.89	100	01/03/18 18:57	ELM	L363758
n-Butylbenzene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
sec-Butyl benzene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
tert-Butyl benzene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Carbon Disulfide	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Carbon Tetrachloride	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Chlorobenzene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Chlorodibromomethane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Chloroethane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Chloroform	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Chloromethane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
2-Chlorotoluene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
4-Chlorotoluene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
1,2-Dibromo-3-Chloropropane	<1.22	mg/Kg - dry	1.22	100	01/03/18 18:57	ELM	L363758
1,2-Dibromoethane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
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Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97740**
Sample ID : **WD-8 @ 5'**

Matrix: **Solids**
Sampled: **12/22/2017 9:26**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Dibromomethane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
trans-1,4-Dichloro-2-butene	<1.22	mg/Kg - dry	1.22	100	01/03/18 18:57	ELM	L363758
1,2-Dichlorobenzene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
1,3-Dichlorobenzene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
1,4-Dichlorobenzene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Dichlorodifluoromethane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
1,1-Dichloroethane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
1,2-Dichloroethane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
1,1-Dichloroethene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
cis-1,2-Dichloroethene	**1.22**	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
trans-1,2-Dichloroethene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
1,2-Dichloroethene (Total)	**1.22**	mg/Kg - dry	0.244	100	01/03/18 18:57		L363758
1,2-Dichloropropane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
1,3-Dichloropropane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
2,2-Dichloropropane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
1,1-Dichloropropene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
cis-1,3-Dichloropropene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
trans-1,3-Dichloropropene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Ethylbenzene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Hexachlorobutadiene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
2-Hexanone	<1.22	mg/Kg - dry	1.22	100	01/03/18 18:57	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97740**
Sample ID : **WD-8 @ 5'**

Matrix: **Solids**
Sampled: **12/22/2017 9:26**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Isopropylbenzene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
4-Isopropyl toluene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Methyl tert-butyl ether (MTBE)	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
4-Methyl-2-Pentanone	<1.22	mg/Kg - dry	1.22	100	01/03/18 18:57	ELM	L363758
Methylene Chloride	<2.44	mg/Kg - dry	2.44	100	01/03/18 18:57	ELM	L363758
Naphthalene	<1.22	mg/Kg - dry	1.22	100	01/03/18 18:57	ELM	L363758
n-Propylbenzene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Styrene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
1,1,1,2-Tetrachloroethane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
1,1,2,2-Tetrachloroethane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Tetrachloroethene	**86.9**	mg/Kg - dry	2.44	1000	01/03/18 19:39	ELM	L363758
Toluene	<1.22	mg/Kg - dry	1.22	100	01/03/18 18:57	ELM	L363758
1,2,3-Trichlorobenzene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
1,2,4-Trichlorobenzene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
1,1,1-Trichloroethane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
1,1,2-Trichloroethane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Trichloroethene	**0.823**	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Trichlorofluoromethane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
1,2,3-Trichloropropane	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
1,2,4-Trimethylbenzene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
1,3,5-Trimethylbenzene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
Vinyl Chloride	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97740**
Sample ID : **WD-8 @ 5'**

Matrix: **Solids**
Sampled: **12/22/2017 9:26**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
o-Xylene	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57	ELM	L363758
m,p-Xylene	<0.489	mg/Kg - dry	0.489	100	01/03/18 18:57	ELM	L363758
Xylene (Total)	<0.244	mg/Kg - dry	0.244	100	01/03/18 18:57		L363758
Surrogate: 4-Bromofluorobenzene	91.3		Limits: 40-140%	100	01/03/18 18:57	ELM	L363758
Surrogate: 1,2-Dichloroethane - d4	77.0		Limits: 40-140%	100	01/03/18 18:57	ELM	L363758
Surrogate: Toluene-d8	85.1		Limits: 40-140%	100	01/03/18 18:57	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97741**
Sample ID : **WD-11 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 9:16**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
% Moisture	**14.7**	%		1	01/03/18 10:57	CJH	2540G-2011

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97741**
Sample ID : **WD-11 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 9:16**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<46.9	mg/Kg - dry	46.9	1000	01/03/18 20:10	ELM	L363758
Benzene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Bromobenzene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Bromochloromethane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Bromodichloromethane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Bromoform	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Bromomethane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Methyl Ethyl Ketone (MEK)	<46.9	mg/Kg - dry	46.9	1000	01/03/18 20:10	ELM	L363758
n-Butylbenzene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
sec-Butyl benzene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
tert-Butyl benzene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Carbon Disulfide	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Carbon Tetrachloride	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Chlorobenzene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Chlorodibromomethane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Chloroethane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Chloroform	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Chloromethane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
2-Chlorotoluene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
4-Chlorotoluene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
1,2-Dibromo-3-Chloropropane	<11.7	mg/Kg - dry	11.7	1000	01/03/18 20:10	ELM	L363758
1,2-Dibromoethane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
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Project #1502-1-3

Report Date : 01/08/2018
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Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97741**
Sample ID : **WD-11 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 9:16**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Dibromomethane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
trans-1,4-Dichloro-2-butene	<11.7	mg/Kg - dry	11.7	1000	01/03/18 20:10	ELM	L363758
1,2-Dichlorobenzene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
1,3-Dichlorobenzene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
1,4-Dichlorobenzene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Dichlorodifluoromethane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
1,1-Dichloroethane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
1,2-Dichloroethane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
1,1-Dichloroethene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
cis-1,2-Dichloroethene	**10.3**	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
trans-1,2-Dichloroethene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
1,2-Dichloroethene (Total)	**10.3**	mg/Kg - dry	2.34	1000	01/03/18 20:10		L363758
1,2-Dichloropropane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
1,3-Dichloropropane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
2,2-Dichloropropane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
1,1-Dichloropropene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
cis-1,3-Dichloropropene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
trans-1,3-Dichloropropene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Ethylbenzene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
1,1,2-Trichloro-1,2,2-trifluoroethane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Hexachlorobutadiene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
2-Hexanone	<11.7	mg/Kg - dry	11.7	1000	01/03/18 20:10	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97741**
Sample ID : **WD-11 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 9:16**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Isopropylbenzene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
4-Isopropyl toluene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Methyl tert-butyl ether (MTBE)	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
4-Methyl-2-Pentanone	<11.7	mg/Kg - dry	11.7	1000	01/03/18 20:10	ELM	L363758
Methylene Chloride	<23.4	mg/Kg - dry	23.4	1000	01/03/18 20:10	ELM	L363758
Naphthalene	<11.7	mg/Kg - dry	11.7	1000	01/03/18 20:10	ELM	L363758
n-Propylbenzene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Styrene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
1,1,1,2-Tetrachloroethane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
1,1,2,2-Tetrachloroethane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Tetrachloroethene	**1970**	mg/Kg - dry	23.4	10000	01/03/18 20:41	ELM	L363758
Toluene	<11.7	mg/Kg - dry	11.7	1000	01/03/18 20:10	ELM	L363758
1,2,3-Trichlorobenzene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
1,2,4-Trichlorobenzene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
1,1,1-Trichloroethane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
1,1,2-Trichloroethane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Trichloroethene	**36.2**	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Trichlorofluoromethane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
1,2,3-Trichloropropane	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
1,2,4-Trimethylbenzene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
1,3,5-Trimethylbenzene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
Vinyl Chloride	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

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Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97741**
Sample ID : **WD-11 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 9:16**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
o-Xylene	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10	ELM	L363758
m,p-Xylene	<4.69	mg/Kg - dry	4.69	1000	01/03/18 20:10	ELM	L363758
Xylene (Total)	<2.34	mg/Kg - dry	2.34	1000	01/03/18 20:10		L363758
Surrogate: 4-Bromofluorobenzene	120		Limits: 40-140%	1000	01/03/18 20:10	ELM	L363758
Surrogate: 1,2-Dichloroethane - d4	117		Limits: 40-140%	1000	01/03/18 20:10	ELM	L363758
Surrogate: Toluene-d8	132		Limits: 40-140%	1000	01/03/18 20:10	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Atlanta, GA
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Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97742**
Sample ID : **ADD-1 @ 6'**

Matrix: **Solids**
Sampled: **12/22/2017 9:43**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
% Moisture	**14.1**	%		1	01/03/18 10:57	CJH	2540G-2011

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97742**
Sample ID : **ADD-1 @ 6'**

Matrix: **Solids**
Sampled: **12/22/2017 9:43**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<46.6	mg/Kg - dry	46.6	1000	01/05/18 14:03	ELM	L363758
Benzene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Bromobenzene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Bromochloromethane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Bromodichloromethane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Bromoform	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Bromomethane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Methyl Ethyl Ketone (MEK)	<46.6	mg/Kg - dry	46.6	1000	01/05/18 14:03	ELM	L363758
n-Butylbenzene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
sec-Butyl benzene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
tert-Butyl benzene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Carbon Disulfide	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Carbon Tetrachloride	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Chlorobenzene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Chlorodibromomethane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Chloroethane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Chloroform	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Chloromethane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
2-Chlorotoluene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
4-Chlorotoluene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
1,2-Dibromo-3-Chloropropane	<11.6	mg/Kg - dry	11.6	1000	01/05/18 14:03	ELM	L363758
1,2-Dibromoethane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97742**
Sample ID : **ADD-1 @ 6'**

Matrix: **Solids**
Sampled: **12/22/2017 9:43**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Dibromomethane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
trans-1,4-Dichloro-2-butene	<11.6	mg/Kg - dry	11.6	1000	01/05/18 14:03	ELM	L363758
1,2-Dichlorobenzene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
1,3-Dichlorobenzene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
1,4-Dichlorobenzene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Dichlorodifluoromethane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
1,1-Dichloroethane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
1,2-Dichloroethane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
1,1-Dichloroethene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
cis-1,2-Dichloroethene	**6.66**	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
trans-1,2-Dichloroethene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
1,2-Dichloroethene (Total)	**6.66**	mg/Kg - dry	2.33	1000	01/05/18 14:03		L363758
1,2-Dichloropropane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
1,3-Dichloropropane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
2,2-Dichloropropane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
1,1-Dichloropropene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
cis-1,3-Dichloropropene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
trans-1,3-Dichloropropene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Ethylbenzene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
1,1,2-Trichloro-1,2,2-trifluoroethane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Hexachlorobutadiene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
2-Hexanone	<11.6	mg/Kg - dry	11.6	1000	01/05/18 14:03	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97742**
Sample ID : **ADD-1 @ 6'**

Matrix: **Solids**
Sampled: **12/22/2017 9:43**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Isopropylbenzene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
4-Isopropyl toluene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Methyl tert-butyl ether (MTBE)	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
4-Methyl-2-Pentanone	<11.6	mg/Kg - dry	11.6	1000	01/05/18 14:03	ELM	L363758
Methylene Chloride	<23.3	mg/Kg - dry	23.3	1000	01/05/18 14:03	ELM	L363758
Naphthalene	<11.6	mg/Kg - dry	11.6	1000	01/05/18 14:03	ELM	L363758
n-Propylbenzene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Styrene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
1,1,1,2-Tetrachloroethane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
1,1,2,2-Tetrachloroethane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Tetrachloroethene	**197**	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Toluene	<11.6	mg/Kg - dry	11.6	1000	01/05/18 14:03	ELM	L363758
1,2,3-Trichlorobenzene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
1,2,4-Trichlorobenzene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
1,1,1-Trichloroethane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
1,1,2-Trichloroethane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Trichloroethene	**4.28**	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Trichlorofluoromethane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
1,2,3-Trichloropropane	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
1,2,4-Trimethylbenzene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
1,3,5-Trimethylbenzene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
Vinyl Chloride	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97742**
Sample ID : **ADD-1 @ 6'**

Matrix: **Solids**
Sampled: **12/22/2017 9:43**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
o-Xylene	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03	ELM	L363758
m,p-Xylene	<4.66	mg/Kg - dry	4.66	1000	01/05/18 14:03	ELM	L363758
Xylene (Total)	<2.33	mg/Kg - dry	2.33	1000	01/05/18 14:03		L363758
Surrogate: 4-Bromofluorobenzene	123		Limits: 40-140%	1000	01/05/18 14:03	ELM	L363758
Surrogate: 1,2-Dichloroethane - d4	105		Limits: 40-140%	1000	01/05/18 14:03	ELM	L363758
Surrogate: Toluene-d8	109		Limits: 40-140%	1000	01/05/18 14:03	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97743**
Sample ID : **ADD-1 @ 10"**

Matrix: **Solids**
Sampled: **12/22/2017 9:48**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
% Moisture	**14.2**	%		1	01/03/18 10:57	CJH	2540G-2011

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
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Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97743**
Sample ID : **ADD-1 @ 10"**

Matrix: **Solids**
Sampled: **12/22/2017 9:48**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<4.66	mg/Kg - dry	4.66	100	01/05/18 14:34	ELM	L363758
Benzene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Bromobenzene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Bromochloromethane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Bromodichloromethane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Bromoform	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Bromomethane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Methyl Ethyl Ketone (MEK)	<4.66	mg/Kg - dry	4.66	100	01/05/18 14:34	ELM	L363758
n-Butylbenzene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
sec-Butyl benzene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
tert-Butyl benzene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Carbon Disulfide	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Carbon Tetrachloride	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Chlorobenzene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Chlorodibromomethane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Chloroethane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Chloroform	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Chloromethane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
2-Chlorotoluene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
4-Chlorotoluene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
1,2-Dibromo-3-Chloropropane	<1.17	mg/Kg - dry	1.17	100	01/05/18 14:34	ELM	L363758
1,2-Dibromoethane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97743**
Sample ID : **ADD-1 @ 10"**

Matrix: **Solids**
Sampled: **12/22/2017 9:48**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Dibromomethane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
trans-1,4-Dichloro-2-butene	<1.17	mg/Kg - dry	1.17	100	01/05/18 14:34	ELM	L363758
1,2-Dichlorobenzene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
1,3-Dichlorobenzene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
1,4-Dichlorobenzene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Dichlorodifluoromethane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
1,1-Dichloroethane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
1,2-Dichloroethane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
1,1-Dichloroethene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
cis-1,2-Dichloroethene	**8.95**	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
trans-1,2-Dichloroethene	**0.773**	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
1,2-Dichloroethene (Total)	**9.72**	mg/Kg - dry	0.233	100	01/05/18 14:34		L363758
1,2-Dichloropropane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
1,3-Dichloropropane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
2,2-Dichloropropane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
1,1-Dichloropropene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
cis-1,3-Dichloropropene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
trans-1,3-Dichloropropene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Ethylbenzene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Hexachlorobutadiene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
2-Hexanone	<1.17	mg/Kg - dry	1.17	100	01/05/18 14:34	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97743**
Sample ID : **ADD-1 @ 10"**

Matrix: **Solids**
Sampled: **12/22/2017 9:48**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Isopropylbenzene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
4-Isopropyl toluene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Methyl tert-butyl ether (MTBE)	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
4-Methyl-2-Pentanone	<1.17	mg/Kg - dry	1.17	100	01/05/18 14:34	ELM	L363758
Methylene Chloride	<2.33	mg/Kg - dry	2.33	100	01/05/18 14:34	ELM	L363758
Naphthalene	<1.17	mg/Kg - dry	1.17	100	01/05/18 14:34	ELM	L363758
n-Propylbenzene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Styrene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
1,1,1,2-Tetrachloroethane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
1,1,2,2-Tetrachloroethane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Tetrachloroethene	**318**	mg/Kg - dry	2.33	1000	01/05/18 15:05	ELM	L363758
Toluene	<1.17	mg/Kg - dry	1.17	100	01/05/18 14:34	ELM	L363758
1,2,3-Trichlorobenzene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
1,2,4-Trichlorobenzene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
1,1,1-Trichloroethane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
1,1,2-Trichloroethane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Trichloroethene	**34.6**	mg/Kg - dry	2.33	1000	01/05/18 15:05	ELM	L363758
Trichlorofluoromethane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
1,2,3-Trichloropropane	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
1,2,4-Trimethylbenzene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
1,3,5-Trimethylbenzene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
Vinyl Chloride	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97743**
Sample ID : **ADD-1 @ 10"**

Matrix: **Solids**
Sampled: **12/22/2017 9:48**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
o-Xylene	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34	ELM	L363758
m,p-Xylene	<0.466	mg/Kg - dry	0.466	100	01/05/18 14:34	ELM	L363758
Xylene (Total)	<0.233	mg/Kg - dry	0.233	100	01/05/18 14:34		L363758
Surrogate: 4-Bromofluorobenzene	95.0		Limits: 40-140%	100	01/05/18 14:34	ELM	L363758
Surrogate: 1,2-Dichloroethane - d4	84.7		Limits: 40-140%	100	01/05/18 14:34	ELM	L363758
Surrogate: Toluene-d8	90.0		Limits: 40-140%	100	01/05/18 14:34	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97744**
Sample ID : **ADD-2 @ 5'**

Matrix: **Solids**
Sampled: **12/22/2017 9:59**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
% Moisture	**14.7**	%		1	01/03/18 10:57	CJH	2540G-2011

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97744**
Sample ID : **ADD-2 @ 5'**

Matrix: **Solids**
Sampled: **12/22/2017 9:59**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<46.9	mg/Kg - dry	46.9	1000	01/05/18 15:19	ELM	L363758
Benzene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Bromobenzene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Bromochloromethane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Bromodichloromethane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Bromoform	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Bromomethane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Methyl Ethyl Ketone (MEK)	<46.9	mg/Kg - dry	46.9	1000	01/05/18 15:19	ELM	L363758
n-Butylbenzene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
sec-Butyl benzene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
tert-Butyl benzene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Carbon Disulfide	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Carbon Tetrachloride	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Chlorobenzene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Chlorodibromomethane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Chloroethane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Chloroform	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Chloromethane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
2-Chlorotoluene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
4-Chlorotoluene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
1,2-Dibromo-3-Chloropropane	<11.7	mg/Kg - dry	11.7	1000	01/05/18 15:19	ELM	L363758
1,2-Dibromoethane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97744**
Sample ID : **ADD-2 @ 5'**

Matrix: **Solids**
Sampled: **12/22/2017 9:59**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Dibromomethane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
trans-1,4-Dichloro-2-butene	<11.7	mg/Kg - dry	11.7	1000	01/05/18 15:19	ELM	L363758
1,2-Dichlorobenzene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
1,3-Dichlorobenzene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
1,4-Dichlorobenzene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Dichlorodifluoromethane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
1,1-Dichloroethane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
1,2-Dichloroethane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
1,1-Dichloroethene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
cis-1,2-Dichloroethene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
trans-1,2-Dichloroethene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
1,2-Dichloroethene (Total)	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19		L363758
1,2-Dichloropropane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
1,3-Dichloropropane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
2,2-Dichloropropane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
1,1-Dichloropropene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
cis-1,3-Dichloropropene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
trans-1,3-Dichloropropene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Ethylbenzene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
1,1,2-Trichloro-1,2,2-trifluoroethane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Hexachlorobutadiene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
2-Hexanone	<11.7	mg/Kg - dry	11.7	1000	01/05/18 15:19	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97744**
Sample ID : **ADD-2 @ 5'**

Matrix: **Solids**
Sampled: **12/22/2017 9:59**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Isopropylbenzene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
4-Isopropyl toluene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Methyl tert-butyl ether (MTBE)	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
4-Methyl-2-Pentanone	<11.7	mg/Kg - dry	11.7	1000	01/05/18 15:19	ELM	L363758
Methylene Chloride	<23.4	mg/Kg - dry	23.4	1000	01/05/18 15:19	ELM	L363758
Naphthalene	<11.7	mg/Kg - dry	11.7	1000	01/05/18 15:19	ELM	L363758
n-Propylbenzene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Styrene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
1,1,1,2-Tetrachloroethane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
1,1,2,2-Tetrachloroethane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Tetrachloroethene	**1970**	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Toluene	<11.7	mg/Kg - dry	11.7	1000	01/05/18 15:19	ELM	L363758
1,2,3-Trichlorobenzene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
1,2,4-Trichlorobenzene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
1,1,1-Trichloroethane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
1,1,2-Trichloroethane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Trichloroethene	**3.09**	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Trichlorofluoromethane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
1,2,3-Trichloropropane	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
1,2,4-Trimethylbenzene	**7.61**	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
1,3,5-Trimethylbenzene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
Vinyl Chloride	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Duluth , GA 30096

Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97744**
Sample ID : **ADD-2 @ 5'**

Matrix: **Solids**
Sampled: **12/22/2017 9:59**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
o-Xylene	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19	ELM	L363758
m,p-Xylene	<4.69	mg/Kg - dry	4.69	1000	01/05/18 15:19	ELM	L363758
Xylene (Total)	<2.34	mg/Kg - dry	2.34	1000	01/05/18 15:19		L363758
Surrogate: 4-Bromofluorobenzene	117		Limits: 40-140%	1000	01/05/18 15:19	ELM	L363758
Surrogate: 1,2-Dichloroethane - d4	116		Limits: 40-140%	1000	01/05/18 15:19	ELM	L363758
Surrogate: Toluene-d8	122		Limits: 40-140%	1000	01/05/18 15:19	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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23106
Clearwater Environmental Resources, LLC
Mr. Jack Wintle
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Duluth , GA 30096

Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97745**
Sample ID : **ADD-2 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 10:15**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
% Moisture	**19.9**	%		1	01/03/18 10:57	CJH	2540G-2011

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Report Date : 01/08/2018
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Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97745**
Sample ID : **ADD-2 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 10:15**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<4.99	mg/Kg - dry	4.99	100	01/05/18 15:37	ELM	L363758
Benzene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Bromobenzene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Bromochloromethane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Bromodichloromethane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Bromoform	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Bromomethane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Methyl Ethyl Ketone (MEK)	<4.99	mg/Kg - dry	4.99	100	01/05/18 15:37	ELM	L363758
n-Butylbenzene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
sec-Butyl benzene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
tert-Butyl benzene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Carbon Disulfide	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Carbon Tetrachloride	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Chlorobenzene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Chlorodibromomethane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Chloroethane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Chloroform	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Chloromethane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
2-Chlorotoluene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
4-Chlorotoluene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
1,2-Dibromo-3-Chloropropane	<1.25	mg/Kg - dry	1.25	100	01/05/18 15:37	ELM	L363758
1,2-Dibromoethane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97745**
Sample ID : **ADD-2 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 10:15**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Dibromomethane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
trans-1,4-Dichloro-2-butene	<1.25	mg/Kg - dry	1.25	100	01/05/18 15:37	ELM	L363758
1,2-Dichlorobenzene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
1,3-Dichlorobenzene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
1,4-Dichlorobenzene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Dichlorodifluoromethane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
1,1-Dichloroethane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
1,2-Dichloroethane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
1,1-Dichloroethene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
cis-1,2-Dichloroethene	**3.65**	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
trans-1,2-Dichloroethene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
1,2-Dichloroethene (Total)	**3.65**	mg/Kg - dry	0.250	100	01/05/18 15:37		L363758
1,2-Dichloropropane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
1,3-Dichloropropane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
2,2-Dichloropropane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
1,1-Dichloropropene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
cis-1,3-Dichloropropene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
trans-1,3-Dichloropropene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Ethylbenzene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Hexachlorobutadiene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
2-Hexanone	<1.25	mg/Kg - dry	1.25	100	01/05/18 15:37	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
Atlanta, GA
Project #1502-1-3

Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97745**
Sample ID : **ADD-2 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 10:15**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Isopropylbenzene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
4-Isopropyl toluene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Methyl tert-butyl ether (MTBE)	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
4-Methyl-2-Pentanone	<1.25	mg/Kg - dry	1.25	100	01/05/18 15:37	ELM	L363758
Methylene Chloride	<2.50	mg/Kg - dry	2.50	100	01/05/18 15:37	ELM	L363758
Naphthalene	<1.25	mg/Kg - dry	1.25	100	01/05/18 15:37	ELM	L363758
n-Propylbenzene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Styrene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
1,1,1,2-Tetrachloroethane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
1,1,2,2-Tetrachloroethane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Tetrachloroethene	**25.3**	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Toluene	<1.25	mg/Kg - dry	1.25	100	01/05/18 15:37	ELM	L363758
1,2,3-Trichlorobenzene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
1,2,4-Trichlorobenzene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
1,1,1-Trichloroethane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
1,1,2-Trichloroethane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Trichloroethene	**3.48**	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Trichlorofluoromethane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
1,2,3-Trichloropropane	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
1,2,4-Trimethylbenzene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
1,3,5-Trimethylbenzene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
Vinyl Chloride	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Project Information : RAYLOC
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Report Date : 01/08/2018
Received : 12/28/2017

Rebekah Ross
Project Manager

Report Number : **17-362-0235**

REPORT OF ANALYSIS

Lab No : **97745**
Sample ID : **ADD-2 @ 10'**

Matrix: **Solids**
Sampled: **12/22/2017 10:15**

Analytical Method: 8260B **Prep Batch(es):** **L363757** 01/03/18 10:11
Prep Method: 5035

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Batch
o-Xylene	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37	ELM	L363758
m,p-Xylene	<0.499	mg/Kg - dry	0.499	100	01/05/18 15:37	ELM	L363758
Xylene (Total)	<0.250	mg/Kg - dry	0.250	100	01/05/18 15:37		L363758
Surrogate: 4-Bromofluorobenzene	115		Limits: 40-140%	100	01/05/18 15:37	ELM	L363758
Surrogate: 1,2-Dichloroethane - d4	98.1		Limits: 40-140%	100	01/05/18 15:37	ELM	L363758
Surrogate: Toluene-d8	106		Limits: 40-140%	100	01/05/18 15:37	ELM	L363758

Qualifiers/ Definitions DF Dilution Factor MQL Method Quantitation Limit

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Quality Control Data

Client ID: **Clearwater Environmental Resources, LLC**
Project Description: **RAYLOC**
Report No: **17-362-0235**

QC Prep:
QC Prep Batch Method: SM-2540G-DRYWT
QC Analytical Batch(es): L363087
Analysis Method: 2540G-2011
Analysis Description: Total Solids

Duplicate L 97737-DUP

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
% Moisture	%	10.0	9.99	0.1	20.0	01/03/18 10:57

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Quality Control Data

Client ID: Clearwater Environmental Resources, LLC
Project Description: RAYLOC
Report No: 17-362-0235

QC Prep: L363757
QC Prep Batch Method: 5035
QC Analytical Batch(es): L363758
Analysis Method: 8260B
Analysis Description: Volatile Organic Compounds - GC/MS

Lab Reagent Blank LRB-L363757 Matrix: SOL

Associated Lab Samples: 97737, 97738, 97739, 97740, 97741, 97742, 97743, 97744, 97745

Parameter	Units	Blank Result	MQL	Analyzed	% Recovery
Acetone	mg/Kg	<4.00	4.00	01/05/18 13:55	
Benzene	mg/Kg	<0.200	0.200	01/05/18 13:55	
Bromobenzene	mg/Kg	<0.200	0.200	01/05/18 13:55	
Bromochloromethane	mg/Kg	<0.200	0.200	01/05/18 13:55	
Bromodichloromethane	mg/Kg	<0.200	0.200	01/05/18 13:55	
Bromoform	mg/Kg	<0.200	0.200	01/05/18 13:55	
Bromomethane	mg/Kg	<0.200	0.200	01/05/18 13:55	
Methyl Ethyl Ketone (MEK)	mg/Kg	<4.00	4.00	01/05/18 13:55	
n-Butylbenzene	mg/Kg	<0.200	0.200	01/05/18 13:55	
sec-Butyl benzene	mg/Kg	<0.200	0.200	01/05/18 13:55	
tert-Butyl benzene	mg/Kg	<0.200	0.200	01/05/18 13:55	
Carbon Disulfide	mg/Kg	<0.200	0.200	01/05/18 13:55	
Carbon Tetrachloride	mg/Kg	<0.200	0.200	01/05/18 13:55	
Chlorobenzene	mg/Kg	<0.200	0.200	01/05/18 13:55	
Chlorodibromomethane	mg/Kg	<0.200	0.200	01/05/18 13:55	
Chloroethane	mg/Kg	<0.200	0.200	01/05/18 13:55	
Chloroform	mg/Kg	<0.200	0.200	01/05/18 13:55	
Chloromethane	mg/Kg	<0.200	0.200	01/05/18 13:55	
2-Chlorotoluene	mg/Kg	<0.200	0.200	01/05/18 13:55	
4-Chlorotoluene	mg/Kg	<0.200	0.200	01/05/18 13:55	
1,2-Dibromo-3-Chloropropane	mg/Kg	<1.00	1.00	01/05/18 13:55	
1,2-Dibromoethane	mg/Kg	<0.200	0.200	01/05/18 13:55	
Dibromomethane	mg/Kg	<0.200	0.200	01/05/18 13:55	
trans-1,4-Dichloro-2-butene	mg/Kg	<1.00	1.00	01/05/18 13:55	
1,2-Dichlorobenzene	mg/Kg	<0.200	0.200	01/05/18 13:55	
1,3-Dichlorobenzene	mg/Kg	<0.200	0.200	01/05/18 13:55	
1,4-Dichlorobenzene	mg/Kg	<0.200	0.200	01/05/18 13:55	

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Quality Control Data

Client ID: Clearwater Environmental Resources, LLC
Project Description: RAYLOC
Report No: 17-362-0235

QC Prep: L363757
QC Prep Batch Method: 5035
QC Analytical Batch(es): L363758
Analysis Method: 8260B
Analysis Description: Volatile Organic Compounds - GC/MS

Lab Reagent Blank LRB-L363757 Matrix: SOL

Associated Lab Samples: 97737, 97738, 97739, 97740, 97741, 97742, 97743, 97744, 97745

Parameter	Units	Blank Result	MQL	Analyzed	% Recovery
Dichlorodifluoromethane	mg/Kg	<0.200	0.200	01/05/18 13:55	
1,1-Dichloroethane	mg/Kg	<0.200	0.200	01/05/18 13:55	
1,2-Dichloroethane	mg/Kg	<0.200	0.200	01/05/18 13:55	
1,1-Dichloroethene	mg/Kg	<0.200	0.200	01/05/18 13:55	
cis-1,2-Dichloroethene	mg/Kg	<0.200	0.200	01/05/18 13:55	
trans-1,2-Dichloroethene	mg/Kg	<0.200	0.200	01/05/18 13:55	
1,2-Dichloropropane	mg/Kg	<0.200	0.200	01/05/18 13:55	
1,3-Dichloropropane	mg/Kg	<0.200	0.200	01/05/18 13:55	
2,2-Dichloropropane	mg/Kg	<0.200	0.200	01/05/18 13:55	
1,1-Dichloropropene	mg/Kg	<0.200	0.200	01/05/18 13:55	
cis-1,3-Dichloropropene	mg/Kg	<0.200	0.200	01/05/18 13:55	
trans-1,3-Dichloropropene	mg/Kg	<0.200	0.200	01/05/18 13:55	
Ethylbenzene	mg/Kg	<0.200	0.200	01/05/18 13:55	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/Kg	<0.200	0.200	01/05/18 13:55	
Hexachlorobutadiene	mg/Kg	<0.200	0.200	01/05/18 13:55	
2-Hexanone	mg/Kg	<1.00	1.00	01/05/18 13:55	
Isopropylbenzene	mg/Kg	<0.200	0.200	01/05/18 13:55	
4-Isopropyl toluene	mg/Kg	<0.200	0.200	01/05/18 13:55	
Methyl tert-butyl ether (MTBE)	mg/Kg	<0.200	0.200	01/05/18 13:55	
4-Methyl-2-Pentanone	mg/Kg	<1.00	1.00	01/05/18 13:55	
Methylene Chloride	mg/Kg	<2.00	2.00	01/05/18 13:55	
Naphthalene	mg/Kg	<1.00	1.00	01/05/18 13:55	
n-Propylbenzene	mg/Kg	<0.200	0.200	01/05/18 13:55	
Styrene	mg/Kg	<0.200	0.200	01/05/18 13:55	
1,1,1,2-Tetrachloroethane	mg/Kg	<0.200	0.200	01/05/18 13:55	
1,1,2,2-Tetrachloroethane	mg/Kg	<0.200	0.200	01/05/18 13:55	
Tetrachloroethene	mg/Kg	<0.200	0.200	01/05/18 13:55	

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Quality Control Data

Client ID: Clearwater Environmental Resources, LLC
Project Description: RAYLOC
Report No: 17-362-0235

QC Prep: L363757
QC Prep Batch Method: 5035
QC Analytical Batch(es): L363758
Analysis Method: 8260B
Analysis Description: Volatile Organic Compounds - GC/MS

Lab Reagent Blank LRB-L363757 Matrix: SOL

Associated Lab Samples: 97737, 97738, 97739, 97740, 97741, 97742, 97743, 97744, 97745

Parameter	Units	Blank Result	MQL	Analyzed	% Recovery
Toluene	mg/Kg	<1.00	1.00	01/05/18 13:55	
1,2,3-Trichlorobenzene	mg/Kg	<0.200	0.200	01/05/18 13:55	
1,2,4-Trichlorobenzene	mg/Kg	<0.200	0.200	01/05/18 13:55	
1,1,1-Trichloroethane	mg/Kg	<0.200	0.200	01/05/18 13:55	
1,1,2-Trichloroethane	mg/Kg	<0.200	0.200	01/05/18 13:55	
Trichloroethene	mg/Kg	<0.200	0.200	01/05/18 13:55	
Trichlorofluoromethane	mg/Kg	<0.200	0.200	01/05/18 13:55	
1,2,3-Trichloropropane	mg/Kg	<0.200	0.200	01/05/18 13:55	
1,2,4-Trimethylbenzene	mg/Kg	<0.200	0.200	01/05/18 13:55	
1,3,5-Trimethylbenzene	mg/Kg	<0.200	0.200	01/05/18 13:55	
Vinyl Chloride	mg/Kg	<0.200	0.200	01/05/18 13:55	
o-Xylene	mg/Kg	<0.200	0.200	01/05/18 13:55	
m,p-Xylene	mg/Kg	<0.400	0.400	01/05/18 13:55	
4-Bromofluorobenzene (S)				01/05/18 13:55	99.7
1,2-Dichloroethane - d4 (S)				01/05/18 13:55	132
Toluene-d8 (S)				01/05/18 13:55	102

Laboratory Control Sample & LCSD LCS-L363757 LCSD-L363757

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS %Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD
Acetone	mg/Kg	20.0	16.5	18.9	82.5	94.5	40-160	13.5	30
Benzene	mg/Kg	20.0	17.3	18.7	86.5	93.5	40-140	7.7	30
Bromobenzene	mg/Kg	20.0	18.8	20.4	94.0	102	40-140	8.1	30
Bromochloromethane	mg/Kg	20.0	18.9	20.3	94.5	102	40-140	7.1	30
Bromodichloromethane	mg/Kg	20.0	20.2	21.9	101	110	40-140	8.0	30
Bromoform	mg/Kg	20.0	17.9	19.8	89.5	99.0	40-140	10.0	30

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Quality Control Data

Client ID: Clearwater Environmental Resources, LLC
Project Description: RAYLOC
Report No: 17-362-0235

QC Prep: L363757
QC Prep Batch Method: 5035
QC Analytical Batch(es): L363758
Analysis Method: 8260B
Analysis Description: Volatile Organic Compounds - GC/MS

Laboratory Control Sample & LCSD LCS-L363757 LCSD-L363757

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS %Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD
Bromomethane	mg/Kg	20.0	16.5	17.9	82.5	89.5	40-140	8.1	30
Methyl Ethyl Ketone (MEK)	mg/Kg	20.0	17.1	18.6	85.5	93.0	40-140	8.4	30
n-Butylbenzene	mg/Kg	20.0	22.1	23.7	111	119	40-140	6.9	30
sec-Butyl benzene	mg/Kg	20.0	21.9	23.5	110	118	40-140	7.0	30
tert-Butyl benzene	mg/Kg	20.0	23.9	23.4	120	117	40-140	2.1	30
Carbon Disulfide	mg/Kg	20.0	12.1	13.0	60.5	65.0	40-140	7.1	30
Carbon Tetrachloride	mg/Kg	20.0	15.4	16.9	77.0	84.5	40-160	9.2	30
Chlorobenzene	mg/Kg	20.0	20.6	22.1	103	111	40-140	7.0	30
Chlorodibromomethane	mg/Kg	20.0	18.0	20.2	90.0	101	40-140	11.5	30
Chloroethane	mg/Kg	20.0	21.2	22.1	106	111	20-160	4.1	30
Chloroform	mg/Kg	20.0	17.2	18.6	86.0	93.0	40-140	7.8	30
Chloromethane	mg/Kg	20.0	18.5	17.8	92.5	89.0	20-140	3.8	30
2-Chlorotoluene	mg/Kg	20.0	21.5	23.3	108	117	40-140	8.0	30
4-Chlorotoluene	mg/Kg	20.0	21.5	22.8	108	114	40-140	5.8	30
1,2-Dibromo-3-Chloropropane	mg/Kg	20.0	19.3	21.4	96.5	107	40-140	10.3	30
1,2-Dibromoethane	mg/Kg	20.0	17.7	17.7	88.5	88.5	40-140	0.0	30
Dibromomethane	mg/Kg	20.0	16.7	18.9	83.5	94.5	40-140	12.3	30
trans-1,4-Dichloro-2-butene	mg/Kg	20.0	19.2	19.9	96.0	99.5	40-140	3.5	30
1,2-Dichlorobenzene	mg/Kg	20.0	19.1	21.3	95.5	107	40-140	10.8	30
1,3-Dichlorobenzene	mg/Kg	20.0	19.5	21.3	97.5	107	40-140	8.8	30
1,4-Dichlorobenzene	mg/Kg	20.0	19.2	21.2	96.0	106	40-140	9.9	30
Dichlorodifluoromethane	mg/Kg	20.0	6.75	6.87	33.7	34.3	20-140	1.7	30
1,1-Dichloroethane	mg/Kg	20.0	17.2	18.6	86.0	93.0	40-140	7.8	30
1,2-Dichloroethane	mg/Kg	20.0	18.0	19.4	90.0	97.0	40-140	7.4	30
1,1-Dichloroethene	mg/Kg	20.0	15.0	16.0	75.0	80.0	40-140	6.4	30
cis-1,2-Dichloroethene	mg/Kg	20.0	16.6	18.2	83.0	91.0	40-140	9.1	30

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Quality Control Data

Client ID: Clearwater Environmental Resources, LLC
Project Description: RAYLOC
Report No: 17-362-0235

QC Prep: L363757
QC Prep Batch Method: 5035
QC Analytical Batch(es): L363758
Analysis Method: 8260B
Analysis Description: Volatile Organic Compounds - GC/MS

Laboratory Control Sample & LCSD LCS-L363757 LCSD-L363757

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS %Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD
trans-1,2-Dichloroethene	mg/Kg	20.0	16.6	17.9	83.0	89.5	40-160	7.5	30
1,2-Dichloropropane	mg/Kg	20.0	20.8	22.4	104	112	40-140	7.4	30
1,3-Dichloropropane	mg/Kg	20.0	22.9	22.3	115	112	40-140	2.6	30
2,2-Dichloropropane	mg/Kg	20.0	15.5	16.9	77.5	84.5	40-140	8.6	30
1,1-Dichloropropene	mg/Kg	20.0	17.4	18.8	87.0	94.0	40-140	7.7	30
cis-1,3-Dichloropropene	mg/Kg	20.0	19.2	20.6	96.0	103	40-140	7.0	30
trans-1,3-Dichloropropene	mg/Kg	20.0	17.6	18.8	88.0	94.0	40-140	6.5	30
Ethylbenzene	mg/Kg	20.0	21.8	23.4	109	117	40-140	7.0	30
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/Kg	20.0	13.8	14.9	69.0	74.5	40-140	7.6	30
Hexachlorobutadiene	mg/Kg	20.0	18.7	20.4	93.5	102	40-140	8.6	30
2-Hexanone	mg/Kg	20.0	19.4	22.3	97.0	112	40-140	13.9	30
Isopropylbenzene	mg/Kg	20.0	21.7	23.4	109	117	40-140	7.5	30
4-Isopropyl toluene	mg/Kg	20.0	20.3	21.9	102	110	40-140	7.5	30
Methyl tert-butyl ether (MTBE)	mg/Kg	20.0	15.9	17.5	79.5	87.5	40-140	9.5	30
4-Methyl-2-Pentanone	mg/Kg	20.0	20.6	22.4	103	112	40-140	8.3	30
Methylene Chloride	mg/Kg	20.0	17.4	18.7	87.0	93.5	40-140	7.2	30
Naphthalene	mg/Kg	20.0	17.4	19.1	87.0	95.5	40-140	9.3	30
n-Propylbenzene	mg/Kg	20.0	22.6	24.6	113	123	40-140	8.4	30
Styrene	mg/Kg	20.0	20.7	22.4	104	112	40-140	7.8	30
1,1,1,2-Tetrachloroethane	mg/Kg	20.0	20.3	22.7	102	114	40-140	11.1	30
1,1,2,2-Tetrachloroethane	mg/Kg	20.0	19.4	20.5	97.0	103	40-140	5.5	30
Tetrachloroethene	mg/Kg	20.0	19.3	20.5	96.5	103	40-140	6.0	30
Toluene	mg/Kg	20.0	20.2	21.8	101	109	40-140	7.6	30
1,2,3-Trichlorobenzene	mg/Kg	20.0	15.8	17.2	79.0	86.0	40-140	8.4	30
1,2,4-Trichlorobenzene	mg/Kg	20.0	17.0	18.1	85.0	90.5	40-140	6.2	30
1,1,1-Trichloroethane	mg/Kg	20.0	17.6	19.0	88.0	95.0	40-160	7.6	30

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Quality Control Data

Client ID: **Clearwater Environmental Resources, LLC**
Project Description: **RAYLOC**
Report No: **17-362-0235**

QC Prep: L363757
QC Prep Batch Method: 5035
QC Analytical Batch(es): L363758
Analysis Method: 8260B
Analysis Description: Volatile Organic Compounds - GC/MS

Laboratory Control Sample & LCSD LCS-L363757 LCSD-L363757

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS %Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD
1,1,2-Trichloroethane	mg/Kg	20.0	18.9	20.9	94.5	105	40-140	10.0	30
Trichloroethene	mg/Kg	20.0	20.7	23.1	104	116	40-140	10.9	30
Trichlorofluoromethane	mg/Kg	20.0	22.2	23.9	111	120	40-140	7.3	30
1,2,3-Trichloropropane	mg/Kg	20.0	20.0	21.9	100	110	40-140	9.0	30
1,2,4-Trimethylbenzene	mg/Kg	20.0	20.4	22.1	102	111	40-140	8.0	30
1,3,5-Trimethylbenzene	mg/Kg	20.0	21.5	23.2	108	116	40-140	7.6	30
Vinyl Chloride	mg/Kg	20.0	18.2	17.1	91.0	85.5	40-140	6.2	30
o-Xylene	mg/Kg	20.0	21.8	23.3	109	117	40-140	6.6	30
m,p-Xylene	mg/Kg	40.0	43.3	46.4	108	116	40-140	6.9	30
4-Bromofluorobenzene (S)					105	112	40-140		
1,2-Dichloroethane - d4 (S)					91.7	100	40-140		
Toluene-d8 (S)					98.5	108	40-140		

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Cooler Receipt Form

Customer Number: **23106**
Customer Name: **Clearwater Environmental Resources, LLC**
Report Number: **17-362-0235**

Shipping Method

● Fed Ex	○ US Postal	○ Lab	○ Other :	
○ UPS	○ Client	○ Courier	Thermometer ID:	#35

Shipping container/cooler uncompromised?	● Yes	○ No	
Number of coolers received	1		
Custody seals intact on shipping container/cooler?	○ Yes	○ No	● Not Required
Custody seals intact on sample bottles?	○ Yes	○ No	● Not Required
Chain of Custody (COC) present?	● Yes	○ No	
COC agrees with sample label(s)?	○ Yes	● No	
COC properly completed	● Yes	○ No	
Samples in proper containers?	● Yes	○ No	
Sample containers intact?	● Yes	○ No	
Sufficient sample volume for indicated test(s)?	● Yes	○ No	
All samples received within holding time?	● Yes	○ No	
Cooler temperature in compliance?	● Yes	○ No	
Cooler/Samples arrived at the laboratory on ice. Samples were considered acceptable as cooling process had begun.	● Yes	○ No	
Water - Sample containers properly preserved	○ Yes	○ No	● N/A
Water - VOA vials free of headspace	○ Yes	● No	○ N/A
Trip Blanks received with VOAs	● Yes	○ No	○ N/A
Soil VOA method 5035 – compliance criteria met	● Yes	○ No	○ N/A

☐ High concentration container (48 hr)	☐ Low concentration EnCore samplers (48 hr)
☑ High concentration pre-weighed (methanol -14 d)	☑ Low conc pre-weighed vials (Sod Bis -14 d)

Special precautions or instructions included? ○ Yes ● No

Comments: Trip Blank sample containers for volatile analysis were received with headspace. Will not analyze per Jack Wintle by email.
Sample on chain says WD-8 C10' but the container labels say WD-8 C5'. Per Jack Wintle by email, the Cs are @s and the ID to use is WD-8 @5'.

Signature: Kristina A. McAdams Date & Time: 12/28/2017 12:02:06

Client Name/Address	Client Project Manager/Contact	Billing Information	For Laboratory Use Only
Clearwater Environmental 3870 Pierce Industrial Blvd Duluth GA 30096	JACK WINTLE sk 340139	same	17-362-0235 23106 12-28-2017 12:01:32 Clearwater Environmental Resources, LLC RAYLOC
Project Description	**Project/Site Location (City/State)**	☐ RUSH – Additional charges apply ☐ Special Detection Limit(s) Date Results Needed	Method ☑ Fed ☐ Cour Othe
RAYLOC	Atlanta, GA		Dil
Project Number	**Project Manager Phone #**	**Project Manager Email**	**Purchase Order Number**
1502-1-3	678-441-4601	jack.wintle@clearwaterew.net	**Site/Facility ID #**

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Memphis, TN 38133
(901) 213-2400

Unless noted, all containers per Table II of 40 CFR Part 136.

A	Cool < 10C Na2S2O3 (Micro Only)
B	Cool <= 6C
C	H2SO4 pH<2
D	None Required
E	NaOH pH>10
F	HNO3 pH<2
G	HCL pH<2
H	H3PO4 pH<2
I	Cool <= 6C NA2S2O3

Date	Time	Sample Identification	Number of Containers	Matrix (Refer to Key)	(G)rab or (C)omposite	Required Analysis / Preservative: VOCs - 8260B	Comments/Notes
12/22	0852	PD-2@10'	4	S	G	A,M	
	0904	UD-2@10'	4	S	G	A,M	
	0938	WD-4 @10'	4	S	G	A,M	
	0926	WD-8 @~~10~~5'	4	S	G	A,M	
	0916	WD-11 @10'	4	S	G	A,M	
	0943	ADD-1 @6'	4	S	G	A,M	
	0948	ADD-1 @10'	4	S	G	A,M	
	0959	ADD-2 @5'	4	S	G	A,M	
	1015	ADD-2 @10'	4	S	G	A,M	
		TRIP BLANK					

For Laboratory Use Only

Ice	Custody Seals	Lab Comments
(Y) / N	Y / (N)	

Blank/Cooler Temp: 1.0 °C TS MT

Sampled by (Name – Print): PERRY FRIX

Relinquished by: (SIGNATURE)

Relinquished by: (SIGNATURE)

Relinquished by: (SIGNATURE)

Client Remarks/Comments

Date	Time	Received by: (SIGNATURE)	Date	Time
12/22	1100	Jack Wintle	12/22	1100
12/22	11:25	Hugo Anez	12/27/18	900
			12/28/17	

915

APPENDIX C
SEPTEMBER 2017 X2 GW REMEDIAL
LABORATORY REPORT & SAMPLING LOGS

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 10/02/2017

GCAL Report 217092816

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
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

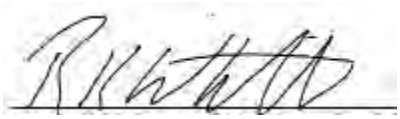
J or I	Indicates the result is between the MDL and LOQ
J	DOD flag on analyte in the parent sample for MS/MSD outside acceptance criteria
U	Indicates the compound was analyzed for but not detected
B or V	Indicates the analyte was detected in the associated Method Blank
Q	Indicates a non-compliant QC Result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

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 217092816

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:** 217092816

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 21709281602 (MW-12 @ 60'), 21709281604 (MW-17 @ 30'), 21709281606 (MW-20 @ 60'), 21709281607 (MW-21 @ 60'), 21709281608 (MW-22 @ 60'), 21709281609 (MW-23 @ 60'), 21709281612 (MW-26 @ 30'), and 21709281613 (PT-3 @ 60') had to be diluted due to the presence of non-target background and to bracket the concentration of target analytes within the calibration range of the instrument. The dilutions are reflected in the elevated reporting limits.

In the EPA 8260B analysis, sample 21709281610 (MW-24 @ 30') had to be diluted 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
21709281601	MW-7 @ 30'	Water	09/26/2017 07:46	09/28/2017 09:40
21709281602	MW-12 @ 60'	Water	09/26/2017 09:16	09/28/2017 09:40
21709281603	MW-15 @ 30'	Water	09/26/2017 08:27	09/28/2017 09:40
21709281604	MW-17 @ 30'	Water	09/26/2017 08:12	09/28/2017 09:40
21709281605	MW-19 @ 30'	Water	09/26/2017 08:20	09/28/2017 09:40
21709281606	MW-20 @ 60'	Water	09/26/2017 07:36	09/28/2017 09:40
21709281607	MW-21 @ 60'	Water	09/26/2017 10:04	09/28/2017 09:40
21709281608	MW-22 @ 60'	Water	09/26/2017 09:55	09/28/2017 09:40
21709281609	MW-23 @ 60'	Water	09/26/2017 09:46	09/28/2017 09:40
21709281610	MW-24 @ 30'	Water	09/26/2017 09:25	09/28/2017 09:40
21709281611	MW-25 @ 30'	Water	09/26/2017 08:59	09/28/2017 09:40
21709281612	MW-26 @ 30'	Water	09/26/2017 08:38	09/28/2017 09:40
21709281613	PT-3 @ 60'	Water	09/26/2017 07:29	09/28/2017 09:40
21709281614	TRIP BLANK	Water	09/26/2017 00:01	09/28/2017 09:40

Summary of Compounds Detected

MW-12 @ 60'

Collect Date 09/26/2017 09:16 **GCAL ID** 21709281602
Receive Date 09/28/2017 09:40 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	48.8	20.0	ug/L
156-59-2	cis-1,2-Dichloroethene	47.3	10.0	ug/L
127-18-4	Tetrachloroethene	794	100	ug/L
79-01-6	Trichloroethene	32.3	10.0	ug/L

MW-15 @ 30'

Collect Date 09/26/2017 08:27 **GCAL ID** 21709281603
Receive Date 09/28/2017 09:40 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	13.0	10.0	ug/L
67-64-1	Acetone	5.41	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	13.0	5.00	ug/L
75-01-4	Vinyl chloride	7.94	2.00	ug/L

MW-17 @ 30'

Collect Date 09/26/2017 08:12 **GCAL ID** 21709281604
Receive Date 09/28/2017 09:40 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	334	20.0	ug/L
156-59-2	cis-1,2-Dichloroethene	330	10.0	ug/L
127-18-4	Tetrachloroethene	1090	100	ug/L
79-01-6	Trichloroethene	175	10.0	ug/L

MW-19 @ 30'

Collect Date 09/26/2017 08:20 **GCAL ID** 21709281605
Receive Date 09/28/2017 09:40 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	19.1	10.0	ug/L
67-64-1	Acetone	6.82	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	19.1	5.00	ug/L

Summary of Compounds Detected

MW-19 @ 30'

Collect Date 09/26/2017 08:20 **GCAL ID** 21709281605
Receive Date 09/28/2017 09:40 **Matrix** Water

EPA 8260B (Continued)

CAS#	Parameter	Result	LOQ	Units
75-01-4	Vinyl chloride	3.00	2.00	ug/L

MW-20 @ 60'

Collect Date 09/26/2017 07:36 **GCAL ID** 21709281606
Receive Date 09/28/2017 09:40 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	68.7	50.0	ug/L
156-59-2	cis-1,2-Dichloroethene	65.9	25.0	ug/L
127-18-4	Tetrachloroethene	1800	250	ug/L
79-01-6	Trichloroethene	138	25.0	ug/L

MW-21 @ 60'

Collect Date 09/26/2017 10:04 **GCAL ID** 21709281607
Receive Date 09/28/2017 09:40 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	3020	500	ug/L

MW-22 @ 60'

Collect Date 09/26/2017 09:55 **GCAL ID** 21709281608
Receive Date 09/28/2017 09:40 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
156-59-2	cis-1,2-Dichloroethene	787	500	ug/L
127-18-4	Tetrachloroethene	2130	500	ug/L
79-01-6	Trichloroethene	351	10.0	ug/L

Summary of Compounds Detected

MW-23 @ 60'

Collect Date 09/26/2017 09:46 **GCAL ID** 21709281609
Receive Date 09/28/2017 09:40 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	4680	1000	ug/L
156-59-2	cis-1,2-Dichloroethene	4680	500	ug/L
127-18-4	Tetrachloroethene	2880	500	ug/L
79-01-6	Trichloroethene	889	50.0	ug/L

MW-24 @ 30'

Collect Date 09/26/2017 09:25 **GCAL ID** 21709281610
Receive Date 09/28/2017 09:40 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	454	100	ug/L
156-59-2	cis-1,2-Dichloroethene	454	50.0	ug/L
127-18-4	Tetrachloroethene	159	5.00	ug/L
79-01-6	Trichloroethene	106	5.00	ug/L

MW-26 @ 30'

Collect Date 09/26/2017 08:38 **GCAL ID** 21709281612
Receive Date 09/28/2017 09:40 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	306	10.0	ug/L
67-64-1	Acetone	5.40	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	272	50.0	ug/L
127-18-4	Tetrachloroethene	118	5.00	ug/L
79-01-6	Trichloroethene	52.5	5.00	ug/L

PT-3 @ 60'

Collect Date 09/26/2017 07:29 **GCAL ID** 21709281613
Receive Date 09/28/2017 09:40 **Matrix** Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
156-59-2	cis-1,2-Dichloroethene	224	125	ug/L
127-18-4	Tetrachloroethene	11400	1250	ug/L

Summary of Compounds Detected

PT-3 @ 60'				
	Collect Date	09/26/2017 07:29	GCAL ID	21709281613
	Receive Date	09/28/2017 09:40	Matrix	Water

EPA 8260B (Continued)

CAS#	Parameter	Result	LOQ	Units
79-01-6	Trichloroethene	627	125	ug/L

TRIP BLANK				
	Collect Date	09/26/2017 00:01	GCAL ID	21709281614
	Receive Date	09/28/2017 09:40	Matrix	Water

EPA 8260B

CAS#	Parameter	Result	LOQ	Units
67-64-1	Acetone	10.2	5.00	ug/L

Sample Results

MW-7 @ 30'	**Collect Date**	09/26/2017 07:46	**GCAL ID**	21709281601
	Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/30/2017 14:10	NTB	619258

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

MW-7 @ 30'

Collect Date	09/26/2017 07:46	**GCAL ID**	21709281601
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/30/2017 14:10	NTB	619258

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	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	49.1	ug/L	98	77 - 127
2037-26-5	Toluene d8	50	51.7	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.1	ug/L	100	71 - 127

MW-12 @ 60'

Collect Date	09/26/2017 09:16	**GCAL ID**	21709281602
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	09/29/2017 19:25	NTB	619188

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	09/26/2017 09:16	**GCAL ID**	21709281602
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	09/29/2017 19:25	NTB	619188

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)**	**48.8**	**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**	**47.3**	**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	09/26/2017 09:16	**GCAL ID**	21709281602
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	09/29/2017 19:25	NTB	619188

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**	**32.3**	**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	96.8	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	100	98.5	ug/L	99	77 - 127
2037-26-5	Toluene d8	100	102	ug/L	102	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	09/29/2017 19:03	NTB	619188

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**794**	**100**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1000	967	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	1000	977	ug/L	98	77 - 127
2037-26-5	Toluene d8	1000	1040	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	1000	978	ug/L	98	71 - 127

Sample Results

MW-15 @ 30'	**Collect Date**	09/26/2017 08:27	**GCAL ID**	21709281603
	Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/30/2017 14:32	NTB	619258

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)**	**13.0**	**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**	**5.41**	**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**	**13.0**	**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	09/26/2017 08:27	**GCAL ID**	21709281603
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/30/2017 14:32	NTB	619258

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**	**7.94**	**2.00**	**ug/L**
1330-20-7	Xylene (total)	ND	15.0	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47.9	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	49.1	ug/L	98	77 - 127
2037-26-5	Toluene d8	50	51.6	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.1	ug/L	100	71 - 127

MW-17 @ 30'

Collect Date	09/26/2017 08:12	**GCAL ID**	21709281604
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/01/2017 15:04	NTB	619277

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	09/26/2017 08:12	**GCAL ID**	21709281604
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/01/2017 15:04	NTB	619277

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)**	**334**	**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**	**330**	**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-17 @ 30'	**Collect Date**	09/26/2017 08:12	**GCAL ID**	21709281604
	Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/01/2017 15:04	NTB	619277

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**	**175**	**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	98.8	ug/L	99	78 - 130
1868-53-7	Dibromofluoromethane	100	102	ug/L	102	77 - 127
2037-26-5	Toluene d8	100	103	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	101	ug/L	101	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	20	10/01/2017 14:42	NTB	619277

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**1090**	**100**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1000	954	ug/L	95	78 - 130
1868-53-7	Dibromofluoromethane	1000	987	ug/L	99	77 - 127
2037-26-5	Toluene d8	1000	1030	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	1000	999	ug/L	100	71 - 127

Sample Results

MW-19 @ 30'	**Collect Date**	09/26/2017 08:20	**GCAL ID**	21709281605
	Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/30/2017 14:54	NTB	619258

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)**	**19.1**	**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**	**6.82**	**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**	**19.1**	**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	09/26/2017 08:20	**GCAL ID**	21709281605
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/30/2017 14:54	NTB	619258

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**	**3.00**	**2.00**	**ug/L**
1330-20-7	Xylene (total)	ND	15.0	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	47.6	ug/L	95	78 - 130
1868-53-7	Dibromofluoromethane	50	48.9	ug/L	98	77 - 127
2037-26-5	Toluene d8	50	52.4	ug/L	105	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.8	ug/L	100	71 - 127

MW-20 @ 60'

Collect Date	09/26/2017 07:36	**GCAL ID**	21709281606
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	10/01/2017 19:15	BLY	619277

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	09/26/2017 07:36	**GCAL ID**	21709281606
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	10/01/2017 19:15	BLY	619277

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)**	**68.7**	**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**	**65.9**	**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	09/26/2017 07:36	**GCAL ID**	21709281606
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	10/01/2017 19:15	BLY	619277

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**	**138**	**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	243	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	250	247	ug/L	99	77 - 127
2037-26-5	Toluene d8	250	253	ug/L	101	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	09/30/2017 16:24	NTB	619258

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**1800**	**250**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2500	2330	ug/L	93	78 - 130
1868-53-7	Dibromofluoromethane	2500	2400	ug/L	96	77 - 127
2037-26-5	Toluene d8	2500	2570	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	2500	2470	ug/L	99	71 - 127

Sample Results

MW-21 @ 60'

Collect Date	09/26/2017 10:04	**GCAL ID**	21709281607
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	10/01/2017 19:37	BLY	619277

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	25.0	ug/L
71-55-6	1,1,1-Trichloroethane	ND	25.0	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	ND	25.0	ug/L
79-00-5	1,1,2-Trichloroethane	ND	25.0	ug/L
75-34-3	1,1-Dichloroethane	ND	25.0	ug/L
75-35-4	1,1-Dichloroethene	ND	25.0	ug/L
563-58-6	1,1-Dichloropropene	ND	25.0	ug/L
96-18-4	1,2,3-Trichloropropane	ND	25.0	ug/L
120-82-1	1,2,4-Trichlorobenzene	ND	25.0	ug/L
95-63-6	1,2,4-Trimethylbenzene	ND	25.0	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	ND	25.0	ug/L
106-93-4	1,2-Dibromoethane	ND	25.0	ug/L
95-50-1	1,2-Dichlorobenzene	ND	25.0	ug/L
107-06-2	1,2-Dichloroethane	ND	25.0	ug/L
540-59-0	1,2-Dichloroethene(Total)	ND	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	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

Sample Results

MW-21 @ 60'

Collect Date	09/26/2017 10:04	**GCAL ID**	21709281607
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	10/01/2017 19:37	BLY	619277

CAS#	Parameter	Result	LOQ	Units
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
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	ND	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	244	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	250	250	ug/L	100	77 - 127
2037-26-5	Toluene d8	250	252	ug/L	101	76 - 134
17060-07-0	1,2-Dichloroethane-d4	250	254	ug/L	102	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	09/30/2017 16:46	NTB	619258

CAS#	Parameter	Result	LOQ	Units
127-18-4	Tetrachloroethene	3020	500	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	5000	4690	ug/L	94	78 - 130
1868-53-7	Dibromofluoromethane	5000	4800	ug/L	96	77 - 127
2037-26-5	Toluene d8	5000	5150	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	5000	4970	ug/L	99	71 - 127

Sample Results

MW-22 @ 60'

Collect Date	09/26/2017 09:55	**GCAL ID**	21709281608
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/01/2017 19:59	BLY	619277

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

Sample Results

MW-22 @ 60'

Collect Date	09/26/2017 09:55	**GCAL ID**	21709281608
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/01/2017 19:59	BLY	619277

CAS#	Parameter	Result	LOQ	Units
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
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**	**351**	**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	98.2	ug/L	98	78 - 130
1868-53-7	Dibromofluoromethane	100	101	ug/L	101	77 - 127
2037-26-5	Toluene d8	100	101	ug/L	101	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	103	ug/L	103	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	09/30/2017 17:08	NTB	619258

CAS#	Parameter	Result	LOQ	Units
540-59-0	1,2-Dichloroethene(Total)	ND	1000	ug/L
156-59-2	**cis-1,2-Dichloroethene**	**787**	**500**	**ug/L**
127-18-4	**Tetrachloroethene**	**2130**	**500**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	5000	4570	ug/L	91	78 - 130
1868-53-7	Dibromofluoromethane	5000	4920	ug/L	98	77 - 127
2037-26-5	Toluene d8	5000	5140	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	5000	5050	ug/L	101	71 - 127

Sample Results

MW-23 @ 60'	**Collect Date**	09/26/2017 09:46	**GCAL ID**	21709281609
	Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	10	09/30/2017 19:44	NTB	619258

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

Sample Results

MW-23 @ 60'

Collect Date	09/26/2017 09:46	**GCAL ID**	21709281609
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	10	09/30/2017 19:44	NTB	619258

CAS#	Parameter	Result	LOQ	Units
75-09-2	Methylene chloride	ND	50.0	ug/L
91-20-3	Naphthalene	ND	50.0	ug/L
104-51-8	n-Butylbenzene	ND	50.0	ug/L
103-65-1	n-Propylbenzene	ND	50.0	ug/L
95-47-6	o-Xylene	ND	50.0	ug/L
135-98-8	sec-Butylbenzene	ND	50.0	ug/L
100-42-5	Styrene	ND	50.0	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	50.0	ug/L
98-06-6	tert-Butylbenzene	ND	50.0	ug/L
108-88-3	Toluene	ND	50.0	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	50.0	ug/L
10061-02-6	trans-1,3-Dichloropropene	ND	50.0	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	ND	50.0	ug/L
79-01-6	**Trichloroethene**	**889**	**50.0**	**ug/L**
75-69-4	Trichlorofluoromethane	ND	50.0	ug/L
76-13-1	Trichlorotrifluoroethane	ND	50.0	ug/L
75-01-4	Vinyl chloride	ND	20.0	ug/L
1330-20-7	Xylene (total)	ND	150	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	500	467	ug/L	93	78 - 130
1868-53-7	Dibromofluoromethane	500	488	ug/L	98	77 - 127
2037-26-5	Toluene d8	500	510	ug/L	102	76 - 134
17060-07-0	1,2-Dichloroethane-d4	500	508	ug/L	102	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	100	09/30/2017 17:53	NTB	619258

CAS#	Parameter	Result	LOQ	Units
540-59-0	**1,2-Dichloroethene(Total)**	**4680**	**1000**	**ug/L**
156-59-2	**cis-1,2-Dichloroethene**	**4680**	**500**	**ug/L**
127-18-4	**Tetrachloroethene**	**2880**	**500**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	5000	4720	ug/L	94	78 - 130
1868-53-7	Dibromofluoromethane	5000	4850	ug/L	97	77 - 127
2037-26-5	Toluene d8	5000	5160	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	5000	5050	ug/L	101	71 - 127

Sample Results

MW-24 @ 30'

Collect Date	09/26/2017 09:25	**GCAL ID**	21709281610
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/01/2017 17:23	NTB	619277

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

Sample Results

MW-24 @ 30'	**Collect Date**	09/26/2017 09:25	**GCAL ID**	21709281610
	Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/01/2017 17:23	NTB	619277

CAS#	Parameter	Result	LOQ	Units
75-09-2	Methylene chloride	ND	5.00	ug/L
91-20-3	Naphthalene	ND	5.00	ug/L
104-51-8	n-Butylbenzene	ND	5.00	ug/L
103-65-1	n-Propylbenzene	ND	5.00	ug/L
95-47-6	o-Xylene	ND	5.00	ug/L
135-98-8	sec-Butylbenzene	ND	5.00	ug/L
100-42-5	Styrene	ND	5.00	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	5.00	ug/L
98-06-6	tert-Butylbenzene	ND	5.00	ug/L
127-18-4	**Tetrachloroethene**	**159**	**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**	**106**	**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	48.6	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	50	49.2	ug/L	98	77 - 127
2037-26-5	Toluene d8	50	51.5	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.7	ug/L	101	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	10	10/01/2017 17:01	NTB	619277

CAS#	Parameter	Result	LOQ	Units
540-59-0	**1,2-Dichloroethene(Total)**	**454**	**100**	**ug/L**
156-59-2	**cis-1,2-Dichloroethene**	**454**	**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	486	ug/L	97	77 - 127
2037-26-5	Toluene d8	500	518	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	500	498	ug/L	100	71 - 127

Sample Results

MW-25 @ 30'	**Collect Date**	09/26/2017 08:59	**GCAL ID**	21709281611
	Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/30/2017 15:17	NTB	619258

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

MW-25 @ 30'

Collect Date	09/26/2017 08:59	**GCAL ID**	21709281611
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/30/2017 15:17	NTB	619258

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	47.1	ug/L	94	78 - 130
1868-53-7	Dibromofluoromethane	50	48.6	ug/L	97	77 - 127
2037-26-5	Toluene d8	50	51.4	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.5	ug/L	99	71 - 127

MW-26 @ 30'

Collect Date	09/26/2017 08:38	**GCAL ID**	21709281612
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/01/2017 16:14	NTB	619277

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

Sample Results

MW-26 @ 30'

Collect Date	09/26/2017 08:38	**GCAL ID**	21709281612
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/01/2017 16:14	NTB	619277

CAS#	Parameter	Result	LOQ	Units
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)**	**306**	**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**	**5.40**	**5.00**	**ug/L**
71-43-2	Benzene	ND	5.00	ug/L
108-86-1	Bromobenzene	ND	5.00	ug/L
74-97-5	Bromochloromethane	ND	5.00	ug/L
75-27-4	Bromodichloromethane	ND	5.00	ug/L
75-25-2	Bromoform	ND	5.00	ug/L
74-83-9	Bromomethane	ND	5.00	ug/L
75-15-0	Carbon disulfide	ND	5.00	ug/L
56-23-5	Carbon tetrachloride	ND	5.00	ug/L
108-90-7	Chlorobenzene	ND	5.00	ug/L
75-00-3	Chloroethane	ND	5.00	ug/L
67-66-3	Chloroform	ND	5.00	ug/L
74-87-3	Chloromethane	ND	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	ND	5.00	ug/L
124-48-1	Dibromochloromethane	ND	5.00	ug/L
74-95-3	Dibromomethane	ND	5.00	ug/L
75-71-8	Dichlorodifluoromethane	ND	5.00	ug/L
100-41-4	Ethylbenzene	ND	5.00	ug/L
87-68-3	Hexachlorobutadiene	ND	5.00	ug/L
98-82-8	Isopropylbenzene (Cumene)	ND	5.00	ug/L
136777-61-2	m,p-Xylene	ND	10.0	ug/L
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

Sample Results

MW-26 @ 30'

Collect Date	09/26/2017 08:38	**GCAL ID**	21709281612
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/01/2017 16:14	NTB	619277

CAS#	Parameter	Result	LOQ	Units
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**	**118**	**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**	**52.5**	**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	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	49.5	ug/L	99	77 - 127
2037-26-5	Toluene d8	50	51.1	ug/L	102	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.2	ug/L	100	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	10	10/01/2017 15:52	NTB	619277

CAS#	Parameter	Result	LOQ	Units
156-59-2	**cis-1,2-Dichloroethene**	**272**	**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	487	ug/L	97	77 - 127
2037-26-5	Toluene d8	500	514	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	500	492	ug/L	98	71 - 127

Sample Results

PT-3 @ 60'	**Collect Date**	09/26/2017 07:29	**GCAL ID**	21709281613
	Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	25	09/30/2017 19:22	NTB	619258

CAS#	Parameter	Result	LOQ	Units
630-20-6	1,1,1,2-Tetrachloroethane	ND	125	ug/L
71-55-6	1,1,1-Trichloroethane	ND	125	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	ND	125	ug/L
79-00-5	1,1,2-Trichloroethane	ND	125	ug/L
75-34-3	1,1-Dichloroethane	ND	125	ug/L
75-35-4	1,1-Dichloroethene	ND	125	ug/L
563-58-6	1,1-Dichloropropene	ND	125	ug/L
96-18-4	1,2,3-Trichloropropane	ND	125	ug/L
120-82-1	1,2,4-Trichlorobenzene	ND	125	ug/L
95-63-6	1,2,4-Trimethylbenzene	ND	125	ug/L
96-12-8	1,2-Dibromo-3-chloropropane	ND	125	ug/L
106-93-4	1,2-Dibromoethane	ND	125	ug/L
95-50-1	1,2-Dichlorobenzene	ND	125	ug/L
107-06-2	1,2-Dichloroethane	ND	125	ug/L
540-59-0	1,2-Dichloroethene(Total)	ND	250	ug/L
78-87-5	1,2-Dichloropropane	ND	125	ug/L
108-67-8	1,3,5-Trimethylbenzene	ND	125	ug/L
541-73-1	1,3-Dichlorobenzene	ND	125	ug/L
142-28-9	1,3-Dichloropropane	ND	125	ug/L
106-46-7	1,4-Dichlorobenzene	ND	125	ug/L
594-20-7	2,2-Dichloropropane	ND	125	ug/L
78-93-3	2-Butanone	ND	125	ug/L
95-49-8	2-Chlorotoluene	ND	125	ug/L
591-78-6	2-Hexanone	ND	125	ug/L
106-43-4	4-Chlorotoluene	ND	125	ug/L
99-87-6	4-Isopropyltoluene	ND	125	ug/L
108-10-1	4-Methyl-2-pentanone	ND	125	ug/L
67-64-1	Acetone	ND	125	ug/L
71-43-2	Benzene	ND	125	ug/L
108-86-1	Bromobenzene	ND	125	ug/L
74-97-5	Bromochloromethane	ND	125	ug/L
75-27-4	Bromodichloromethane	ND	125	ug/L
75-25-2	Bromoform	ND	125	ug/L
74-83-9	Bromomethane	ND	125	ug/L
75-15-0	Carbon disulfide	ND	125	ug/L
56-23-5	Carbon tetrachloride	ND	125	ug/L
108-90-7	Chlorobenzene	ND	125	ug/L
75-00-3	Chloroethane	ND	125	ug/L
67-66-3	Chloroform	ND	125	ug/L
74-87-3	Chloromethane	ND	125	ug/L
156-59-2	**cis-1,2-Dichloroethene**	**224**	**125**	**ug/L**
10061-01-5	cis-1,3-Dichloropropene	ND	125	ug/L
124-48-1	Dibromochloromethane	ND	125	ug/L
74-95-3	Dibromomethane	ND	125	ug/L
75-71-8	Dichlorodifluoromethane	ND	125	ug/L
100-41-4	Ethylbenzene	ND	125	ug/L
87-68-3	Hexachlorobutadiene	ND	125	ug/L

Sample Results

PT-3 @ 60'

Collect Date	09/26/2017 07:29	**GCAL ID**	21709281613
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	25	09/30/2017 19:22	NTB	619258

CAS#	Parameter	Result	LOQ	Units
98-82-8	Isopropylbenzene (Cumene)	ND	125	ug/L
136777-61-2	m,p-Xylene	ND	250	ug/L
75-09-2	Methylene chloride	ND	125	ug/L
91-20-3	Naphthalene	ND	125	ug/L
104-51-8	n-Butylbenzene	ND	125	ug/L
103-65-1	n-Propylbenzene	ND	125	ug/L
95-47-6	o-Xylene	ND	125	ug/L
135-98-8	sec-Butylbenzene	ND	125	ug/L
100-42-5	Styrene	ND	125	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	ND	125	ug/L
98-06-6	tert-Butylbenzene	ND	125	ug/L
108-88-3	Toluene	ND	125	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	125	ug/L
10061-02-6	trans-1,3-Dichloropropene	ND	125	ug/L
110-57-6	trans-1,4-Dichloro-2-butene	ND	125	ug/L
79-01-6	**Trichloroethene**	**627**	**125**	**ug/L**
75-69-4	Trichlorofluoromethane	ND	125	ug/L
76-13-1	Trichlorotrifluoroethane	ND	125	ug/L
75-01-4	Vinyl chloride	ND	50.0	ug/L
1330-20-7	Xylene (total)	ND	375	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1250	1170	ug/L	94	78 - 130
1868-53-7	Dibromofluoromethane	1250	1250	ug/L	100	77 - 127
2037-26-5	Toluene d8	1250	1260	ug/L	101	76 - 134
17060-07-0	1,2-Dichloroethane-d4	1250	1280	ug/L	102	71 - 127

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	250	09/30/2017 17:30	NTB	619258

CAS#	Parameter	Result	LOQ	Units
127-18-4	**Tetrachloroethene**	**11400**	**1250**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	12500	11700	ug/L	94	78 - 130
1868-53-7	Dibromofluoromethane	12500	12000	ug/L	96	77 - 127
2037-26-5	Toluene d8	12500	12900	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	12500	12600	ug/L	101	71 - 127

Sample Results

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Collect Date	09/26/2017 00:01	**GCAL ID**	21709281614
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/30/2017 15:39	NTB	619258

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**	**10.2**	**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	09/26/2017 00:01	**GCAL ID**	21709281614
Receive Date	09/28/2017 09:40	**Matrix**	Water

EPA 8260B (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	09/30/2017 15:39	NTB	619258

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	47.9	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	48.4	ug/L	97	77 - 127
2037-26-5	Toluene d8	50	51.6	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	50.1	ug/L	100	71 - 127

GC/MS Volatiles QC Summary

Analytical Batch 619188	Client ID	MB619188		LCS619188				LCSD619188				
	GCAL ID	1725938		1725939				1725940				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	09/29/2017 11:36		09/29/2017 10:07				09/29/2017 10:29				
	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	47.4	95	76 - 126	50.0	46.1	92	3	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	5.00	50.0	51.1	102	70 - 122	50.0	53.6	107	5	30
1,1,2-Trichloroethane	79-00-5	ND	5.00	50.0	47.2	94	72 - 121	50.0	48.7	97	3	30
1,1-Dichloroethane	75-34-3	ND	5.00	50.0	49.1	98	74 - 127	50.0	49.4	99	1	30
1,1-Dichloroethene	75-35-4	ND	5.00	50.0	48.8	98	69 - 129	50.0	48.3	97	1	20
1,1-Dichloropropene	563-58-6	ND	5.00	50.0	47.6	95	72 - 131	50.0	46.4	93	3	30
1,2,3-Trichloropropane	96-18-4	ND	5.00	50.0	49.5	99	70 - 120	50.0	52.9	106	7	30
1,2,4-Trichlorobenzene	120-82-1	ND	5.00	50.0	47.4	95	61 - 135	50.0	48.1	96	1	30
1,2,4-Trimethylbenzene	95-63-6	ND	5.00	50.0	50.9	102	74 - 125	50.0	51.8	104	2	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	5.00	50.0	46.3	93	57 - 121	50.0	52.2	104	12	30
1,2-Dibromoethane	106-93-4	ND	5.00	50.0	47.3	95	70 - 124	50.0	48.1	96	2	30
1,2-Dichlorobenzene	95-50-1	ND	5.00	50.0	48.6	97	71 - 126	50.0	49.7	99	2	30
1,2-Dichloroethane	107-06-2	ND	5.00	50.0	50.0	100	71 - 129	50.0	50.0	100	0	30
1,2-Dichloroethene(Total)	540-59-0	ND	10.0	100	101	101	74 - 128	100	99.5	100	1	30
1,2-Dichloropropane	78-87-5	ND	5.00	50.0	50.0	100	72 - 128	50.0	49.9	100	0	30
1,3,5-Trimethylbenzene	108-67-8	ND	5.00	50.0	51.2	102	71 - 132	50.0	51.1	102	0	30
1,3-Dichlorobenzene	541-73-1	ND	5.00	50.0	48.9	98	74 - 126	50.0	49.6	99	1	30
1,3-Dichloropropane	142-28-9	ND	5.00	50.0	46.9	94	74 - 122	50.0	47.5	95	1	30
1,4-Dichlorobenzene	106-46-7	ND	5.00	50.0	48.4	97	72 - 122	50.0	48.0	96	1	30
2,2-Dichloropropane	594-20-7	ND	5.00	50.0	46.8	94	77 - 124	50.0	45.5	91	3	30
2-Butanone	78-93-3	ND	5.00	50.0	48.3	97	58 - 137	50.0	52.5	105	9	30
2-Chlorotoluene	95-49-8	ND	5.00	50.0	50.0	100	72 - 127	50.0	50.2	100	0	30
2-Hexanone	591-78-6	ND	5.00	50.0	49.4	99	50 - 135	50.0	54.2	108	9	30
4-Chlorotoluene	106-43-4	ND	5.00	50.0	50.4	101	75 - 126	50.0	50.4	101	0	30
4-Isopropyltoluene	99-87-6	ND	5.00	50.0	50.9	102	71 - 129	50.0	50.1	100	2	30
4-Methyl-2-pentanone	108-10-1	ND	5.00	50.0	47.1	94	57 - 132	50.0	51.3	103	9	30
Acetone	67-64-1	ND	5.00	50.0	42.7	85	44 - 156	50.0	51.0	102	18	30
Benzene	71-43-2	ND	5.00	50.0	47.3	95	70 - 129	50.0	47.0	94	0	20
Bromobenzene	108-86-1	ND	5.00	50.0	49.9	100	71 - 120	50.0	50.9	102	2	30
Bromochloromethane	74-97-5	ND	5.00	50.0	45.7	91	76 - 130	50.0	45.0	90	2	30
Bromodichloromethane	75-27-4	ND	5.00	50.0	50.1	100	74 - 125	50.0	50.3	101	0	30
Bromoform	75-25-2	ND	5.00	50.0	47.9	96	64 - 122	50.0	49.3	99	3	30
Bromomethane	74-83-9	ND	5.00	50.0	42.0	84	47 - 138	50.0	43.4	87	3	30
Carbon disulfide	75-15-0	ND	5.00	50.0	51.6	103	69 - 136	50.0	50.1	100	3	30
Carbon tetrachloride	56-23-5	ND	5.00	50.0	48.8	98	76 - 128	50.0	47.5	95	3	30
Chlorobenzene	108-90-7	ND	5.00	50.0	47.1	94	74 - 123	50.0	47.3	95	1	20
Chloroethane	75-00-3	ND	5.00	50.0	56.0	112	62 - 141	50.0	53.9	108	4	30
Chloroform	67-66-3	ND	5.00	50.0	48.5	97	75 - 122	50.0	48.5	97	1	30
Chloromethane	74-87-3	ND	5.00	50.0	44.4	89	59 - 132	50.0	46.2	92	4	30
cis-1,2-Dichloroethene	156-59-2	ND	5.00	50.0	50.6	101	73 - 130	50.0	50.2	100	1	30
cis-1,3-Dichloropropene	10061-01-5	ND	5.00	50.0	49.4	99	71 - 132	50.0	49.4	99	0	30
Dibromochloromethane	124-48-1	ND	5.00	50.0	47.1	94	71 - 123	50.0	48.3	97	3	30
Dibromomethane	74-95-3	ND	5.00	50.0	49.0	98	72 - 129	50.0	49.8	100	2	30
Dichlorodifluoromethane	75-71-8	ND	5.00	50.0	47.5	95	58 - 140	50.0	47.2	94	1	30
Ethylbenzene	100-41-4	ND	5.00	50.0	46.4	93	74 - 126	50.0	46.5	93	0	30
Hexachlorobutadiene	87-68-3	ND	5.00	50.0	44.4	89	61 - 144	50.0	43.5	87	2	30
Isopropylbenzene (Cumene)	98-82-8	ND	5.00	50.0	48.8	98	71 - 125	50.0	48.1	96	1	30
m,p-Xylene	136777-61-2	ND	10.0	100	95.8	96	74 - 126	100	94.5	95	1	30
Methylene chloride	75-09-2	ND	5.00	50.0	54.8	110	68 - 132	50.0	55.3	111	1	30
Naphthalene	91-20-3	ND	5.00	50.0	47.7	95	57 - 138	50.0	51.1	102	7	35
n-Butylbenzene	104-51-8	ND	5.00	50.0	52.1	104	69 - 134	50.0	51.4	103	1	30
n-Propylbenzene	103-65-1	ND	5.00	50.0	51.1	102	75 - 129	50.0	50.8	102	1	30
o-Xylene	95-47-6	ND	5.00	50.0	47.6	95	73 - 130	50.0	47.6	95	0	30
sec-Butylbenzene	135-98-8	ND	5.00	50.0	50.0	100	70 - 136	50.0	50.4	101	1	30
Styrene	100-42-5	ND	5.00	50.0	47.1	94	71 - 127	50.0	47.6	95	1	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	5.00	50.0	44.9	90	71 - 125	50.0	45.8	92	2	30
tert-Butylbenzene	98-06-6	ND	5.00	50.0	48.8	98	72 - 126	50.0	48.8	98	0	30

GC/MS Volatiles QC Summary

Analytical Batch 619188	Client ID	MB619188		LCS619188				LCSD619188				
	GCAL ID	1725938		1725939				1725940				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	09/29/2017 11:36		09/29/2017 10:07				09/29/2017 10:29				
	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	44.1	88	68 - 128	50.0	44.3	89	1	30
Toluene	108-88-3	ND	5.00	50.0	47.5	95	72 - 120	50.0	47.6	95	0	20
trans-1,2-Dichloroethene	156-60-5	ND	5.00	50.0	50.3	101	69 - 132	50.0	49.3	99	2	30
trans-1,3-Dichloropropene	10061-02-6	ND	5.00	50.0	50.5	101	71 - 131	50.0	50.7	101	0	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	5.00	50.0	49.9	100	56 - 132	50.0	53.1	106	6	30
Trichloroethene	79-01-6	ND	5.00	50.0	45.7	91	76 - 129	50.0	45.5	91	1	20
Trichlorofluoromethane	75-69-4	ND	5.00	50.0	48.6	97	72 - 136	50.0	47.4	95	3	30
Trichlorotrifluoroethane	76-13-1	ND	5.00	50.0	50.8	102	72 - 136	50.0	49.5	99	3	30
Vinyl chloride	75-01-4	ND	2.00	50.0	48.7	97	68 - 132	50.0	47.8	96	2	30
Xylene (total)	1330-20-7	ND	15.0	150	143	95	74 - 127	150	142	95	1	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	49.9	100	50	51.6	103	71 - 127	50	51.9	104	NA	NA
4-Bromofluorobenzene	460-00-4	46.2	92	50	46.8	94	78 - 130	50	47.4	95	NA	NA
Dibromofluoromethane	1868-53-7	48.2	96	50	50.7	101	77 - 127	50	49.9	100	NA	NA
Toluene d8	2037-26-5	50.9	102	50	48.5	97	76 - 134	50	48.9	98	NA	NA

Analytical Batch 619258	Client ID	MB619258		LCS619258				LCSD619258				
	GCAL ID	1726273		1726274				1726275				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	09/30/2017 11:11		09/30/2017 09:33				09/30/2017 09:57				
	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	47.0	94	75 - 124	50.0	49.6	99	5	30
1,1,1-Trichloroethane	71-55-6	ND	5.00	50.0	43.0	86	76 - 126	50.0	47.7	95	10	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	5.00	50.0	49.0	98	70 - 122	50.0	49.6	99	1	30
1,1,2-Trichloroethane	79-00-5	ND	5.00	50.0	48.5	97	72 - 121	50.0	48.7	97	0	30
1,1-Dichloroethane	75-34-3	ND	5.00	50.0	45.5	91	74 - 127	50.0	48.8	98	7	30
1,1-Dichloroethene	75-35-4	ND	5.00	50.0	43.5	87	69 - 129	50.0	49.8	100	14	20
1,1-Dichloropropene	563-58-6	ND	5.00	50.0	41.5	83	72 - 131	50.0	47.1	94	13	30
1,2,3-Trichloropropane	96-18-4	ND	5.00	50.0	48.8	98	70 - 120	50.0	48.3	97	1	30
1,2,4-Trichlorobenzene	120-82-1	ND	5.00	50.0	46.0	92	61 - 135	50.0	48.6	97	5	30
1,2,4-Trimethylbenzene	95-63-6	ND	5.00	50.0	48.2	96	74 - 125	50.0	51.2	102	6	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	5.00	50.0	49.2	98	57 - 121	50.0	47.2	94	4	30
1,2-Dibromoethane	106-93-4	ND	5.00	50.0	48.0	96	70 - 124	50.0	48.9	98	2	30
1,2-Dichlorobenzene	95-50-1	ND	5.00	50.0	47.5	95	71 - 126	50.0	49.2	98	4	30
1,2-Dichloroethane	107-06-2	ND	5.00	50.0	47.3	95	71 - 129	50.0	49.3	99	4	30
1,2-Dichloroethene(Total)	540-59-0	ND	10.0	100	92.4	92	74 - 128	100	98.8	99	7	30
1,2-Dichloropropane	78-87-5	ND	5.00	50.0	46.6	93	72 - 128	50.0	48.3	97	4	30
1,3,5-Trimethylbenzene	108-67-8	ND	5.00	50.0	47.7	95	71 - 132	50.0	50.5	101	6	30
1,3-Dichlorobenzene	541-73-1	ND	5.00	50.0	46.8	94	74 - 126	50.0	49.6	99	6	30
1,3-Dichloropropane	142-28-9	ND	5.00	50.0	46.8	94	74 - 122	50.0	47.0	94	0	30
1,4-Dichlorobenzene	106-46-7	ND	5.00	50.0	46.1	92	72 - 122	50.0	48.5	97	5	30
2,2-Dichloropropane	594-20-7	ND	5.00	50.0	42.3	85	77 - 124	50.0	47.4	95	11	30
2-Butanone	78-93-3	ND	5.00	50.0	47.7	95	58 - 137	50.0	45.4	91	5	30
2-Chlorotoluene	95-49-8	ND	5.00	50.0	46.4	93	72 - 127	50.0	48.7	97	5	30
2-Hexanone	591-78-6	ND	5.00	50.0	49.6	99	50 - 135	50.0	47.6	95	4	30
4-Chlorotoluene	106-43-4	ND	5.00	50.0	46.6	93	75 - 126	50.0	49.5	99	6	30
4-Isopropyltoluene	99-87-6	ND	5.00	50.0	46.0	92	71 - 129	50.0	50.6	101	10	30
4-Methyl-2-pentanone	108-10-1	ND	5.00	50.0	47.6	95	57 - 132	50.0	45.6	91	4	30
Acetone	67-64-1	ND	5.00	50.0	44.5	89	44 - 156	50.0	40.2	80	10	30
Benzene	71-43-2	ND	5.00	50.0	44.3	89	70 - 129	50.0	47.1	94	6	20
Bromobenzene	108-86-1	ND	5.00	50.0	47.3	95	71 - 120	50.0	48.3	97	2	30
Bromochloromethane	74-97-5	ND	5.00	50.0	45.8	92	76 - 130	50.0	48.6	97	6	30
Bromodichloromethane	75-27-4	ND	5.00	50.0	48.6	97	74 - 125	50.0	50.1	100	3	30
Bromoform	75-25-2	ND	5.00	50.0	50.5	101	64 - 122	50.0	51.5	103	2	30

GC/MS Volatiles QC Summary

Analytical Batch 619258	Client ID	MB619258		LCS619258				LCSD619258				
	GCAL ID	1726273		1726274				1726275				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	09/30/2017 11:11		09/30/2017 09:33				09/30/2017 09:57				
	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	45.4	91	47 - 138	50.0	49.8	100	9	30
Carbon disulfide	75-15-0	ND	5.00	50.0	45.6	91	69 - 136	50.0	51.3	103	12	30
Carbon tetrachloride	56-23-5	ND	5.00	50.0	43.8	88	76 - 128	50.0	49.2	98	12	30
Chlorobenzene	108-90-7	ND	5.00	50.0	46.8	94	74 - 123	50.0	48.8	98	4	20
Chloroethane	75-00-3	ND	5.00	50.0	47.0	94	62 - 141	50.0	53.5	107	13	30
Chloroform	67-66-3	ND	5.00	50.0	46.5	93	75 - 122	50.0	48.6	97	4	30
Chloromethane	74-87-3	ND	5.00	50.0	42.1	84	59 - 132	50.0	49.5	99	16	30
cis-1,2-Dichloroethene	156-59-2	ND	5.00	50.0	46.9	94	73 - 130	50.0	49.6	99	6	30
cis-1,3-Dichloropropene	10061-01-5	ND	5.00	50.0	47.3	95	71 - 132	50.0	49.0	98	4	30
Dibromochloromethane	124-48-1	ND	5.00	50.0	48.8	98	71 - 123	50.0	50.0	100	2	30
Dibromomethane	74-95-3	ND	5.00	50.0	48.4	97	72 - 129	50.0	50.0	100	3	30
Dichlorodifluoromethane	75-71-8	ND	5.00	50.0	40.8	82	58 - 140	50.0	48.4	97	17	30
Ethylbenzene	100-41-4	ND	5.00	50.0	44.8	90	74 - 126	50.0	47.9	96	7	30
Hexachlorobutadiene	87-68-3	ND	5.00	50.0	42.9	86	61 - 144	50.0	46.3	93	8	30
Isopropylbenzene (Cumene)	98-82-8	ND	5.00	50.0	45.7	91	71 - 125	50.0	49.6	99	8	30
m,p-Xylene	136777-61-2	ND	10.0	100	91.6	92	74 - 126	100	97.2	97	6	30
Methylene chloride	75-09-2	ND	5.00	50.0	52.2	104	68 - 132	50.0	45.3	91	14	30
Naphthalene	91-20-3	ND	5.00	50.0	48.2	96	57 - 138	50.0	48.1	96	0	35
n-Butylbenzene	104-51-8	ND	5.00	50.0	46.1	92	69 - 134	50.0	51.3	103	11	30
n-Propylbenzene	103-65-1	ND	5.00	50.0	45.8	92	75 - 129	50.0	49.3	99	7	30
o-Xylene	95-47-6	ND	5.00	50.0	46.6	93	73 - 130	50.0	48.6	97	4	30
sec-Butylbenzene	135-98-8	ND	5.00	50.0	45.1	90	70 - 136	50.0	49.8	100	10	30
Styrene	100-42-5	ND	5.00	50.0	46.4	93	71 - 127	50.0	48.4	97	4	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	5.00	50.0	44.1	88	71 - 125	50.0	45.0	90	2	30
tert-Butylbenzene	98-06-6	ND	5.00	50.0	44.3	89	72 - 126	50.0	47.6	95	7	30
Tetrachloroethene	127-18-4	ND	5.00	50.0	42.6	85	68 - 128	50.0	47.8	96	12	30
Toluene	108-88-3	ND	5.00	50.0	46.2	92	72 - 120	50.0	48.8	98	5	20
trans-1,2-Dichloroethene	156-60-5	ND	5.00	50.0	45.5	91	69 - 132	50.0	49.3	99	8	30
trans-1,3-Dichloropropene	10061-02-6	ND	5.00	50.0	48.3	97	71 - 131	50.0	50.2	100	4	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	5.00	50.0	47.0	94	56 - 132	50.0	47.4	95	1	30
Trichloroethene	79-01-6	ND	5.00	50.0	43.5	87	76 - 129	50.0	46.5	93	7	20
Trichlorofluoromethane	75-69-4	ND	5.00	50.0	42.3	85	72 - 136	50.0	49.9	100	16	30
Trichlorotrifluoroethane	76-13-1	ND	5.00	50.0	43.3	87	72 - 136	50.0	51.9	104	18	30
Vinyl chloride	75-01-4	ND	2.00	50.0	43.0	86	68 - 132	50.0	49.0	98	13	30
Xylene (total)	1330-20-7	ND	15.0	150	138	92	74 - 127	150	146	97	6	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	49.5	99	50	50.3	101	71 - 127	50	51	102	NA	NA
4-Bromofluorobenzene	460-00-4	48	96	50	49.8	100	78 - 130	50	50	100	NA	NA
Dibromofluoromethane	1868-53-7	48.5	97	50	51.1	102	77 - 127	50	50.7	101	NA	NA
Toluene d8	2037-26-5	51.6	103	50	50.1	100	76 - 134	50	49.4	99	NA	NA

Analytical Batch 619277	Client ID	MB619277		LCS619277				LCSD619277				
	GCAL ID	1726366		1726367				1726368				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/01/2017 12:06		10/01/2017 10:38				10/01/2017 11:00				
	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	48.7	97	75 - 124	50.0	48.4	97	1	30
1,1,1-Trichloroethane	71-55-6	ND	5.00	50.0	47.3	95	76 - 126	50.0	46.2	92	2	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	5.00	50.0	47.7	95	70 - 122	50.0	48.9	98	2	30
1,1,2-Trichloroethane	79-00-5	ND	5.00	50.0	49.0	98	72 - 121	50.0	48.4	97	1	30
1,1-Dichloroethane	75-34-3	ND	5.00	50.0	48.4	97	74 - 127	50.0	47.9	96	1	30
1,1-Dichloroethene	75-35-4	ND	5.00	50.0	49.8	100	69 - 129	50.0	48.1	96	3	20
1,1-Dichloropropene	563-58-6	ND	5.00	50.0	46.7	93	72 - 131	50.0	44.9	90	4	30
1,2,3-Trichloropropane	96-18-4	ND	5.00	50.0	46.1	92	70 - 120	50.0	47.1	94	2	30

GC/MS Volatiles QC Summary

Analytical Batch 619277	Client ID	MB619277		LCS619277				LCSD619277				
	GCAL ID	1726366		1726367				1726368				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/01/2017 12:06		10/01/2017 10:38				10/01/2017 11:00				
	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	46.1	92	61 - 135	50.0	46.9	94	2	30
1,2,4-Trimethylbenzene	95-63-6	ND	5.00	50.0	49.8	100	74 - 125	50.0	49.2	98	1	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	5.00	50.0	46.3	93	57 - 121	50.0	49.7	99	7	30
1,2-Dibromoethane	106-93-4	ND	5.00	50.0	48.6	97	70 - 124	50.0	48.7	97	0	30
1,2-Dichlorobenzene	95-50-1	ND	5.00	50.0	48.6	97	71 - 126	50.0	49.0	98	1	30
1,2-Dichloroethane	107-06-2	ND	5.00	50.0	49.2	98	71 - 129	50.0	48.8	98	1	30
1,2-Dichloroethene(Total)	540-59-0	ND	10.0	100	97.8	98	74 - 128	100	96.2	96	2	30
1,2-Dichloropropane	78-87-5	ND	5.00	50.0	48.9	98	72 - 128	50.0	47.9	96	2	30
1,3,5-Trimethylbenzene	108-67-8	ND	5.00	50.0	49.6	99	71 - 132	50.0	48.4	97	2	30
1,3-Dichlorobenzene	541-73-1	ND	5.00	50.0	48.6	97	74 - 126	50.0	47.8	96	2	30
1,3-Dichloropropane	142-28-9	ND	5.00	50.0	47.4	95	74 - 122	50.0	46.4	93	2	30
1,4-Dichlorobenzene	106-46-7	ND	5.00	50.0	47.5	95	72 - 122	50.0	47.2	94	1	30
2,2-Dichloropropane	594-20-7	ND	5.00	50.0	46.2	92	77 - 124	50.0	44.7	89	3	30
2-Butanone	78-93-3	ND	5.00	50.0	46.0	92	58 - 137	50.0	47.6	95	3	30
2-Chlorotoluene	95-49-8	ND	5.00	50.0	47.6	95	72 - 127	50.0	46.3	93	3	30
2-Hexanone	591-78-6	ND	5.00	50.0	46.8	94	50 - 135	50.0	48.1	96	3	30
4-Chlorotoluene	106-43-4	ND	5.00	50.0	47.7	95	75 - 126	50.0	46.8	94	2	30
4-Isopropyltoluene	99-87-6	ND	5.00	50.0	48.6	97	71 - 129	50.0	47.6	95	2	30
4-Methyl-2-pentanone	108-10-1	ND	5.00	50.0	45.0	90	57 - 132	50.0	46.5	93	3	30
Acetone	67-64-1	ND	5.00	50.0	40.4	81	44 - 156	50.0	51.8	104	25	30
Benzene	71-43-2	ND	5.00	50.0	47.2	94	70 - 129	50.0	46.2	92	2	20
Bromobenzene	108-86-1	ND	5.00	50.0	47.2	94	71 - 120	50.0	46.5	93	1	30
Bromochloromethane	74-97-5	ND	5.00	50.0	49.4	99	76 - 130	50.0	48.5	97	2	30
Bromodichloromethane	75-27-4	ND	5.00	50.0	51.0	102	74 - 125	50.0	50.0	100	2	30
Bromoform	75-25-2	ND	5.00	50.0	52.1	104	64 - 122	50.0	52.3	105	0	30
Bromomethane	74-83-9	ND	5.00	50.0	47.2	94	47 - 138	50.0	50.8	102	7	30
Carbon disulfide	75-15-0	ND	5.00	50.0	51.0	102	69 - 136	50.0	48.4	97	5	30
Carbon tetrachloride	56-23-5	ND	5.00	50.0	49.0	98	76 - 128	50.0	48.5	97	1	30
Chlorobenzene	108-90-7	ND	5.00	50.0	49.0	98	74 - 123	50.0	47.5	95	3	20
Chloroethane	75-00-3	ND	5.00	50.0	51.9	104	62 - 141	50.0	50.7	101	2	30
Chloroform	67-66-3	ND	5.00	50.0	49.3	99	75 - 122	50.0	48.0	96	3	30
Chloromethane	74-87-3	ND	5.00	50.0	45.4	91	59 - 132	50.0	46.9	94	3	30
cis-1,2-Dichloroethene	156-59-2	ND	5.00	50.0	49.6	99	73 - 130	50.0	48.5	97	2	30
cis-1,3-Dichloropropene	10061-01-5	ND	5.00	50.0	49.1	98	71 - 132	50.0	48.5	97	1	30
Dibromochloromethane	124-48-1	ND	5.00	50.0	50.1	100	71 - 123	50.0	49.9	100	0	30
Dibromomethane	74-95-3	ND	5.00	50.0	49.9	100	72 - 129	50.0	49.6	99	1	30
Dichlorodifluoromethane	75-71-8	ND	5.00	50.0	46.6	93	58 - 140	50.0	45.9	92	2	30
Ethylbenzene	100-41-4	ND	5.00	50.0	47.2	94	74 - 126	50.0	46.0	92	3	30
Hexachlorobutadiene	87-68-3	ND	5.00	50.0	43.9	88	61 - 144	50.0	43.9	88	0	30
Isopropylbenzene (Cumene)	98-82-8	ND	5.00	50.0	49.7	99	71 - 125	50.0	47.6	95	4	30
m,p-Xylene	136777-61-2	ND	10.0	100	97.9	98	74 - 126	100	93.9	94	4	30
Methylene chloride	75-09-2	ND	5.00	50.0	43.7	87	68 - 132	50.0	53.6	107	20	30
Naphthalene	91-20-3	ND	5.00	50.0	45.2	90	57 - 138	50.0	47.7	95	5	35
n-Butylbenzene	104-51-8	ND	5.00	50.0	49.2	98	69 - 134	50.0	47.7	95	3	30
n-Propylbenzene	103-65-1	ND	5.00	50.0	48.0	96	75 - 129	50.0	46.8	94	3	30
o-Xylene	95-47-6	ND	5.00	50.0	48.9	98	73 - 130	50.0	48.0	96	2	30
sec-Butylbenzene	135-98-8	ND	5.00	50.0	47.8	96	70 - 136	50.0	46.8	94	2	30
Styrene	100-42-5	ND	5.00	50.0	49.0	98	71 - 127	50.0	47.3	95	4	30
tert-Butyl methyl ether (MTBE)	1634-04-4	ND	5.00	50.0	44.1	88	71 - 125	50.0	44.7	89	1	30
tert-Butylbenzene	98-06-6	ND	5.00	50.0	46.1	92	72 - 126	50.0	45.3	91	2	30
Tetrachloroethene	127-18-4	ND	5.00	50.0	47.0	94	68 - 128	50.0	45.6	91	3	30
Toluene	108-88-3	ND	5.00	50.0	48.4	97	72 - 120	50.0	47.0	94	3	20
trans-1,2-Dichloroethene	156-60-5	ND	5.00	50.0	48.2	96	69 - 132	50.0	47.7	95	1	30
trans-1,3-Dichloropropene	10061-02-6	ND	5.00	50.0	51.0	102	71 - 131	50.0	49.1	98	4	30
trans-1,4-Dichloro-2-butene	110-57-6	ND	5.00	50.0	43.7	87	56 - 132	50.0	45.8	92	5	30
Trichloroethene	79-01-6	ND	5.00	50.0	47.3	95	76 - 129	50.0	46.8	94	1	20
Trichlorofluoromethane	75-69-4	ND	5.00	50.0	49.8	100	72 - 136	50.0	47.4	95	5	30
Trichlorotrifluoroethane	76-13-1	ND	5.00	50.0	51.8	104	72 - 136	50.0	49.1	98	5	30

GC/MS Volatiles QC Summary

Analytical Batch 619277	Client ID	MB619277		LCS619277				LCSD619277				
	GCAL ID	1726366		1726367				1726368				
	Sample Type	MB		LCS				LCSD				
	Prep Date	NA		NA				NA				
	Analysis Date	10/01/2017 12:06		10/01/2017 10:38				10/01/2017 11:00				
	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	48.3	97	68 - 132	50.0	47.2	94	2	30
Xylene (total)	1330-20-7	ND	15.0	150	147	98	74 - 127	150	142	95	3	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	50.4	101	50	50.8	102	71 - 127	50	51.2	102	NA	NA
4-Bromofluorobenzene	460-00-4	48.3	97	50	50.4	101	78 - 130	50	50.5	101	NA	NA
Dibromofluoromethane	1868-53-7	49	98	50	50.9	102	77 - 127	50	51.3	103	NA	NA
Toluene d8	2037-26-5	52.2	104	50	49	98	76 - 134	50	49.1	98	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: 217092816
PM: SAB3

Report to:
Client: Clearwater Environmental
Address: 3870 P'Tree Ind Blvd
Duluth GA 30096
Contact: Jack Wuthe
Phone: 678-491-4601
E-mail: jack.wuthe@clearwatereav.net

Bill to:
Client:
Address: Ste 34019
Contact: SAA
Phone:
E-mail:

P.O. Number
Project Name/Number: RAGLOC
Sampled By: Perry Fox

Analytical Requests & Method: VOCs via 8260B

GCAL use only:
Custody Seal used ☐ yes ☐ no
intact ☐ yes ☐ no
EZ9
Temperature °C 0.6
CDM=N/A

☐ Dissolved Analysis Requested
☐ Field filtered
☐ Lab filtered

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	No Containers	Preservative	
W	9/26	0746		X	MW-7C 30'	3	X	1
		0916		X	MW-12C 60'	3	X	2
		0827		X	MW-15C 30'	3	X	3
		0812		X	MW-17C 30'	3	X	4
		0820		X	MW-19C 30	3	X	5
		0736		X	MW-20C 60'	3	X	6
		1004		X	MW-21C 60'	3	X	7
		0955		X	MW-22C 60'	3	X	8
		0946		X	MW-23C 60'	3	X	9
		0925		X	MW-24C 30'	3	X	10
		0859		X	MW-25C 30'	3	X	11
		0836		X	MW-26C 30'	3	X	12
		0729		X	PT-3C 60	3	X	13

Air Bill No: 7703-6115-1650

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:
	9/27/17	1345	Hugo Arce	9/27/17	13:45
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	9/27/17	1405	FedEx		
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
FedEx	9-28-17	0940		9-28-17	0940

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

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: 217092816
PM: SAB3

Report to:	Bill to:	Analytical Requests & Method	GCAL use only:
Client: Clearwater Env	Client:		Custody Seal used ☐ yes ☐ no
Address:	Address:		intact ☐ yes ☐ no
Contact: Jack Vintle	Contact:		Temperature °C 0.6 EZ9
Phone:	Phone:		CPM = N/A
E-mail:	E-mail:		☐ Dissolved Analysis Requested ☐ Field filtered ☐ Lab filtered
P.O. Number	Project Name/Number RAYLOC		
Sampled By: Ploy Fox			

Matrix[1]	Date	Time (2400)	Comp	Grab	Sample Description	No Containers	Preservative
W					TRIP BLANK	2	14

Air Bill No: 7703-6115-1650

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:
	9/27/17	1345	Hugo Alvez	9/27/17	13:45
Brad Tuckum	9/27/17	1405	FEDEX		
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
FEDEX	9-28-17	0940	Tiffany Jarvis	9-28-17	0940

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

217092816

SAMPLE DELIVERY GROUP 217092816	
Client **PM** SAB3 4912 - Clearwater Environmental Resources	**Transport Method** FEDEX
Profile Number 259985	**Received By** Savage, Tiffany R
Line Item(s) 1 - VOC	**Receive Date(s)** 09/28/17

CHECKLIST	YES	NO
Samples received with proper thermal preservation?	☑	☐
Radioactivity is <1600 cpm? If no, record cpm value in notes section.	☑	☐
COC relinquished and complete (including sampleIDs, collect times, and sampler)?	☑	☐
All containers received in good condition and within hold time?	☑	☐
All sample labels and containers received match the chain of custody?	☑	☐
Preservative added to any containers?	☐	☑
If received, was headspace for VOC water containers < 6mm?	☑	☐
Samples collected in containers provided by GCAL?	☑	☐

COOLERS

Airbill	Thermometer ID: E29	Temp °C
7703-6115-1650		0.6

DISCREPANCIES

None

LAB PRESERVATIONS

None

NOTES

Revision 1.6

Groundwater Sampling Logsheet - PDBs

Rayloc Facility
HSI# 10547

SAMPLE ID	MW-7
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	30'
SCREENED INTERVAL	25' - 35'
DEPLOYMENT DATE	9/14/17
DEPLOYMENT DTW	26.18
RECOVERY DATE	9/26/17
RECOVERY DTW	26.55
CONDITION OF PDB	GOOD

SAMPLE ID	MW-12
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	60'
SCREENED INTERVAL	26' - 96'
DEPLOYMENT DATE	9/14/17
DEPLOYMENT DTW	27.08
RECOVERY DATE	9/26/17
RECOVERY DTW	27.05
CONDITION OF PDB	GOOD

SAMPLE ID	MW-15
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	30'
SCREENED INTERVAL	5' - 40'
DEPLOYMENT DATE	9/14/17
DEPLOYMENT DTW	9.72
RECOVERY DATE	9/26/17
RECOVERY DTW	9.23
CONDITION OF PDB	GOOD

SAMPLE ID	MW-17
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	30'
SCREENED INTERVAL	5' - 31'
DEPLOYMENT DATE	9/14/17
DEPLOYMENT DTW	8.53
RECOVERY DATE	9/26/17
RECOVERY DTW	8.45
CONDITION OF PDB	GOOD

SAMPLE ID	MW-19
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	30'
SCREENED INTERVAL	10' - 35'
DEPLOYMENT DATE	9/14/17
DEPLOYMENT DTW	7.97
RECOVERY DATE	9/26/17
RECOVERY DTW	8.57
CONDITION OF PDB	GOOD

SAMPLE ID	MW-20
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	60'
SCREENED INTERVAL	20' - 70'
DEPLOYMENT DATE	9/14/17
DEPLOYMENT DTW	22.12
RECOVERY DATE	9/26/17
RECOVERY DTW	22.12
CONDITION OF PDB	GOOD

Sampler Signature _____ Sample Date 9/26/17

Groundwater Sampling Logsheet - PDBs

Rayloc Facility

HSI# 10547

SAMPLE ID	MW-21
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	60'
SCREENED INTERVAL	40' - 75'
DEPLOYMENT DATE	9/14/17
DEPLOYMENT DTW	46.85
RECOVERY DATE	9/26/17
RECOVERY DTW	46.93
CONDITION OF PDB	GOOD

SAMPLE ID	MW-22
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	60'
SCREENED INTERVAL	40' - 70'
DEPLOYMENT DATE	9/14/17
DEPLOYMENT DTW	44.48
RECOVERY DATE	9/26/17
RECOVERY DTW	44.49
CONDITION OF PDB	GOOD

SAMPLE ID	MW-23
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	60'
SCREENED INTERVAL	30' - 60'
DEPLOYMENT DATE	9/14/17
DEPLOYMENT DTW	49.79
RECOVERY DATE	9/26/17
RECOVERY DTW	49.90
CONDITION OF PDB	GOOD

SAMPLE ID	MW-24
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	30'
SCREENED INTERVAL	25' - 35'
DEPLOYMENT DATE	9/14/17
DEPLOYMENT DTW	23.48
RECOVERY DATE	9/26/17
RECOVERY DTW	23.64
CONDITION OF PDB	GOOD

SAMPLE ID	MW-25
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	30'
SCREENED INTERVAL	20' - 40'
DEPLOYMENT DATE	8/24/17
DEPLOYMENT DTW	28.62
RECOVERY DATE	9/26/17
RECOVERY DTW	28.77
CONDITION OF PDB	GOOD

SAMPLE ID	MW-26
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	30'
SCREENED INTERVAL	25' - 30'
DEPLOYMENT DATE	9/14/17
DEPLOYMENT DTW	10.52
RECOVERY DATE	9/26/17
RECOVERY DTW	10.83
CONDITION OF PDB	GOOD

Sampler Signature _____ Sample Date 9/26/17

Groundwater Sampling Logsheet - PDBs

Rayloc Facility

HSI# 10547

SAMPLE ID	PT-3
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	60'
SCREENED INTERVAL	12.6' - 67.6'
DEPLOYMENT DATE	9/14/17
DEPLOYMENT DTW	22.64
RECOVERY DATE	9/26/17
RECOVERY DTW	22.64
CONDITION OF PDB	GOOD

SAMPLE ID	
PDB BRAND NAME	
SAMPLE DEPTH	
SCREENED INTERVAL	
DEPLOYMENT DATE	
DEPLOYMENT DTW	
RECOVERY DATE	
RECOVERY DTW	
CONDITION OF PDB	

SAMPLE ID	
PDB BRAND NAME	
SAMPLE DEPTH	
SCREENED INTERVAL	
DEPLOYMENT DATE	
DEPLOYMENT DTW	
RECOVERY DATE	
RECOVERY DTW	
CONDITION OF PDB	

SAMPLE ID	
PDB BRAND NAME	
SAMPLE DEPTH	
SCREENED INTERVAL	
DEPLOYMENT DATE	
DEPLOYMENT DTW	
RECOVERY DATE	
RECOVERY DTW	
CONDITION OF PDB	

SAMPLE ID	
PDB BRAND NAME	
SAMPLE DEPTH	
SCREENED INTERVAL	
DEPLOYMENT DATE	
DEPLOYMENT DTW	
RECOVERY DATE	
RECOVERY DTW	
CONDITION OF PDB	

SAMPLE ID	
PDB BRAND NAME	
SAMPLE DEPTH	
SCREENED INTERVAL	
DEPLOYMENT DATE	
DEPLOYMENT DTW	
RECOVERY DATE	
RECOVERY DTW	
CONDITION OF PDB	

Sampler Signature _____ Sample Date 9/26/17

APPENDIX D
NOVEMBER 2017 COMPLIANCE GROUNDWATER LABORATORY REPORT & SAMPLING LOGS

Groundwater Sampling Logsheet - PDBs

Rayloc Facility

HSI# 10547

SAMPLE ID	MW-1	F
PDB BRAND NAME	Equilibrator	
SAMPLE DEPTH	27'	
SCREENED INTERVAL	23 - 33	
DEPLOYMENT DATE	10/17/17	
DEPLOYMENT DTW	24.92	
RECOVERY DATE	11/7/17	
RECOVERY DTW	25.10	
CONDITION OF PDB	Good	

SAMPLE ID	MW-2	F
PDB BRAND NAME	Equilibrator	
SAMPLE DEPTH	35'	
SCREENED INTERVAL	31 - 41	
DEPLOYMENT DATE	10/17/17	
DEPLOYMENT DTW	33.22	
RECOVERY DATE	11/7/17	
RECOVERY DTW	33.22	
CONDITION OF PDB	Good	

SAMPLE ID	MW-3	F
PDB BRAND NAME	Equilibrator	
SAMPLE DEPTH	25'	
SCREENED INTERVAL	19 - 29	
DEPLOYMENT DATE	10/17/17	
DEPLOYMENT DTW	~~25'~~ 20.78	
RECOVERY DATE	11/7/17	
RECOVERY DTW	20.90	
CONDITION OF PDB	Good	

SAMPLE ID	MW-4	F
PDB BRAND NAME	Equilibrator	
SAMPLE DEPTH	12'	
SCREENED INTERVAL	7 -17	
DEPLOYMENT DATE	10/17/17	
DEPLOYMENT DTW	7.39	
RECOVERY DATE	11/7/17	
RECOVERY DTW	7.49	
CONDITION OF PDB	Good	

SAMPLE ID	MW-5A	FP
PDB BRAND NAME	Equilibrator	
SAMPLE DEPTH	45'	
SCREENED INTERVAL	15 - 75	
DEPLOYMENT DATE	10/18/17	
DEPLOYMENT DTW	26.92	
RECOVERY DATE	11/7/17	
RECOVERY DTW	27.28	
CONDITION OF PDB	Good	

SAMPLE ID	MW-6A	FP
PDB BRAND NAME	Equilibrator	
SAMPLE DEPTH	45'	
SCREENED INTERVAL	40 - 50	
DEPLOYMENT DATE	10/17/17	
DEPLOYMENT DTW	42.37	
RECOVERY DATE	11/7/17	
RECOVERY DTW	42.50	
CONDITION OF PDB	Good	

Sampler Signature _____ Sample Date 11/7/17

Groundwater Sampling Logsheet - PDBs

Rayloc Facility
HSI# 10547

SAMPLE ID	MW-7
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	30'
SCREENED INTERVAL	25 - 35
DEPLOYMENT DATE	10/17/17
DEPLOYMENT DTW	26.85
RECOVERY DATE	11/7/17
RECOVERY DTW	26.78
CONDITION OF PDB	Good

SAMPLE ID	MW-8
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	~~22'~~ 24'
SCREENED INTERVAL	17 - 27
DEPLOYMENT DATE	10/17/17
DEPLOYMENT DTW	20.26
RECOVERY DATE	11/7/17
RECOVERY DTW	20.33
CONDITION OF PDB	

SAMPLE ID	MW-9
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	23'
SCREENED INTERVAL	14 - 34
DEPLOYMENT DATE	10/17/17
DEPLOYMENT DTW	15.68
RECOVERY DATE	11/7/17
RECOVERY DTW	15.61
CONDITION OF PDB	Good

SAMPLE ID	MW-10
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	38'
SCREENED INTERVAL	34 - 44
DEPLOYMENT DATE	~~10/17/17~~ 10/17/17
DEPLOYMENT DTW	~~22.30~~ 31.91
RECOVERY DATE	11/7/17
RECOVERY DTW	22.39
CONDITION OF PDB	Good

REAL!

SAMPLE ID	MW-12
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	60
SCREENED INTERVAL	26 - 96
DEPLOYMENT DATE	10/17/17
DEPLOYMENT DTW	27.63
RECOVERY DATE	11/7/17
RECOVERY DTW	27.75
CONDITION OF PDB	Good

SAMPLE ID	MW-13
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	~~33'~~ 34'
SCREENED INTERVAL	23 - 43
DEPLOYMENT DATE	10-18-17
DEPLOYMENT DTW	31.60
RECOVERY DATE	11/7/17
RECOVERY DTW	31.90
CONDITION OF PDB	Good

Sampler Signature _____ Sample Date 11/7/17

Groundwater Sampling Logsheet - PDBs

Rayloc Facility

HSI# 10547

SAMPLE ID	MW-15
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	30'
SCREENED INTERVAL	5 - 40
DEPLOYMENT DATE	10/17/17
DEPLOYMENT DTW	9.39
RECOVERY DATE	11/7/17
RECOVERY DTW	9.11
CONDITION OF PDB	Good

SAMPLE ID	MW-16
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	~~30~~ 38'
SCREENED INTERVAL	14 - 39
DEPLOYMENT DATE	10/17/17
DEPLOYMENT DTW	22.30
RECOVERY DATE	~~=~~ 11/7/17
RECOVERY DTW	22.33
CONDITION OF PDB	

SAMPLE ID	MW-17
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	30'
SCREENED INTERVAL	5 - 31
DEPLOYMENT DATE	10/17/17
DEPLOYMENT DTW	8.69
RECOVERY DATE	11/7/17
RECOVERY DTW	8.62
CONDITION OF PDB	Good

SAMPLE ID	MW-18
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	60'
SCREENED INTERVAL	20 - 88
DEPLOYMENT DATE	10/17/17
DEPLOYMENT DTW	26.29
RECOVERY DATE	11/7/17
RECOVERY DTW	26.39
CONDITION OF PDB	Good

SAMPLE ID	MW-19
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	30'
SCREENED INTERVAL	10 - 35
DEPLOYMENT DATE	10/17/17
DEPLOYMENT DTW	8.55
RECOVERY DATE	11/7/17
RECOVERY DTW	8.49
CONDITION OF PDB	Good

SAMPLE ID	MW-24
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	30'
SCREENED INTERVAL	25 - 35
DEPLOYMENT DATE	10/17/17
DEPLOYMENT DTW	24.15
RECOVERY DATE	11/7/17
RECOVERY DTW	~~31.70~~ 24.45
CONDITION OF PDB	Good

~~Pass. equil. zone?~~

Sampler Signature _____ Sample Date 11/7/17

Groundwater Sampling Logsheet - PDBs

Rayloc Facility

HSI# 10547

SAMPLE ID	RAD -4
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	60'
SCREENED INTERVAL	NI
DEPLOYMENT DATE	10/17/17
DEPLOYMENT DTW	49.62
RECOVERY DATE	11/7/17
RECOVERY DTW	49.68
CONDITION OF PDB	Good

SAMPLE ID	RAD-5
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	60'
SCREENED INTERVAL	NI
DEPLOYMENT DATE	10/17/17
DEPLOYMENT DTW	27.06
RECOVERY DATE	11/7/17
RECOVERY DTW	~~27.94~~ 27.24
CONDITION OF PDB	Good

SAMPLE ID	MW-76
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	~~25~~ 30'
SCREENED INTERVAL	
DEPLOYMENT DATE	10/17/17
DEPLOYMENT DTW	10.92
RECOVERY DATE	11/7/17
RECOVERY DTW	10.82
CONDITION OF PDB	Good

SAMPLE ID	
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	
SCREENED INTERVAL	
DEPLOYMENT DATE	
DEPLOYMENT DTW	
RECOVERY DATE	
RECOVERY DTW	
CONDITION OF PDB	

SAMPLE ID	
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	
SCREENED INTERVAL	
DEPLOYMENT DATE	
DEPLOYMENT DTW	
RECOVERY DATE	
RECOVERY DTW	
CONDITION OF PDB	

SAMPLE ID	
PDB BRAND NAME	Equilibrator
SAMPLE DEPTH	
SCREENED INTERVAL	
DEPLOYMENT DATE	
DEPLOYMENT DTW	
RECOVERY DATE	
RECOVERY DTW	
CONDITION OF PDB	

Sampler Signature _____ Sample Date 11/7/17

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 16, 2017

Jack Wintle
Clearwater Environmental Resources, LLC

3870 Peachtree Ind. Blvd.
Duluth GA 30096

RE: RAYLOC

Dear Jack Wintle: Order No: 1711829

Analytical Environmental Services, Inc. received 22 samples on 11/8/2017 1:32:00 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:
-NELAP/State of Florida Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, Air & Emissions Volatile Organics, and Drinking Water Microbiology & Metals, effective 07/01/17-06/30/18.
State of Georgia, Department of Natural Resources ID #800 for analysis of Drinking Water Metals, effective 07/01/17-06/30/18 and Total Coliforms/ E. coli, effective 04/25/17-04/24/20.
-NELAP/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/17-06/30/18.
-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 11/01/19.
These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Mirzeta Kararic

Mirzeta Kararic

Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
AES Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1711 904

Date: _____ Page 1 of 2

COMPANY:	ADDRESS:
Clearwater Env. Resources	3870 Pleasant Hill Ind Blvd Ste 340139 Duluth GA 30096
PHONE: 678 491-4601	EMAIL: jack.wyatt@clearwaterenv.net
SAMPLED BY: Perry Fry	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes) H+I	ANALYSIS REQUESTED VOCs by 8260B	REMARKS	Number of Containers
1	MW-1 @ 27'	11/7/17	1334	X		GW	2			2
2	MW-2 @ 35'		1319	X			2			2
3	MW-3 @ 25'		1328	X			2			2
4	MW-4 @ 12'		1240	X			2			2
5	MW-5A @ 45'		1302	X			2			2
6	MW-6A @ 45'		1310	X			2			2
7	MW-7 @ 30'		1412	X			2			2
8	MW-8 @ 24'		1353	X			2			2
9	MW-9 @ 23'		1342	X			2			2
10	MW-10 @ 38'		1519	X			2			2
11	MW-12 @ 60'		1425	X			2			2
12	MW-13 @ 34'		1440	X			2			2
13	MW-15 @ 30'		1503	X			2			2
14	MW-16 @ 38'		1347	X			2			2

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	11/7/17 1705	1.	11/7@1705
2.	11/8@1330	2.	11/8/17 1332
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
(client) FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION

PROJECT NAME: RAYLOC
PROJECT #:
SITE ADDRESS:
SEND REPORT TO:
INVOICE TO:
(IF DIFFERENT FROM ABOVE)
QUOTE #: _____ PO#: _____

RECEIPT

Total # of Containers: 44

Turnaround Time (TAT) Request
- [x] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same-Day Rush **(auth req.)**
- [ ] Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

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

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

ANALYTICAL ENVIRONMENTAL SERVICES, INC.
3080 Presidential Drive Atlanta, GA 30340-3704
Phone: (770) 457-8177 / Toll-Free: (800) 972-4889 / Fax: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1711829
Date: _____ Page 2 of 2

COMPANY: Clearwater Env. Resources	ADDRESS: 3820 Pittsfield Blvd Ste 240139 Duluth GA 30096
PHONE: 678 491-4601	EMAIL: jack.smith@clearwaterenv.net
SAMPLED BY: Jerry Fritz	SIGNATURE:

#	SAMPLE ID	SAMPLED: DATE	SAMPLED: TIME	GRAB	COMPOSITE	MATRIX (see codes)	PRESERVATION (see codes)	REMARKS	Number of Containers
1	MW-17 C 30'	11/7/17	1502	X		GW	N		2
2	MW-18 C 60'		1406	X			N		2
3	MW-19 C 30'		1455	X			N		2
4	MW-24 C 30'		1540	X			N		2
5	MW-26 C 30'		1510	X			N		2
6	RAD-4 C 60'		1553	X			N		2
7	RAD-5 C 60'		1430	X			N		2
8									
9	TRIP BLANK								2
10									
11									
12									
13									
14									

ANALYSIS REQUESTED: 8260B; VOCs w/ MTBE

Visit our website www.aesatlanta.com for downloadable COCs and to log in to your AESAccess account.

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1.	11/7/17 1705	1.	11/7/17 1705
2.	11/8/17 1332	2.	11/8/17 1332
3.		3.	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT: / / VIA:
IN: / / VIA:
client FedEx UPS US mail courier Greyhound
other: _____

PROJECT INFORMATION
PROJECT NAME: RAVEN
PROJECT #:
SITE ADDRESS:
SEND REPORT TO:
INVOICE TO:
(IF DIFFERENT FROM ABOVE)
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 44

Turnaround Time (TAT) Request
- [x] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same-Day Rush **(auth req.)**
- [ ] Other _____

STATE PROGRAM (if any): _____
E-mail? ☐ Fax? ☐
DATA PACKAGE: I ○ II ○ III ○ IV ○

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT. Samples are disposed of 30 days after completion of report unless other arangements are made.

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

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

Analytical Environmental Services, Inc **Date:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-1 @ 27'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 1:34:00 PM
Lab ID:	1711829-001	**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	251397	1	11/11/2017 20:17	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
2-Butanone	BRL	50		ug/L	251397	1	11/11/2017 20:17	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/11/2017 20:17	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/11/2017 20:17	OM
Acetone	BRL	50		ug/L	251397	1	11/11/2017 20:17	OM
Benzene	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Chloroethane	BRL	10		ug/L	251397	1	11/11/2017 20:17	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Chloromethane	BRL	10		ug/L	251397	1	11/11/2017 20:17	OM
cis-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/11/2017 20:17	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Freon-113	BRL	10		ug/L	251397	1	11/11/2017 20:17	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-1 @ 27'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 1:34:00 PM
Lab ID:	1711829-001	**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	251397	1	11/11/2017 20:17	OM
Tetrachloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Toluene	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Trichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/11/2017 20:17	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/11/2017 20:17	OM
Surr: 4-Bromofluorobenzene	96.3	68-127		%REC	251397	1	11/11/2017 20:17	OM
Surr: Dibromofluoromethane	98.1	84.4-122		%REC	251397	1	11/11/2017 20:17	OM
Surr: Toluene-d8	95.6	80.1-116		%REC	251397	1	11/11/2017 20:17	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-2 @ 35'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 1:19:00 PM
Lab ID:	1711829-002	**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	251397	1	11/11/2017 20:43	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
2-Butanone	BRL	50		ug/L	251397	1	11/11/2017 20:43	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/11/2017 20:43	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/11/2017 20:43	OM
Acetone	BRL	50		ug/L	251397	1	11/11/2017 20:43	OM
Benzene	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Chloroethane	BRL	10		ug/L	251397	1	11/11/2017 20:43	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Chloromethane	BRL	10		ug/L	251397	1	11/11/2017 20:43	OM
cis-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/11/2017 20:43	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Freon-113	BRL	10		ug/L	251397	1	11/11/2017 20:43	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-2 @ 35'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 1:19:00 PM
Lab ID:	1711829-002	**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	251397	1	11/11/2017 20:43	OM
Tetrachloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Toluene	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Trichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/11/2017 20:43	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/11/2017 20:43	OM
Surr: 4-Bromofluorobenzene	96.7	68-127		%REC	251397	1	11/11/2017 20:43	OM
Surr: Dibromofluoromethane	95.5	84.4-122		%REC	251397	1	11/11/2017 20:43	OM
Surr: Toluene-d8	98.6	80.1-116		%REC	251397	1	11/11/2017 20:43	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-3 @ 25'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 1:28:00 PM
Lab ID:	1711829-003	**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	251397	1	11/11/2017 21:09	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
2-Butanone	BRL	50		ug/L	251397	1	11/11/2017 21:09	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/11/2017 21:09	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/11/2017 21:09	OM
Acetone	BRL	50		ug/L	251397	1	11/11/2017 21:09	OM
Benzene	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Chloroethane	BRL	10		ug/L	251397	1	11/11/2017 21:09	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Chloromethane	BRL	10		ug/L	251397	1	11/11/2017 21:09	OM
cis-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/11/2017 21:09	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Freon-113	BRL	10		ug/L	251397	1	11/11/2017 21:09	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-3 @ 25'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 1:28:00 PM
Lab ID:	1711829-003	**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	251397	1	11/11/2017 21:09	OM
Tetrachloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Toluene	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Trichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/11/2017 21:09	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/11/2017 21:09	OM
Surr: 4-Bromofluorobenzene	96.5	68-127		%REC	251397	1	11/11/2017 21:09	OM
Surr: Dibromofluoromethane	94.8	84.4-122		%REC	251397	1	11/11/2017 21:09	OM
Surr: Toluene-d8	96.6	80.1-116		%REC	251397	1	11/11/2017 21:09	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-4 @ 12'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 12:40:00 PM
Lab ID:	1711829-004	**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	251397	1	11/11/2017 21:35	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
2-Butanone	BRL	50		ug/L	251397	1	11/11/2017 21:35	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/11/2017 21:35	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/11/2017 21:35	OM
Acetone	BRL	50		ug/L	251397	1	11/11/2017 21:35	OM
Benzene	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Chloroethane	BRL	10		ug/L	251397	1	11/11/2017 21:35	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Chloromethane	BRL	10		ug/L	251397	1	11/11/2017 21:35	OM
cis-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/11/2017 21:35	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Freon-113	BRL	10		ug/L	251397	1	11/11/2017 21:35	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-4 @ 12'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 12:40:00 PM
Lab ID:	1711829-004	**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	251397	1	11/11/2017 21:35	OM
Tetrachloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Toluene	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Trichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/11/2017 21:35	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/11/2017 21:35	OM
Surr: 4-Bromofluorobenzene	97	68-127		%REC	251397	1	11/11/2017 21:35	OM
Surr: Dibromofluoromethane	97.3	84.4-122		%REC	251397	1	11/11/2017 21:35	OM
Surr: Toluene-d8	97.2	80.1-116		%REC	251397	1	11/11/2017 21:35	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-5A @ 45'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 1:02:00 PM
Lab ID:	1711829-005	**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	251397	1	11/11/2017 22:01	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
2-Butanone	BRL	50		ug/L	251397	1	11/11/2017 22:01	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/11/2017 22:01	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/11/2017 22:01	OM
Acetone	BRL	50		ug/L	251397	1	11/11/2017 22:01	OM
Benzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Chloroethane	BRL	10		ug/L	251397	1	11/11/2017 22:01	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Chloromethane	BRL	10		ug/L	251397	1	11/11/2017 22:01	OM
cis-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/11/2017 22:01	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Freon-113	BRL	10		ug/L	251397	1	11/11/2017 22:01	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-5A @ 45'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 1:02:00 PM
Lab ID:	1711829-005	**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	251397	1	11/11/2017 22:01	OM
Tetrachloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Toluene	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Trichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:01	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/11/2017 22:01	OM
Surr: 4-Bromofluorobenzene	98.1	68-127		%REC	251397	1	11/11/2017 22:01	OM
Surr: Dibromofluoromethane	97.7	84.4-122		%REC	251397	1	11/11/2017 22:01	OM
Surr: Toluene-d8	97.9	80.1-116		%REC	251397	1	11/11/2017 22:01	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-6A @ 45'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 1:10:00 PM
Lab ID:	1711829-006	**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	251397	1	11/11/2017 22:27	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
2-Butanone	BRL	50		ug/L	251397	1	11/11/2017 22:27	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/11/2017 22:27	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/11/2017 22:27	OM
Acetone	BRL	50		ug/L	251397	1	11/11/2017 22:27	OM
Benzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Chloroethane	BRL	10		ug/L	251397	1	11/11/2017 22:27	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Chloromethane	BRL	10		ug/L	251397	1	11/11/2017 22:27	OM
cis-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/11/2017 22:27	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Freon-113	BRL	10		ug/L	251397	1	11/11/2017 22:27	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-6A @ 45'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 1:10:00 PM
Lab ID:	1711829-006	**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	251397	1	11/11/2017 22:27	OM
Tetrachloroethene	6.4	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Toluene	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Trichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:27	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/11/2017 22:27	OM
Surr: 4-Bromofluorobenzene	96.8	68-127		%REC	251397	1	11/11/2017 22:27	OM
Surr: Dibromofluoromethane	95.6	84.4-122		%REC	251397	1	11/11/2017 22:27	OM
Surr: Toluene-d8	97.2	80.1-116		%REC	251397	1	11/11/2017 22:27	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-7 @ 30'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 2:12:00 PM
Lab ID:	1711829-007	**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	251397	1	11/11/2017 22:53	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
2-Butanone	BRL	50		ug/L	251397	1	11/11/2017 22:53	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/11/2017 22:53	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/11/2017 22:53	OM
Acetone	BRL	50		ug/L	251397	1	11/11/2017 22:53	OM
Benzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Chloroethane	BRL	10		ug/L	251397	1	11/11/2017 22:53	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Chloromethane	BRL	10		ug/L	251397	1	11/11/2017 22:53	OM
cis-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/11/2017 22:53	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Freon-113	BRL	10		ug/L	251397	1	11/11/2017 22:53	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-7 @ 30'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 2:12:00 PM
Lab ID:	1711829-007	**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	251397	1	11/11/2017 22:53	OM
Tetrachloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Toluene	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Trichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/11/2017 22:53	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/11/2017 22:53	OM
Surr: 4-Bromofluorobenzene	96.2	68-127		%REC	251397	1	11/11/2017 22:53	OM
Surr: Dibromofluoromethane	93.6	84.4-122		%REC	251397	1	11/11/2017 22:53	OM
Surr: Toluene-d8	95.3	80.1-116		%REC	251397	1	11/11/2017 22:53	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-8 @ 24'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 1:53:00 PM
Lab ID:	1711829-008	**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	251397	1	11/11/2017 23:19	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
2-Butanone	BRL	50		ug/L	251397	1	11/11/2017 23:19	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/11/2017 23:19	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/11/2017 23:19	OM
Acetone	BRL	50		ug/L	251397	1	11/11/2017 23:19	OM
Benzene	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Chloroethane	BRL	10		ug/L	251397	1	11/11/2017 23:19	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Chloromethane	BRL	10		ug/L	251397	1	11/11/2017 23:19	OM
cis-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/11/2017 23:19	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Freon-113	BRL	10		ug/L	251397	1	11/11/2017 23:19	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-8 @ 24'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 1:53:00 PM
Lab ID:	1711829-008	**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	251397	1	11/11/2017 23:19	OM
Tetrachloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Toluene	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Trichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/11/2017 23:19	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/11/2017 23:19	OM
Surr: 4-Bromofluorobenzene	95.4	68-127		%REC	251397	1	11/11/2017 23:19	OM
Surr: Dibromofluoromethane	96.7	84.4-122		%REC	251397	1	11/11/2017 23:19	OM
Surr: Toluene-d8	96.9	80.1-116		%REC	251397	1	11/11/2017 23:19	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-9 @ 23'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 1:42:00 PM
Lab ID:	1711829-009	**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	251397	1	11/11/2017 23:44	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
2-Butanone	BRL	50		ug/L	251397	1	11/11/2017 23:44	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/11/2017 23:44	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/11/2017 23:44	OM
Acetone	BRL	50		ug/L	251397	1	11/11/2017 23:44	OM
Benzene	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Chloroethane	BRL	10		ug/L	251397	1	11/11/2017 23:44	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Chloromethane	BRL	10		ug/L	251397	1	11/11/2017 23:44	OM
cis-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/11/2017 23:44	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Freon-113	BRL	10		ug/L	251397	1	11/11/2017 23:44	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-9 @ 23'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 1:42:00 PM
Lab ID:	1711829-009	**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	251397	1	11/11/2017 23:44	OM
Tetrachloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Toluene	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Trichloroethene	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/11/2017 23:44	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/11/2017 23:44	OM
Surr: 4-Bromofluorobenzene	98.2	68-127		%REC	251397	1	11/11/2017 23:44	OM
Surr: Dibromofluoromethane	94.7	84.4-122		%REC	251397	1	11/11/2017 23:44	OM
Surr: Toluene-d8	96.4	80.1-116		%REC	251397	1	11/11/2017 23:44	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-10 @ 38'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 3:19:00 PM
Lab ID:	1711829-010	**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	251397	1	11/12/2017 00:10	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
2-Butanone	BRL	50		ug/L	251397	1	11/12/2017 00:10	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/12/2017 00:10	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/12/2017 00:10	OM
Acetone	BRL	50		ug/L	251397	1	11/12/2017 00:10	OM
Benzene	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Chloroethane	BRL	10		ug/L	251397	1	11/12/2017 00:10	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Chloromethane	BRL	10		ug/L	251397	1	11/12/2017 00:10	OM
cis-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/12/2017 00:10	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Freon-113	BRL	10		ug/L	251397	1	11/12/2017 00:10	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-10 @ 38'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 3:19:00 PM
Lab ID:	1711829-010	**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	251397	1	11/12/2017 00:10	OM
Tetrachloroethene	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Toluene	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Trichloroethene	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/12/2017 00:10	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/12/2017 00:10	OM
Surr: 4-Bromofluorobenzene	96.5	68-127		%REC	251397	1	11/12/2017 00:10	OM
Surr: Dibromofluoromethane	96.4	84.4-122		%REC	251397	1	11/12/2017 00:10	OM
Surr: Toluene-d8	97.2	80.1-116		%REC	251397	1	11/12/2017 00:10	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-12 @ 60'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 2:25:00 PM
Lab ID:	1711829-011	**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	251397	1	11/12/2017 00:36	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
2-Butanone	BRL	50		ug/L	251397	1	11/12/2017 00:36	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/12/2017 00:36	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/12/2017 00:36	OM
Acetone	BRL	50		ug/L	251397	1	11/12/2017 00:36	OM
Benzene	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Chloroethane	BRL	10		ug/L	251397	1	11/12/2017 00:36	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Chloromethane	BRL	10		ug/L	251397	1	11/12/2017 00:36	OM
cis-1,2-Dichloroethene	53	5.0		ug/L	251397	1	11/12/2017 00:36	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/12/2017 00:36	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Freon-113	BRL	10		ug/L	251397	1	11/12/2017 00:36	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-12 @ 60'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 2:25:00 PM
Lab ID:	1711829-011	**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	251397	1	11/12/2017 00:36	OM
Tetrachloroethene	1000	50		ug/L	251397	10	11/13/2017 13:15	OM
Toluene	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Trichloroethene	45	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/12/2017 00:36	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/12/2017 00:36	OM
Surr: 4-Bromofluorobenzene	97.3	68-127		%REC	251397	1	11/12/2017 00:36	OM
Surr: 4-Bromofluorobenzene	95.7	68-127		%REC	251397	10	11/13/2017 13:15	OM
Surr: Dibromofluoromethane	95.2	84.4-122		%REC	251397	1	11/12/2017 00:36	OM
Surr: Dibromofluoromethane	96.1	84.4-122		%REC	251397	10	11/13/2017 13:15	OM
Surr: Toluene-d8	96.4	80.1-116		%REC	251397	1	11/12/2017 00:36	OM
Surr: Toluene-d8	97.5	80.1-116		%REC	251397	10	11/13/2017 13:15	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-13 @ 34'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 2:40:00 PM
Lab ID:	1711829-012	**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	251397	1	11/13/2017 13:41	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
2-Butanone	BRL	50		ug/L	251397	1	11/13/2017 13:41	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/13/2017 13:41	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/13/2017 13:41	OM
Acetone	BRL	50		ug/L	251397	1	11/13/2017 13:41	OM
Benzene	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Chloroethane	BRL	10		ug/L	251397	1	11/13/2017 13:41	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Chloromethane	BRL	10		ug/L	251397	1	11/13/2017 13:41	OM
cis-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/13/2017 13:41	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Freon-113	BRL	10		ug/L	251397	1	11/13/2017 13:41	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-13 @ 34'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 2:40:00 PM
Lab ID:	1711829-012	**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	251397	1	11/13/2017 13:41	OM
Tetrachloroethene	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Toluene	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Trichloroethene	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/13/2017 13:41	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/13/2017 13:41	OM
Surr: 4-Bromofluorobenzene	97.7	68-127		%REC	251397	1	11/13/2017 13:41	OM
Surr: Dibromofluoromethane	98.4	84.4-122		%REC	251397	1	11/13/2017 13:41	OM
Surr: Toluene-d8	97.7	80.1-116		%REC	251397	1	11/13/2017 13:41	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-15 @ 30'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 3:03:00 PM
Lab ID:	1711829-013	**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	251397	1	11/10/2017 21:10	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
2-Butanone	BRL	50		ug/L	251397	1	11/10/2017 21:10	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/10/2017 21:10	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/10/2017 21:10	OM
Acetone	BRL	50		ug/L	251397	1	11/10/2017 21:10	OM
Benzene	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Chloroethane	BRL	10		ug/L	251397	1	11/10/2017 21:10	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Chloromethane	BRL	10		ug/L	251397	1	11/10/2017 21:10	OM
cis-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/10/2017 21:10	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Freon-113	BRL	10		ug/L	251397	1	11/10/2017 21:10	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-15 @ 30'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 3:03:00 PM
Lab ID:	1711829-013	**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	251397	1	11/10/2017 21:10	OM
Tetrachloroethene	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Toluene	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Trichloroethene	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/10/2017 21:10	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/10/2017 21:10	OM
Surr: 4-Bromofluorobenzene	97.9	68-127		%REC	251397	1	11/10/2017 21:10	OM
Surr: Dibromofluoromethane	99.2	84.4-122		%REC	251397	1	11/10/2017 21:10	OM
Surr: Toluene-d8	98.1	80.1-116		%REC	251397	1	11/10/2017 21:10	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-16 @ 38'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 1:47:00 PM
Lab ID:	1711829-014	**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	251397	1	11/14/2017 00:34	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
2-Butanone	BRL	50		ug/L	251397	1	11/14/2017 00:34	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/14/2017 00:34	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/14/2017 00:34	OM
Acetone	BRL	50		ug/L	251397	1	11/14/2017 00:34	OM
Benzene	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Chloroethane	BRL	10		ug/L	251397	1	11/14/2017 00:34	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Chloromethane	BRL	10		ug/L	251397	1	11/14/2017 00:34	OM
cis-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/14/2017 00:34	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Freon-113	BRL	10		ug/L	251397	1	11/14/2017 00:34	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-16 @ 38'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 1:47:00 PM
Lab ID:	1711829-014	**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	251397	1	11/14/2017 00:34	OM
Tetrachloroethene	9.1	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Toluene	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Trichloroethene	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/14/2017 00:34	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/14/2017 00:34	OM
Surr: 4-Bromofluorobenzene	94.4	68-127		%REC	251397	1	11/14/2017 00:34	OM
Surr: Dibromofluoromethane	97.2	84.4-122		%REC	251397	1	11/14/2017 00:34	OM
Surr: Toluene-d8	96.5	80.1-116		%REC	251397	1	11/14/2017 00:34	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-17 @ 30'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 3:02:00 PM
Lab ID:	1711829-015	**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	251397	1	11/14/2017 01:00	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
2-Butanone	BRL	50		ug/L	251397	1	11/14/2017 01:00	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/14/2017 01:00	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/14/2017 01:00	OM
Acetone	BRL	50		ug/L	251397	1	11/14/2017 01:00	OM
Benzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
Chloroethane	BRL	10		ug/L	251397	1	11/14/2017 01:00	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
Chloromethane	BRL	10		ug/L	251397	1	11/14/2017 01:00	OM
cis-1,2-Dichloroethene	370	50		ug/L	251397	10	11/14/2017 10:22	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/14/2017 01:00	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
Freon-113	BRL	10		ug/L	251397	1	11/14/2017 01:00	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-17 @ 30'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 3:02:00 PM
Lab ID:	1711829-015	**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	251397	1	11/14/2017 01:00	OM
Tetrachloroethene	1300	50		ug/L	251397	10	11/14/2017 10:22	OM
Toluene	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
Trichloroethene	250	50		ug/L	251397	10	11/14/2017 10:22	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:00	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/14/2017 01:00	OM
Surr: 4-Bromofluorobenzene	93.7	68-127		%REC	251397	1	11/14/2017 01:00	OM
Surr: 4-Bromofluorobenzene	93.6	68-127		%REC	251397	10	11/14/2017 10:22	OM
Surr: Dibromofluoromethane	97.2	84.4-122		%REC	251397	1	11/14/2017 01:00	OM
Surr: Dibromofluoromethane	98.6	84.4-122		%REC	251397	10	11/14/2017 10:22	OM
Surr: Toluene-d8	95	80.1-116		%REC	251397	1	11/14/2017 01:00	OM
Surr: Toluene-d8	96.2	80.1-116		%REC	251397	10	11/14/2017 10:22	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-18 @ 60'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 2:06:00 PM
Lab ID:	1711829-016	**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	251397	1	11/14/2017 01:25	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
2-Butanone	BRL	50		ug/L	251397	1	11/14/2017 01:25	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/14/2017 01:25	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/14/2017 01:25	OM
Acetone	BRL	50		ug/L	251397	1	11/14/2017 01:25	OM
Benzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Chloroethane	BRL	10		ug/L	251397	1	11/14/2017 01:25	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Chloromethane	BRL	10		ug/L	251397	1	11/14/2017 01:25	OM
cis-1,2-Dichloroethene	10	5.0		ug/L	251397	1	11/14/2017 01:25	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/14/2017 01:25	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Freon-113	BRL	10		ug/L	251397	1	11/14/2017 01:25	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-18 @ 60'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 2:06:00 PM
Lab ID:	1711829-016	**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	251397	1	11/14/2017 01:25	OM
Tetrachloroethene	250	50		ug/L	251397	10	11/14/2017 16:54	OM
Toluene	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Trichloroethene	5.2	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:25	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/14/2017 01:25	OM
Surr: 4-Bromofluorobenzene	93.3	68-127		%REC	251397	1	11/14/2017 01:25	OM
Surr: 4-Bromofluorobenzene	93.7	68-127		%REC	251397	10	11/14/2017 16:54	OM
Surr: Dibromofluoromethane	98.2	84.4-122		%REC	251397	1	11/14/2017 01:25	OM
Surr: Dibromofluoromethane	98.1	84.4-122		%REC	251397	10	11/14/2017 16:54	OM
Surr: Toluene-d8	95.6	80.1-116		%REC	251397	1	11/14/2017 01:25	OM
Surr: Toluene-d8	97.4	80.1-116		%REC	251397	10	11/14/2017 16:54	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-19 @ 30'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 2:55:00 PM
Lab ID:	1711829-017	**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	251397	1	11/14/2017 01:51	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
2-Butanone	BRL	50		ug/L	251397	1	11/14/2017 01:51	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/14/2017 01:51	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/14/2017 01:51	OM
Acetone	BRL	50		ug/L	251397	1	11/14/2017 01:51	OM
Benzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Chloroethane	BRL	10		ug/L	251397	1	11/14/2017 01:51	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Chloromethane	BRL	10		ug/L	251397	1	11/14/2017 01:51	OM
cis-1,2-Dichloroethene	12	5.0		ug/L	251397	1	11/14/2017 01:51	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/14/2017 01:51	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Freon-113	BRL	10		ug/L	251397	1	11/14/2017 01:51	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-19 @ 30'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 2:55:00 PM
Lab ID:	1711829-017	**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	251397	1	11/14/2017 01:51	OM
Tetrachloroethene	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Toluene	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Trichloroethene	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/14/2017 01:51	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/14/2017 01:51	OM
Surr: 4-Bromofluorobenzene	94.9	68-127		%REC	251397	1	11/14/2017 01:51	OM
Surr: Dibromofluoromethane	97	84.4-122		%REC	251397	1	11/14/2017 01:51	OM
Surr: Toluene-d8	95.5	80.1-116		%REC	251397	1	11/14/2017 01:51	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-24 @ 30'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 3:40:00 PM
Lab ID:	1711829-018	**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	251397	1	11/14/2017 02:17	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
2-Butanone	BRL	50		ug/L	251397	1	11/14/2017 02:17	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/14/2017 02:17	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/14/2017 02:17	OM
Acetone	BRL	50		ug/L	251397	1	11/14/2017 02:17	OM
Benzene	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Chloroethane	BRL	10		ug/L	251397	1	11/14/2017 02:17	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Chloromethane	BRL	10		ug/L	251397	1	11/14/2017 02:17	OM
cis-1,2-Dichloroethene	190	5.0		ug/L	251397	1	11/14/2017 02:17	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/14/2017 02:17	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Freon-113	BRL	10		ug/L	251397	1	11/14/2017 02:17	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-24 @ 30'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 3:40:00 PM
Lab ID:	1711829-018	**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	251397	1	11/14/2017 02:17	OM
Tetrachloroethene	130	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Toluene	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Trichloroethene	53	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/14/2017 02:17	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/14/2017 02:17	OM
Surr: 4-Bromofluorobenzene	94.9	68-127		%REC	251397	1	11/14/2017 02:17	OM
Surr: Dibromofluoromethane	98.7	84.4-122		%REC	251397	1	11/14/2017 02:17	OM
Surr: Toluene-d8	95.9	80.1-116		%REC	251397	1	11/14/2017 02:17	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-26 @ 30'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 3:10:00 PM
Lab ID:	1711829-019	**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	251397	1	11/14/2017 02:43	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
2-Butanone	BRL	50		ug/L	251397	1	11/14/2017 02:43	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/14/2017 02:43	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/14/2017 02:43	OM
Acetone	BRL	50		ug/L	251397	1	11/14/2017 02:43	OM
Benzene	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Chloroethane	BRL	10		ug/L	251397	1	11/14/2017 02:43	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Chloromethane	BRL	10		ug/L	251397	1	11/14/2017 02:43	OM
cis-1,2-Dichloroethene	260	50		ug/L	251397	10	11/14/2017 11:41	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/14/2017 02:43	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Freon-113	BRL	10		ug/L	251397	1	11/14/2017 02:43	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	MW-26 @ 30'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 3:10:00 PM
Lab ID:	1711829-019	**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	251397	1	11/14/2017 02:43	OM
Tetrachloroethene	150	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Toluene	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Trichloroethene	58	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/14/2017 02:43	OM
Vinyl chloride	BRL	2.0		ug/L	251397	1	11/14/2017 02:43	OM
Surr: 4-Bromofluorobenzene	93.6	68-127		%REC	251397	1	11/14/2017 02:43	OM
Surr: 4-Bromofluorobenzene	93.8	68-127		%REC	251397	10	11/14/2017 11:41	OM
Surr: Dibromofluoromethane	99.6	84.4-122		%REC	251397	1	11/14/2017 02:43	OM
Surr: Dibromofluoromethane	99.5	84.4-122		%REC	251397	10	11/14/2017 11:41	OM
Surr: Toluene-d8	96.8	80.1-116		%REC	251397	1	11/14/2017 02:43	OM
Surr: Toluene-d8	96.8	80.1-116		%REC	251397	10	11/14/2017 11:41	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	RAD-4 @ 60'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 3:53:00 PM
Lab ID:	1711829-020	**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	251397	1	11/14/2017 03:08	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
2-Butanone	BRL	50		ug/L	251397	1	11/14/2017 03:08	OM
2-Hexanone	BRL	10		ug/L	251397	1	11/14/2017 03:08	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251397	1	11/14/2017 03:08	OM
Acetone	BRL	50		ug/L	251397	1	11/14/2017 03:08	OM
Benzene	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Bromodichloromethane	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Bromoform	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Bromomethane	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Carbon disulfide	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Carbon tetrachloride	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Chlorobenzene	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Chloroethane	BRL	10		ug/L	251397	1	11/14/2017 03:08	OM
Chloroform	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Chloromethane	BRL	10		ug/L	251397	1	11/14/2017 03:08	OM
cis-1,2-Dichloroethene	200	50		ug/L	251397	10	11/14/2017 12:07	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Cyclohexane	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Dibromochloromethane	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Dichlorodifluoromethane	BRL	10		ug/L	251397	1	11/14/2017 03:08	OM
Ethylbenzene	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Freon-113	BRL	10		ug/L	251397	1	11/14/2017 03:08	OM
Isopropylbenzene	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
m,p-Xylene	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Methyl acetate	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Methylcyclohexane	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Methylene chloride	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
o-Xylene	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	RAD-4 @ 60'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 3:53:00 PM
Lab ID:	1711829-020	**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	251397	1	11/14/2017 03:08	OM
Tetrachloroethene	26	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Toluene	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Trichloroethene	34	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251397	1	11/14/2017 03:08	OM
Vinyl chloride	280	20		ug/L	251397	10	11/14/2017 12:07	OM
Surr: 4-Bromofluorobenzene	94.4	68-127		%REC	251397	1	11/14/2017 03:08	OM
Surr: 4-Bromofluorobenzene	94.7	68-127		%REC	251397	10	11/14/2017 12:07	OM
Surr: Dibromofluoromethane	96.8	84.4-122		%REC	251397	10	11/14/2017 12:07	OM
Surr: Dibromofluoromethane	98.9	84.4-122		%REC	251397	1	11/14/2017 03:08	OM
Surr: Toluene-d8	94.9	80.1-116		%REC	251397	1	11/14/2017 03:08	OM
Surr: Toluene-d8	96	80.1-116		%REC	251397	10	11/14/2017 12:07	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	RAD-5 @ 60'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 2:30:00 PM
Lab ID:	1711829-021	**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	251417	1	11/14/2017 03:34	OM
1,1,2,2-Tetrachloroethane	18	5.0		ug/L	251417	1	11/14/2017 03:34	OM
1,1,2-Trichloroethane	10.0	5.0		ug/L	251417	1	11/14/2017 03:34	OM
1,1-Dichloroethane	13	5.0		ug/L	251417	1	11/14/2017 03:34	OM
1,1-Dichloroethene	71	5.0		ug/L	251417	1	11/14/2017 03:34	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
1,2-Dichlorobenzene	200	5.0		ug/L	251417	1	11/14/2017 03:34	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
1,4-Dichlorobenzene	18	5.0		ug/L	251417	1	11/14/2017 03:34	OM
2-Butanone	BRL	50		ug/L	251417	1	11/14/2017 03:34	OM
2-Hexanone	BRL	10		ug/L	251417	1	11/14/2017 03:34	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251417	1	11/14/2017 03:34	OM
Acetone	BRL	50		ug/L	251417	1	11/14/2017 03:34	OM
Benzene	21	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Bromodichloromethane	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Bromoform	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Bromomethane	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Carbon disulfide	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Carbon tetrachloride	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Chlorobenzene	14	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Chloroethane	BRL	10		ug/L	251417	1	11/14/2017 03:34	OM
Chloroform	8.7	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Chloromethane	BRL	10		ug/L	251417	1	11/14/2017 03:34	OM
cis-1,2-Dichloroethene	34000	2500		ug/L	251417	500	11/14/2017 12:33	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Cyclohexane	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Dibromochloromethane	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Dichlorodifluoromethane	BRL	10		ug/L	251417	1	11/14/2017 03:34	OM
Ethylbenzene	11	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Freon-113	BRL	10		ug/L	251417	1	11/14/2017 03:34	OM
Isopropylbenzene	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
m,p-Xylene	36	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Methyl acetate	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Methylcyclohexane	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Methylene chloride	13	5.0		ug/L	251417	1	11/14/2017 03:34	OM
o-Xylene	8.1	5.0		ug/L	251417	1	11/14/2017 03:34	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	RAD-5 @ 60'
Project Name:	RAYLOC	**Collection Date:**	11/7/2017 2:30:00 PM
Lab ID:	1711829-021	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	11	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Tetrachloroethene	15000	500		ug/L	251417	100	11/14/2017 10:49	OM
Toluene	61	5.0		ug/L	251417	1	11/14/2017 03:34	OM
trans-1,2-Dichloroethene	470	250		ug/L	251417	50	11/14/2017 11:15	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Trichloroethene	8700	500		ug/L	251417	100	11/14/2017 10:49	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251417	1	11/14/2017 03:34	OM
Vinyl chloride	190	2.0		ug/L	251417	1	11/14/2017 03:34	OM
Surr: 4-Bromofluorobenzene	92.6	68-127		%REC	251417	50	11/14/2017 11:15	OM
Surr: 4-Bromofluorobenzene	93.2	68-127		%REC	251417	500	11/14/2017 12:33	OM
Surr: 4-Bromofluorobenzene	92.7	68-127		%REC	251417	100	11/14/2017 10:49	OM
Surr: 4-Bromofluorobenzene	96.2	68-127		%REC	251417	1	11/14/2017 03:34	OM
Surr: Dibromofluoromethane	96.5	84.4-122		%REC	251417	500	11/14/2017 12:33	OM
Surr: Dibromofluoromethane	101	84.4-122		%REC	251417	50	11/14/2017 11:15	OM
Surr: Dibromofluoromethane	99.5	84.4-122		%REC	251417	100	11/14/2017 10:49	OM
Surr: Dibromofluoromethane	101	84.4-122		%REC	251417	1	11/14/2017 03:34	OM
Surr: Toluene-d8	95.5	80.1-116		%REC	251417	500	11/14/2017 12:33	OM
Surr: Toluene-d8	97.4	80.1-116		%REC	251417	50	11/14/2017 11:15	OM
Surr: Toluene-d8	93.9	80.1-116		%REC	251417	1	11/14/2017 03:34	OM
Surr: Toluene-d8	96	80.1-116		%REC	251417	100	11/14/2017 10:49	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	TRIP BLANK
Project Name:	RAYLOC	**Collection Date:**	11/7/2017
Lab ID:	1711829-022	**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	251417	1	11/11/2017 15:58	OM
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
1,1,2-Trichloroethane	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
1,1-Dichloroethane	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
1,1-Dichloroethene	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
1,2-Dibromoethane	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
1,2-Dichlorobenzene	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
1,2-Dichloroethane	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
1,2-Dichloropropane	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
1,3-Dichlorobenzene	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
1,4-Dichlorobenzene	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
2-Butanone	BRL	50		ug/L	251417	1	11/11/2017 15:58	OM
2-Hexanone	BRL	10		ug/L	251417	1	11/11/2017 15:58	OM
4-Methyl-2-pentanone	BRL	10		ug/L	251417	1	11/11/2017 15:58	OM
Acetone	BRL	50		ug/L	251417	1	11/11/2017 15:58	OM
Benzene	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Bromodichloromethane	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Bromoform	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Bromomethane	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Carbon disulfide	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Carbon tetrachloride	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Chlorobenzene	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Chloroethane	BRL	10		ug/L	251417	1	11/11/2017 15:58	OM
Chloroform	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Chloromethane	BRL	10		ug/L	251417	1	11/11/2017 15:58	OM
cis-1,2-Dichloroethene	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
cis-1,3-Dichloropropene	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Cyclohexane	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Dibromochloromethane	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Dichlorodifluoromethane	BRL	10		ug/L	251417	1	11/11/2017 15:58	OM
Ethylbenzene	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Freon-113	BRL	10		ug/L	251417	1	11/11/2017 15:58	OM
Isopropylbenzene	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
m,p-Xylene	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Methyl acetate	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Methyl tert-butyl ether	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Methylcyclohexane	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Methylene chloride	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
o-Xylene	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM

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:** 16-Nov-17

Client:	Clearwater Environmental Resources, LLC	**Client Sample ID:**	TRIP BLANK
Project Name:	RAYLOC	**Collection Date:**	11/7/2017
Lab ID:	1711829-022	**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	251417	1	11/11/2017 15:58	OM
Tetrachloroethene	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Toluene	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
trans-1,2-Dichloroethene	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
trans-1,3-Dichloropropene	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Trichloroethene	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Trichlorofluoromethane	BRL	5.0		ug/L	251417	1	11/11/2017 15:58	OM
Vinyl chloride	BRL	2.0		ug/L	251417	1	11/11/2017 15:58	OM
Surr: 4-Bromofluorobenzene	95.5	68-127		%REC	251417	1	11/11/2017 15:58	OM
Surr: Dibromofluoromethane	99.1	84.4-122		%REC	251417	1	11/11/2017 15:58	OM
Surr: Toluene-d8	98.8	80.1-116		%REC	251417	1	11/11/2017 15:58	OM

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

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ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Clearwater Environmental Resources, LLC** AES Work Order Number: **1711829**

2. Carrier: FedEx ☐ UPS ☐ USPS ☐ Client ■ Courier ☐ Other _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	●	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	●	○		
5.	Custody seals intact on shipping container?	○	○	●		
6.	Temperature blanks present?	●	○	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	●	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	●	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	●	○	○		
10.	Sampler name and/or signature on COC?	●	○	○		
11.	Were all samples received within holding time?	●	○	○		
12.	TAT marked on the COC?	●	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 5.8 °C Cooler 2 Temperature _____ °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). MJ 11/8/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	●	○	○		
17.	Custody seals present on sample containers?	○	●	○		
18.	Custody seals intact on sample containers?	○	○	●		
19.	Do sample container labels match the COC?	●	○	○	incomplete info ☐ illegible ☐ no label ☐ other ☐	
20.	Are analyses requested indicated on the COC?	●	○	○		
21.	Were all of the samples listed on the COC received?	●	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	●	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	●	○	○		
24.	Were samples received in appropriate containers?	●	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	●	○	○		
26.	Were trip blanks submitted?	●	○	○	listed on COC ■ not listed on COC ☐	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). MJ 11/9/17

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	●		
29.	Containers meet preservation guidelines?	○	○	●		
30.	Was pH adjusted at Sample Receipt?	○	○	●		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). MJ 11/9/17

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Client: Clearwater Environmental Resources, LLC
Project Name: RAYLOC
Workorder: 1711829

ANALYTICAL QC SUMMARY REPORT

BatchID: 251397

Sample ID: **MB-251397** Client ID: Units: **ug/L** Prep Date: **11/10/2017** Run No: **356561**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **251397** Analysis Date: **11/10/2017** Seq No: **7857524**

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	27									
1,1,2,2-Tetrachloroethane	BRL	34									
1,1,2-Trichloroethane	BRL	27									
1,1-Dichloroethane	BRL	20									
1,1-Dichloroethene	BRL	20									
1,2,4-Trichlorobenzene	BRL	37									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	38									
1,2-Dichlorobenzene	BRL	30									
1,2-Dichloroethane	BRL	20									
1,2-Dichloropropane	BRL	23									
1,3-Dichlorobenzene	BRL	30									
1,4-Dichlorobenzene	BRL	30									
2-Butanone	BRL	150									
2-Hexanone	BRL	41									
4-Methyl-2-pentanone	BRL	41									
Acetone	BRL	120									
Benzene	BRL	16									
Bromodichloromethane	BRL	33									
Bromoform	BRL	52									
Bromomethane	BRL	19									
Carbon disulfide	BRL	16									
Carbon tetrachloride	BRL	31									
Chlorobenzene	BRL	23									
Chloroethane	BRL	26									
Chloroform	BRL	24									
Chloromethane	BRL	21									

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
Workorder: 1711829

ANALYTICAL QC SUMMARY REPORT

BatchID: 251397

Sample ID: **MB-251397** Client ID: Units: **ug/L** Prep Date: **11/10/2017** Run No: **356561**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **251397** Analysis Date: **11/10/2017** Seq No: **7857524**

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	20									
cis-1,3-Dichloropropene	BRL	23									
Cyclohexane	BRL	17									
Dibromochloromethane	BRL	43									
Dichlorodifluoromethane	BRL	49									
Ethylbenzene	BRL	22									
Freon-113	BRL	77									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	22									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	18									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	17									
o-Xylene	BRL	22									
Styrene	BRL	21									
Tetrachloroethene	BRL	34									
Toluene	BRL	19									
trans-1,2-Dichloroethene	BRL	20									
trans-1,3-Dichloropropene	BRL	23									
Trichloroethene	BRL	27									
Trichlorofluoromethane	BRL	28									
Vinyl chloride	BRL	5.1									
Surr: 4-Bromofluorobenzene	47.82	0	50.00		95.6	68	127				
Surr: Dibromofluoromethane	48.77	0	50.00		97.5	84.4	122				
Surr: Toluene-d8	49.46	0	50.00		98.9	80.1	116				
1,1,1-Trichloroethane	BRL	27									
1,1,2,2-Tetrachloroethane	BRL	34									

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
Workorder: 1711829

ANALYTICAL QC SUMMARY REPORT

BatchID: 251397

Sample ID: **MB-251397** Client ID: Units: **ug/m3** Prep Date: **11/10/2017** Run No: **356561**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **251397** Analysis Date: **11/10/2017** Seq No: **7857524**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	BRL	27									
1,1-Dichloroethane	BRL	20									
1,1-Dichloroethene	BRL	20									
1,2,4-Trichlorobenzene	BRL	37									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	38									
1,2-Dichlorobenzene	BRL	30									
1,2-Dichloroethane	BRL	20									
1,2-Dichloropropane	BRL	23									
1,3-Dichlorobenzene	BRL	30									
1,4-Dichlorobenzene	BRL	30									
2-Butanone	BRL	150									
2-Hexanone	BRL	41									
4-Methyl-2-pentanone	BRL	41									
Acetone	BRL	120									
Benzene	BRL	16									
Bromodichloromethane	BRL	33									
Bromoform	BRL	52									
Bromomethane	BRL	19									
Carbon disulfide	BRL	16									
Carbon tetrachloride	BRL	31									
Chlorobenzene	BRL	23									
Chloroethane	BRL	26									
Chloroform	BRL	24									
Chloromethane	BRL	21									
cis-1,2-Dichloroethene	BRL	20									
cis-1,3-Dichloropropene	BRL	23									

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
Workorder: 1711829

ANALYTICAL QC SUMMARY REPORT

BatchID: 251397

Sample ID: **MB-251397** Client ID: Units: **ug/m3** Prep Date: **11/10/2017** Run No: **356561**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **251397** Analysis Date: **11/10/2017** Seq No: **7857524**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyclohexane	BRL	17									
Dibromochloromethane	BRL	43									
Dichlorodifluoromethane	BRL	49									
Ethylbenzene	BRL	22									
Freon-113	BRL	77									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	22									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	18									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	17									
o-Xylene	BRL	22									
Styrene	BRL	21									
Tetrachloroethene	BRL	34									
Toluene	BRL	19									
trans-1,2-Dichloroethene	BRL	20									
trans-1,3-Dichloropropene	BRL	23									
Trichloroethene	BRL	27									
Trichlorofluoromethane	BRL	28									
Vinyl chloride	BRL	5.1									
Surr: 4-Bromofluorobenzene	47.82	0	50.00		95.6	68	127				
Surr: Dibromofluoromethane	48.77	0	50.00		97.5	84.4	122				
Surr: Toluene-d8	49.46	0	50.00		98.9	80.1	116				

Sample ID: **LCS-251397** Client ID: Units: **ug/L** Prep Date: **11/10/2017** Run No: **356670**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **251397** Analysis Date: **11/11/2017** Seq No: **7857780**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

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
Workorder: 1711829

ANALYTICAL QC SUMMARY REPORT

BatchID: 251397

Sample ID: **LCS-251397**	Client ID:	Units: **ug/L**	Prep Date: **11/10/2017**	Run No: **356670**
SampleType: **LCS**	TestCode: **TCL VOLATILE ORGANICS SW8260B**	BatchID: **251397**	Analysis Date: **11/11/2017**	Seq No: **7857780**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	196.2	20	198.2		99.0	69	136				
Benzene	162.4	16	159.7		102	73.7	126				
Chlorobenzene	230.8	23	230.3		100	73.5	124				
Toluene	192.3	19	188.4		102	76.8	125				
Trichloroethene	273.5	27	268.7		102	70.9	124				
Surr: 4-Bromofluorobenzene	48.29	0	50.00		96.6	68	127				
Surr: Dibromofluoromethane	48.35	0	50.00		96.7	84.4	122				
Surr: Toluene-d8	48.59	0	50.00		97.2	80.1	116				
1,1-Dichloroethene	196.2	20	198.2		99.0	69	136				
Benzene	162.4	16	159.7		102	73.7	126				
Chlorobenzene	230.8	23	230.3		100	73.5	124				
Toluene	192.3	19	188.4		102	76.8	125				
Trichloroethene	273.5	27	268.7		102	70.9	124				
Surr: 4-Bromofluorobenzene	48.29	0	50.00		96.6	68	127				
Surr: Dibromofluoromethane	48.35	0	50.00		96.7	84.4	122				
Surr: Toluene-d8	48.59	0	50.00		97.2	80.1	116				

Sample ID: **1711829-013AMS**	Client ID: **MW-15**	Units: **ug/L**	Prep Date: **11/10/2017**	Run No: **356561**
SampleType: **MS**	TestCode: **TCL VOLATILE ORGANICS SW8260B**	BatchID: **251397**	Analysis Date: **11/10/2017**	Seq No: **7857526**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	204.2	20	198.2		103	65.7	143				
Benzene	164.5	16	159.7		103	66.1	137				
Chlorobenzene	234.2	23	230.3		102	70.9	132				
Toluene	191.4	19	188.4		102	63.8	141				
Trichloroethene	273.0	27	268.7		102	70.6	128				
Surr: 4-Bromofluorobenzene	43.77	0	50.00		87.5	68	127				
Surr: Dibromofluoromethane	47.19	0	50.00		94.4	84.4	122				

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
Workorder: 1711829

ANALYTICAL QC SUMMARY REPORT

BatchID: 251397

Sample ID: **1711829-013AMS** Client ID: **MW-15** Units: **ug/L** Prep Date: **11/10/2017** Run No: **356561**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **251397** Analysis Date: **11/10/2017** Seq No: **7857526**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Toluene-d8	46.69	0	50.00		93.4	80.1	116				
1,1-Dichloroethene	204.2	20	198.2		103	65.7	143				
Benzene	164.5	16	159.7		103	66.1	137				
Chlorobenzene	234.2	23	230.3		102	70.9	132				
Toluene	191.4	19	188.4		102	63.8	141				
Trichloroethene	273.0	27	268.7		102	70.6	128				
Surr: 4-Bromofluorobenzene	43.77	0	50.00		87.5	68	127				
Surr: Dibromofluoromethane	47.19	0	50.00		94.4	84.4	122				
Surr: Toluene-d8	46.69	0	50.00		93.4	80.1	116				

Sample ID: **1711829-013AMSD** Client ID: **MW-15** Units: **ug/L** Prep Date: **11/10/2017** Run No: **356561**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **251397** Analysis Date: **11/10/2017** Seq No: **7857527**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	183.3	20	198.2		92.4	65.7	143	204.2	10.8	17.7	
Benzene	153.8	16	159.7		96.3	66.1	137	164.5	6.72	20	
Chlorobenzene	224.9	23	230.3		97.7	70.9	132	234.2	4.03	20	
Toluene	181.9	19	188.4		96.6	63.8	141	191.4	5.05	20	
Trichloroethene	260.9	27	268.7		97.1	70.6	128	273.0	4.53	20	
Surr: 4-Bromofluorobenzene	48.70	0	50.00		97.4	68	127	43.77	0	0	
Surr: Dibromofluoromethane	47.03	0	50.00		94.1	84.4	122	47.19	0	0	
Surr: Toluene-d8	48.97	0	50.00		97.9	80.1	116	46.69	0	0	
1,1-Dichloroethene	183.3	20	198.2		92.4	65.7	143	204.2	10.8	17.7	
Benzene	153.8	16	159.7		96.3	66.1	137	164.5	6.72	20	
Chlorobenzene	224.9	23	230.3		97.7	70.9	132	234.2	4.03	20	
Toluene	181.9	19	188.4		96.6	63.8	141	191.4	5.05	20	
Trichloroethene	260.9	27	268.7		97.1	70.6	128	273.0	4.53	20	
Surr: 4-Bromofluorobenzene	48.70	0	50.00		97.4	68	127	43.77	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
Workorder: 1711829

ANALYTICAL QC SUMMARY REPORT

BatchID: 251397

Sample ID: **1711829-013AMSD** Client ID: **MW-15** Units: **ug/m3** Prep Date: **11/10/2017** Run No: **356561**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **251397** Analysis Date: **11/10/2017** Seq No: **7857527**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Dibromofluoromethane	47.03	0	50.00		94.1	84.4	122	47.19	0	0	
Surr: Toluene-d8	48.97	0	50.00		97.9	80.1	116	46.69	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
Workorder: 1711829

ANALYTICAL QC SUMMARY REPORT

BatchID: 251417

Sample ID: **MB-251417**	Client ID:		Units: **ug/L**	Prep Date: **11/11/2017**	Run No: **356670**
SampleType: **MBLK**	TestCode: **TCL VOLATILE ORGANICS SW8260B**		BatchID: **251417**	Analysis Date: **11/11/2017**	Seq No: **7857781**

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	27									
1,1,2,2-Tetrachloroethane	BRL	34									
1,1,2-Trichloroethane	BRL	27									
1,1-Dichloroethane	BRL	20									
1,1-Dichloroethene	BRL	20									
1,2,4-Trichlorobenzene	BRL	37									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	38									
1,2-Dichlorobenzene	BRL	30									
1,2-Dichloroethane	BRL	20									
1,2-Dichloropropane	BRL	23									
1,3-Dichlorobenzene	BRL	30									
1,4-Dichlorobenzene	BRL	30									
2-Butanone	BRL	150									
2-Hexanone	BRL	41									
4-Methyl-2-pentanone	BRL	41									
Acetone	BRL	120									
Benzene	BRL	16									
Bromodichloromethane	BRL	33									
Bromoform	BRL	52									
Bromomethane	BRL	19									
Carbon disulfide	BRL	16									
Carbon tetrachloride	BRL	31									
Chlorobenzene	BRL	23									
Chloroethane	BRL	26									
Chloroform	BRL	24									
Chloromethane	BRL	21									

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
Workorder: 1711829

ANALYTICAL QC SUMMARY REPORT

BatchID: 251417

Sample ID: **MB-251417** Client ID: Units: **ug/L** Prep Date: **11/11/2017** Run No: **356670**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **251417** Analysis Date: **11/11/2017** Seq No: **7857781**

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	20									
cis-1,3-Dichloropropene	BRL	23									
Cyclohexane	BRL	17									
Dibromochloromethane	BRL	43									
Dichlorodifluoromethane	BRL	49									
Ethylbenzene	BRL	22									
Freon-113	BRL	77									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	22									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	18									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	17									
o-Xylene	BRL	22									
Styrene	BRL	21									
Tetrachloroethene	BRL	34									
Toluene	BRL	19									
trans-1,2-Dichloroethene	BRL	20									
trans-1,3-Dichloropropene	BRL	23									
Trichloroethene	BRL	27									
Trichlorofluoromethane	BRL	28									
Vinyl chloride	BRL	5.1									
Surr: 4-Bromofluorobenzene	47.24	0	50.00		94.5	68	127				
Surr: Dibromofluoromethane	47.94	0	50.00		95.9	84.4	122				
Surr: Toluene-d8	48.31	0	50.00		96.6	80.1	116				
1,1,1-Trichloroethane	BRL	27									
1,1,2,2-Tetrachloroethane	BRL	34									

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
Workorder: 1711829

ANALYTICAL QC SUMMARY REPORT

BatchID: 251417

Sample ID: **MB-251417** Client ID: Units: **ug/m3** Prep Date: **11/11/2017** Run No: **356670**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **251417** Analysis Date: **11/11/2017** Seq No: **7857781**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	BRL	27									
1,1-Dichloroethane	BRL	20									
1,1-Dichloroethene	BRL	20									
1,2,4-Trichlorobenzene	BRL	37									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	38									
1,2-Dichlorobenzene	BRL	30									
1,2-Dichloroethane	BRL	20									
1,2-Dichloropropane	BRL	23									
1,3-Dichlorobenzene	BRL	30									
1,4-Dichlorobenzene	BRL	30									
2-Butanone	BRL	150									
2-Hexanone	BRL	41									
4-Methyl-2-pentanone	BRL	41									
Acetone	BRL	120									
Benzene	BRL	16									
Bromodichloromethane	BRL	33									
Bromoform	BRL	52									
Bromomethane	BRL	19									
Carbon disulfide	BRL	16									
Carbon tetrachloride	BRL	31									
Chlorobenzene	BRL	23									
Chloroethane	BRL	26									
Chloroform	BRL	24									
Chloromethane	BRL	21									
cis-1,2-Dichloroethene	BRL	20									
cis-1,3-Dichloropropene	BRL	23									

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
Workorder: 1711829

ANALYTICAL QC SUMMARY REPORT

BatchID: 251417

Sample ID: **MB-251417** Client ID: Units: **ug/m3** Prep Date: **11/11/2017** Run No: **356670**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **251417** Analysis Date: **11/11/2017** Seq No: **7857781**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cyclohexane	BRL	17									
Dibromochloromethane	BRL	43									
Dichlorodifluoromethane	BRL	49									
Ethylbenzene	BRL	22									
Freon-113	BRL	77									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	22									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	18									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	17									
o-Xylene	BRL	22									
Styrene	BRL	21									
Tetrachloroethene	BRL	34									
Toluene	BRL	19									
trans-1,2-Dichloroethene	BRL	20									
trans-1,3-Dichloropropene	BRL	23									
Trichloroethene	BRL	27									
Trichlorofluoromethane	BRL	28									
Vinyl chloride	BRL	5.1									
Surr: 4-Bromofluorobenzene	47.24	0	50.00		94.5	68	127				
Surr: Dibromofluoromethane	47.94	0	50.00		95.9	84.4	122				
Surr: Toluene-d8	48.31	0	50.00		96.6	80.1	116				

Sample ID: **LCS-251417** Client ID: Units: **ug/L** Prep Date: **11/11/2017** Run No: **356670**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **251417** Analysis Date: **11/11/2017** Seq No: **7857782**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

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
Workorder: 1711829

ANALYTICAL QC SUMMARY REPORT

BatchID: 251417

Sample ID: **LCS-251417**	Client ID:	Units: **ug/L**	Prep Date: **11/11/2017**	Run No: **356670**
SampleType: **LCS**	TestCode: **TCL VOLATILE ORGANICS SW8260B**	BatchID: **251417**	Analysis Date: **11/11/2017**	Seq No: **7857782**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	185.7	20	198.2		93.7	69	136				
Benzene	155.0	16	159.7		97.1	73.7	126				
Chlorobenzene	223.5	23	230.3		97.1	73.5	124				
Toluene	184.5	19	188.4		97.9	76.8	125				
Trichloroethene	261.3	27	268.7		97.3	70.9	124				
Surr: 4-Bromofluorobenzene	48.20	0	50.00		96.4	68	127				
Surr: Dibromofluoromethane	48.78	0	50.00		97.6	84.4	122				
Surr: Toluene-d8	48.43	0	50.00		96.9	80.1	116				
1,1-Dichloroethene	185.7	20	198.2		93.7	69	136				
Benzene	155.0	16	159.7		97.1	73.7	126				
Chlorobenzene	223.5	23	230.3		97.1	73.5	124				
Toluene	184.5	19	188.4		97.9	76.8	125				
Trichloroethene	261.3	27	268.7		97.3	70.9	124				
Surr: 4-Bromofluorobenzene	48.20	0	50.00		96.4	68	127				
Surr: Dibromofluoromethane	48.78	0	50.00		97.6	84.4	122				
Surr: Toluene-d8	48.43	0	50.00		96.9	80.1	116				

Sample ID: **1711655-001AMS**	Client ID:	Units: **ug/L**	Prep Date: **11/11/2017**	Run No: **356670**
SampleType: **MS**	TestCode: **TCL VOLATILE ORGANICS SW8260B**	BatchID: **251417**	Analysis Date: **11/11/2017**	Seq No: **7857818**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	202.0	20	198.2		102	65.7	143				
Benzene	166.3	16	159.7		104	66.1	137				
Chlorobenzene	232.6	23	230.3		101	70.9	132				
Toluene	195.5	19	188.4		104	63.8	141				
Trichloroethene	281.3	27	268.7		105	70.6	128				
Surr: 4-Bromofluorobenzene	48.04	0	50.00		96.1	68	127				
Surr: Dibromofluoromethane	48.25	0	50.00		96.5	84.4	122				

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
Workorder: 1711829

ANALYTICAL QC SUMMARY REPORT

BatchID: 251417

Sample ID: **1711655-001AMS** Client ID: Units: **ug/L** Prep Date: **11/11/2017** Run No: **356670**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **251417** Analysis Date: **11/11/2017** Seq No: **7857818**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Toluene-d8	48.57	0	50.00		97.1	80.1	116				
1,1-Dichloroethene	202.0	20	198.2		102	65.7	143				
Benzene	166.3	16	159.7		104	66.1	137				
Chlorobenzene	232.6	23	230.3		101	70.9	132				
Toluene	195.5	19	188.4		104	63.8	141				
Trichloroethene	281.3	27	268.7		105	70.6	128				
Surr: 4-Bromofluorobenzene	48.04	0	50.00		96.1	68	127				
Surr: Dibromofluoromethane	48.25	0	50.00		96.5	84.4	122				
Surr: Toluene-d8	48.57	0	50.00		97.1	80.1	116				

Sample ID: **1711655-001AMSD** Client ID: Units: **ug/L** Prep Date: **11/11/2017** Run No: **356670**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **251417** Analysis Date: **11/11/2017** Seq No: **7857820**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	194.8	20	198.2		98.3	65.7	143	202.0	3.64	17.7	
Benzene	161.5	16	159.7		101	66.1	137	166.3	2.88	20	
Chlorobenzene	225.9	23	230.3		98.1	70.9	132	232.6	2.89	20	
Toluene	188.2	19	188.4		99.9	63.8	141	195.5	3.77	20	
Trichloroethene	267.7	27	268.7		99.6	70.6	128	281.3	4.97	20	
Surr: 4-Bromofluorobenzene	48.68	0	50.00		97.4	68	127	48.04	0	0	
Surr: Dibromofluoromethane	48.82	0	50.00		97.6	84.4	122	48.25	0	0	
Surr: Toluene-d8	48.11	0	50.00		96.2	80.1	116	48.57	0	0	
1,1-Dichloroethene	194.8	20	198.2		98.3	65.7	143	202.0	3.64	17.7	
Benzene	161.5	16	159.7		101	66.1	137	166.3	2.88	20	
Chlorobenzene	225.9	23	230.3		98.1	70.9	132	232.6	2.89	20	
Toluene	188.2	19	188.4		99.9	63.8	141	195.5	3.77	20	
Trichloroethene	267.7	27	268.7		99.6	70.6	128	281.3	4.97	20	
Surr: 4-Bromofluorobenzene	48.68	0	50.00		97.4	68	127	48.04	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
Workorder: 1711829

ANALYTICAL QC SUMMARY REPORT

BatchID: 251417

Sample ID: **1711655-001AMSD** Client ID:
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **ug/m3** Prep Date: **11/11/2017** Run No: **356670**
BatchID: **251417** Analysis Date: **11/11/2017** Seq No: **7857820**

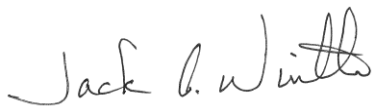
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Dibromofluoromethane	48.82	0	50.00		97.6	84.4	122	48.25	0	0	
Surr: Toluene-d8	48.11	0	50.00		96.2	80.1	116	48.57	0	0	

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		

CD CERTIFICATION

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



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Clearwater Environmental Resources, LLC