

## TECHNICAL MEMORANDUM

**DATE** May 28, 2019

**Project No.** 923-1000-005.5000

**TO** Jerome Cruz, PhD  
Washington State Department of Ecology

**CC** Landsburg PLP Group

**FROM** Gary Zimmerman

**EMAIL** gary\_zimmerman@golder.com

### LANDSBURG MINE SITE TRENCH BACKFILL INITIAL SOILS CHARACTERIZATION

This Trench Backfill Initial Soils Characterization technical memorandum for the Landsburg Mine Site (Landsburg Site) summarizes the initial soil sampling and analysis completed at the Microsoft excavation site in accordance with the Trench Backfill Soils Characterization Workplan<sup>1</sup> (Workplan).

Golder Associates Inc. (Golder) and our subcontractor Goodfellow Bros Inc. (GBI) completed the initial round of sampling on May 14, 2019. All the fill soils for the Landsburg Site is anticipated to come from Cells 1 through 3 of the planned excavation area (Figure 1). Currently only Cell 1 is accessible for excavation and collection of soil samples. Five test pits distributed throughout Cell 1 were excavated to allow collection of representative soil samples from the Cell 1 excavation area. A distinct grab sample was collected from each of the five test pits. The test pits were excavated after the top 4 feet of soil were stripped and native glacial deposited soils were encountered. Only soil deeper than 4 feet below ground surface will be transported to the Landsburg Site and used as trench backfill. The test pits were dug at a depth of approximately 5 to 7 feet below the original ground surface. Locations of the test pits and Cells 1 through 3 are provided in Figure 1. Soils sampled from the test pits were generally consistent in composition and were described as silty-fine to medium sand with trace to little sub-rounded fine gravels.

The five soil samples were delivered to OnSite Environmental Inc. (OnSite) in Redmond, WA and analyzed for the full list of analytes presented in Table 1 (Table 3-1 of the Workplan). There were no organic compounds detected in any of the soil samples. Chromium was the only metal detected in any of the samples. Chromium was detected in all five of the samples at concentrations ranging from 30 to 45 milligrams per kilogram (mg/kg), which are concentrations typical of natural background soil concentrations (90th percentile concentration of 48 mg/kg) for the Puget Sound Area<sup>2</sup> and below the Model Toxics Control Act (MTCA) Method A Level of 2,000 mg/kg for unrestricted land use.

A copy of the laboratory analytical report is provided in Appendix A.

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<sup>1</sup> Golder Associates Inc. (Golder) 2019. Trench Backfill Soils Characterization Workplan, Landsburg Mine Site. Prepared by Golder Associates Inc. April 17, 2019.

<sup>2</sup> Washington State Department of Ecology (Ecology) 1994. Natural Background Soil Metals Concentrations in Washington State. Prepared by Charles San Juan, October 1994.

The soil sampling and analysis confirmed the soil derived from Cell 1 of the Microsoft excavation is free of contaminants including the potential to leach contaminants to the groundwater. The soil is deemed suitable for use as fill at the Site.

Additional soils characterization of Cell 2 and Cell 3 will be completed when they become accessible and the top 4 feet of soil is removed. Five additional test pits will be installed across Cell 2 and Cell 3 as indicated on Figure 1, and five distinct samples will be collected and analyzed for the analytes listed on Table 1. Further confirmation of deeper soils within Cells 1, 2, and 3 will occur throughout the excavation process by sampling and analysis for fuels and metals in accordance with Table 2 (Table 3-2 of the Workplan). The additional sampling will be conducted on a frequency that will result in at least 10 percent confirmation sampling and analysis of all soil imported to the Site. In addition to the sampling and analysis described within this memorandum, field screening of soils will occur both at the Microsoft excavation site and of the soil transported to the Landsburg Site as described in the Workplan.

**GOLDER ASSOCIATES INC.**



Joseph Xi, PE  
*Senior Project Engineer*



Gary Zimmerman  
*Principal*

JX/GLZ/kt

Attachments:

Table 1: Analytes and Analytical Methods for Initial Confirmation Soil Sampling

Table 2: Analytes and Analytical Methods for Ongoing Confirmation Soil Sampling

Figure 1: Soil Characterization Locations

Appendix A: Laboratory Analytical Report

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Tables

**Table 1: Analytes and Analytical Methods for Initial Confirmation Soil Sampling**

Category / Analyte	Reference Method <sup>a</sup>	MDL <sup>a</sup>	RL <sup>b</sup>	Units
<b>Fuels</b>				
TPH-gasoline	NWTPH-Gx	0.703	5	mg/kg
TPH-diesel	NWTPH-Dx	8.31	25	mg/kg
TPH-oil	NWTPH-Dx	17.2	50	mg/kg
<b>Metals</b>				
Arsenic	SW 6010	1.95	10	mg/kg
Cadmium	SW 6010	0.102	0.5	mg/kg
Total Chromium	SW 6010	0.076	0.5	mg/kg
Lead	SW 6010	1.42	5	mg/kg
Mercury	EPA 7471B	0.0002	0.25	mg/kg
<b>Pesticides</b>				
Aldrin	8081B	0.812	5	ug/kg
alpha-BHC	8081B	0.912	5	ug/kg
beta-BHC	8081B	0.727	5	ug/kg
delta-BHC	8081B	1.31	5	ug/kg
gamma-BHC	8081B	0.822	5	ug/kg
alpha-Chlordane	8081B	0.709	10	ug/kg
gamma-Chlordane	8081B	0.723	10	ug/kg
4,4'-DDD	8081B	0.575	10	ug/kg
4,4'-DDE	8081B	0.766	10	ug/kg
4,4'-DDT	8081B	0.593	10	ug/kg
Dieldrin	8081B	0.627	10	ug/kg
Endosulfan I	8081B	0.71	5	ug/kg
Endosulfan II	8081B	0.624	10	ug/kg
Endosulfan sulfate	8081B	0.474	10	ug/kg
Endrin	8081B	0.637	10	ug/kg
Endrin aldehyde	8081B	0.585	10	ug/kg
Endrin ketone	8081B	0.678	10	ug/kg
Heptachlor	8081B	0.942	5	ug/kg
Heptachlor epoxide	8081B	0.682	5	ug/kg
Methoxychlor	8081B	1.62	10	ug/kg
Toxaphene	8081B	17.7	50	ug/kg
<b>Herbicides</b>				
Dalapon	8151A	52.7	230	ug/kg
2,4,6-Trichlorophenol	8151A	3.67	4.7	ug/kg
Dicamba	8151A	7.33	9.4	ug/kg
MCPP	8151A	263	940	ug/kg
MCPA	8151A	659	940	ug/kg
Dichlorprop	8151A	6.73	71	ug/kg
2,4-D	8151A	7.95	9.4	ug/kg
Pentachlorophenol	8151A	0.351	4.8	ug/kg
2,4,5-TP	8151A	3.5	9.5	ug/kg
2,4,5-T	8151A	6.95	9.5	ug/kg
2,4-DB	8151A	4.17	9.5	ug/kg
Dinoseb	8151A	8.57	9.5	ug/kg

**Table 1: Analytes and Analytical Methods for Initial Confirmation Soil Sampling**

Category / Analyte	Reference Method <sup>a</sup>	MDL <sup>a</sup>	RL <sup>b</sup>	Units
<b>VOCs</b>				
Dichlorodifluoromethane	8260C	0.35	1	ug/kg
Chloromethane	8260C	1.09	5	ug/kg
Vinyl Chloride	8260C	0.25	1	ug/kg
Bromomethane	8260C	0.46	1	ug/kg
Chloroethane	8260C	0.94	5	ug/kg
Trichlorofluoromethane	8260C	0.19	1	ug/kg
1,1-Dichloroethene	8260C	0.40	1	ug/kg
Acetone	8260C	2.37	10	ug/kg
Iodomethane	8260C	1.25	5	ug/kg
Carbon Disulfide	8260C	0.25	1	ug/kg
Methylene Chloride	8260C	2.48	5	ug/kg
(trans) 1,2-Dichloroethene	8260C	0.17	1	ug/kg
Methyl t-Butyl Ether	8260C	0.20	1	ug/kg
1,1-Dichloroethane	8260C	0.28	1	ug/kg
Vinyl Acetate	8260C	0.74	5	ug/kg
2,2-Dichloropropane	8260C	0.18	1	ug/kg
(cis) 1,2-Dichloroethene	8260C	0.17	1	ug/kg
2-Butanone	8260C	1.46	5	ug/kg
Bromochloromethane	8260C	0.33	1	ug/kg
Chloroform	8260C	0.19	1	ug/kg
1,1,1-Trichloroethane	8260C	0.25	1	ug/kg
Carbon Tetrachloride	8260C	0.26	1	ug/kg
1,1-Dichloropropene	8260C	0.27	1	ug/kg
Benzene	8260C	0.16	1	ug/kg
1,2-Dichloroethane	8260C	0.22	1	ug/kg
Trichloroethene	8260C	0.36	1	ug/kg
1,2-Dichloropropane	8260C	0.23	1	ug/kg
Dibromomethane	8260C	0.36	1	ug/kg
Bromodichloromethane	8260C	0.25	1	ug/kg
2-Chloroethyl Vinyl Ether	8260C	0.68	6.3	ug/kg
(cis) 1,3-Dichloropropene	8260C	0.17	1	ug/kg
Methyl Isobutyl Ketone	8260C	0.53	5	ug/kg
Toluene	8260C	0.21	5	ug/kg
(trans) 1,3-Dichloropropene	8260C	0.22	1	ug/kg
1,1,2-Trichloroethane	8260C	0.33	1	ug/kg
Tetrachloroethene	8260C	0.32	1	ug/kg
1,3-Dichloropropane	8260C	0.23	1	ug/kg
2-Hexanone	8260C	0.85	5	ug/kg
Dibromochloromethane	8260C	0.32	1	ug/kg
1,2-Dibromoethane	8260C	0.28	1	ug/kg
Chlorobenzene	8260C	0.19	1	ug/kg
1,1,1,2-Tetrachloroethane	8260C	0.29	1	ug/kg
Ethylbenzene	8260C	0.17	1	ug/kg
m,p-Xylene	8260C	0.67	2	ug/kg
o-Xylene	8260C	0.17	1	ug/kg

**Table 1: Analytes and Analytical Methods for Initial Confirmation Soil Sampling**

Category / Analyte	Reference Method <sup>a</sup>	MDL <sup>a</sup>	RL <sup>b</sup>	Units
Styrene	8260C	0.20	1	ug/kg
Bromoform	8260C	0.83	5	ug/kg
Isopropylbenzene	8260C	0.15	1	ug/kg
Bromobenzene	8260C	0.21	1	ug/kg
1,1,2,2-Tetrachloroethane	8260C	0.25	1	ug/kg
1,2,3-Trichloropropane	8260C	0.26	1	ug/kg
n-Propylbenzene	8260C	0.15	1	ug/kg
2-Chlorotoluene	8260C	0.26	1	ug/kg
4-Chlorotoluene	8260C	0.24	1	ug/kg
1,3,5-Trimethylbenzene	8260C	0.15	1	ug/kg
tert-Butylbenzene	8260C	0.15	1	ug/kg
1,2,4-Trimethylbenzene	8260C	0.18	1	ug/kg
sec-Butylbenzene	8260C	0.20	1	ug/kg
1,3-Dichlorobenzene	8260C	0.19	1	ug/kg
p-Isopropyltoluene	8260C	0.15	1	ug/kg
1,4-Dichlorobenzene	8260C	0.20	1	ug/kg
1,2-Dichlorobenzene	8260C	0.15	1	ug/kg
n-Butylbenzene	8260C	0.16	1	ug/kg
1,2-Dibromo-3-chloropropane	8260C	1.43	5	ug/kg
1,2,4-Trichlorobenzene	8260C	0.28	1	ug/kg
Hexachlorobutadiene	8260C	1.38	5	ug/kg
Naphthalene	8260C	0.21	1	ug/kg
1,2,3-Trichlorobenzene	8260C	0.25	1	ug/kg
<b>SVOCs</b>				
n-Nitrosodimethylamine	8270D	0.019	0.033	mg/kg
Pyridine	8270D	0.082	0.33	mg/kg
Phenol	8270D	0.014	0.033	mg/kg
Aniline	8270D	0.068	0.17	mg/kg
bis(2-Chloroethyl)ether	8270D	0.018	0.033	mg/kg
2-Chlorophenol	8270D	0.015	0.033	mg/kg
1,3-Dichlorobenzene	8270D	0.015	0.033	mg/kg
1,4-Dichlorobenzene	8270D	0.014	0.033	mg/kg
Benzyl alcohol	8270D	0.086	0.17	mg/kg
1,2-Dichlorobenzene	8270D	0.014	0.033	mg/kg
2-Methylphenol (o-Cresol)	8270D	0.013	0.033	mg/kg
bis(2-Chloroisopropyl)ether	8270D	0.019	0.033	mg/kg
(3+4)-Methylphenol (m,p-Cresol)	8270D	0.012	0.033	mg/kg
n-Nitroso-di-n-propylamine	8270D	0.015	0.033	mg/kg
Hexachloroethane	8270D	0.014	0.033	mg/kg
Nitrobenzene	8270D	0.016	0.033	mg/kg
Isophorone	8270D	0.012	0.033	mg/kg
2-Nitrophenol	8270D	0.014	0.033	mg/kg
2,4-Dimethylphenol	8270D	0.008	0.033	mg/kg
bis(2-Chloroethoxy)methane	8270D	0.015	0.033	mg/kg
2,4-Dichlorophenol	8270D	0.008	0.033	mg/kg
1,2,4-Trichlorobenzene	8270D	0.015	0.033	mg/kg
Naphthalene	8270D	0.016	0.0067	mg/kg

**Table 1: Analytes and Analytical Methods for Initial Confirmation Soil Sampling**

Category / Analyte	Reference Method <sup>a</sup>	MDL <sup>a</sup>	RL <sup>b</sup>	Units
4-Chloroaniline	8270D	0.050	0.17	mg/kg
Hexachlorobutadiene	8270D	0.016	0.033	mg/kg
4-Chloro-3-methylphenol	8270D	0.020	0.033	mg/kg
2-Methylnaphthalene	8270D	0.014	0.0067	mg/kg
1-Methylnaphthalene	8270D	0.011	0.0067	mg/kg
Hexachlorocyclopentadiene	8270D	0.010	0.033	mg/kg
2,4,6-Trichlorophenol	8270D	0.006	0.033	mg/kg
2,3-Dichloroaniline	8270D	0.008	0.033	mg/kg
2,4,5-Trichlorophenol	8270D	0.009	0.033	mg/kg
2-Chloronaphthalene	8270D	0.010	0.033	mg/kg
2-Nitroaniline	8270D	0.008	0.033	mg/kg
1,4-Dinitrobenzene	8270D	0.007	0.033	mg/kg
Dimethylphthalate	8270D	0.008	0.033	mg/kg
1,3-Dinitrobenzene	8270D	0.006	0.033	mg/kg
2,6-Dinitrotoluene	8270D	0.005	0.033	mg/kg
1,2-Dinitrobenzene	8270D	0.007	0.033	mg/kg
Acenaphthylene	8270D	0.008	0.0067	mg/kg
3-Nitroaniline	8270D	0.005	0.033	mg/kg
2,4-Dinitrophenol	8270D	0.101	0.17	mg/kg
Acenaphthene	8270D	0.011	0.0067	mg/kg
4-Nitrophenol	8270D	0.017	0.033	mg/kg
2,4-Dinitrotoluene	8270D	0.011	0.033	mg/kg
Dibenzofuran	8270D	0.007	0.033	mg/kg
2,3,5,6-Tetrachlorophenol	8270D	0.006	0.033	mg/kg
2,3,4,6-Tetrachlorophenol	8270D	0.006	0.033	mg/kg
Diethylphthalate	8270D	0.007	0.17	mg/kg
4-Chlorophenyl-phenylether	8270D	0.007	0.033	mg/kg
4-Nitroaniline	8270D	0.007	0.033	mg/kg
Fluorene	8270D	0.007	0.0067	mg/kg
4,6-Dinitro-2-methylphenol	8270D	0.007	0.17	mg/kg
n-Nitrosodiphenylamine	8270D	0.007	0.033	mg/kg
1,2-Diphenylhydrazine	8270D	0.008	0.033	mg/kg
4-Bromophenyl-phenylether	8270D	0.006	0.033	mg/kg
Hexachlorobenzene	8270D	0.005	0.033	mg/kg
Pentachlorophenol	8270D	0.012	0.17	mg/kg
Phenanthrene	8270D	0.008	0.0067	mg/kg
Anthracene	8270D	0.007	0.0067	mg/kg
Carbazole	8270D	0.007	0.033	mg/kg
Di-n-butylphthalate	8270D	0.012	0.17	mg/kg
Fluoranthene	8270D	0.008	0.0067	mg/kg
Benzidine	8270D	0.120	0.33	mg/kg
Pyrene	8270D	0.011	0.0067	mg/kg
Butylbenzylphthalate	8270D	0.007	0.17	mg/kg
bis-2-Ethylhexyladipate	8270D	0.007	0.17	mg/kg
3,3'-Dichlorobenzidine	8270D	0.050	0.17	mg/kg
Benzo[a]anthracene	8270D	0.007	0.0067	mg/kg
Chrysene	8270D	0.009	0.0067	mg/kg

**Table 1: Analytes and Analytical Methods for Initial Confirmation Soil Sampling**

Category / Analyte	Reference Method <sup>a</sup>	MDL <sup>a</sup>	RL <sup>b</sup>	Units
bis(2-Ethylhexyl)phthalate	8270D	0.008	0.17	mg/kg
Di-n-octylphthalate	8270D	0.007	0.17	mg/kg
Benzo[b]fluoranthene	8270D	0.006	0.0067	mg/kg
Benzo[j,k]fluoranthene	8270D	0.009	0.0067	mg/kg
Benzo[a]pyrene	8270D	0.009	0.0067	mg/kg
Indeno[1,2,3-cd]pyrene	8270D	0.008	0.0067	mg/kg
Dibenz[a,h]anthracene	8270D	0.007	0.0067	mg/kg
Benzo[g,h,i]perylene	8270D	0.006	0.0067	mg/kg

Notes:

a- MDL is the Method Detection Limit and is specific to a laboratory from the results of MDL studies performed by the laboratory. The MDLs can change based on the results of future MDL studies.

b- RL is the Reporting Limit and is the laboratory Practical Quantitation Limit (PQL).

RLs are laboratory specific, but shall be considered minimums.

ug/kg - microgram per kilogram

mg/kg - milligram per kilogram



**Table 2: Analytes and Analytical Methods for Ongoing Confirmation Soil Sampling**

Category / Analyte	Reference Method <sup>a</sup>	MDL <sup>a</sup>	RL <sup>b</sup>	Units
<b>Fuels</b>				
TPH-gasoline	NWTPH-Gx	0.70	5	mg/kg
TPH-diesel	NWTPH-Dx	8.31	25	mg/kg
TPH-oil	NWTPH-Dx	17.2	50	mg/kg
<b>Metals</b>				
Arsenic	SW 6010	1.95	10	mg/kg
Cadmium	SW 6010	0.10	0.5	mg/kg
Total Chromium	SW 6010	0.08	0.5	mg/kg
Lead	SW 6010	1.42	5	mg/kg
Mercury	EPA 7471B	0.0002	0.25	mg/kg

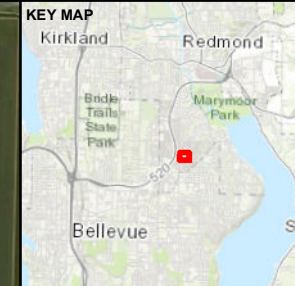
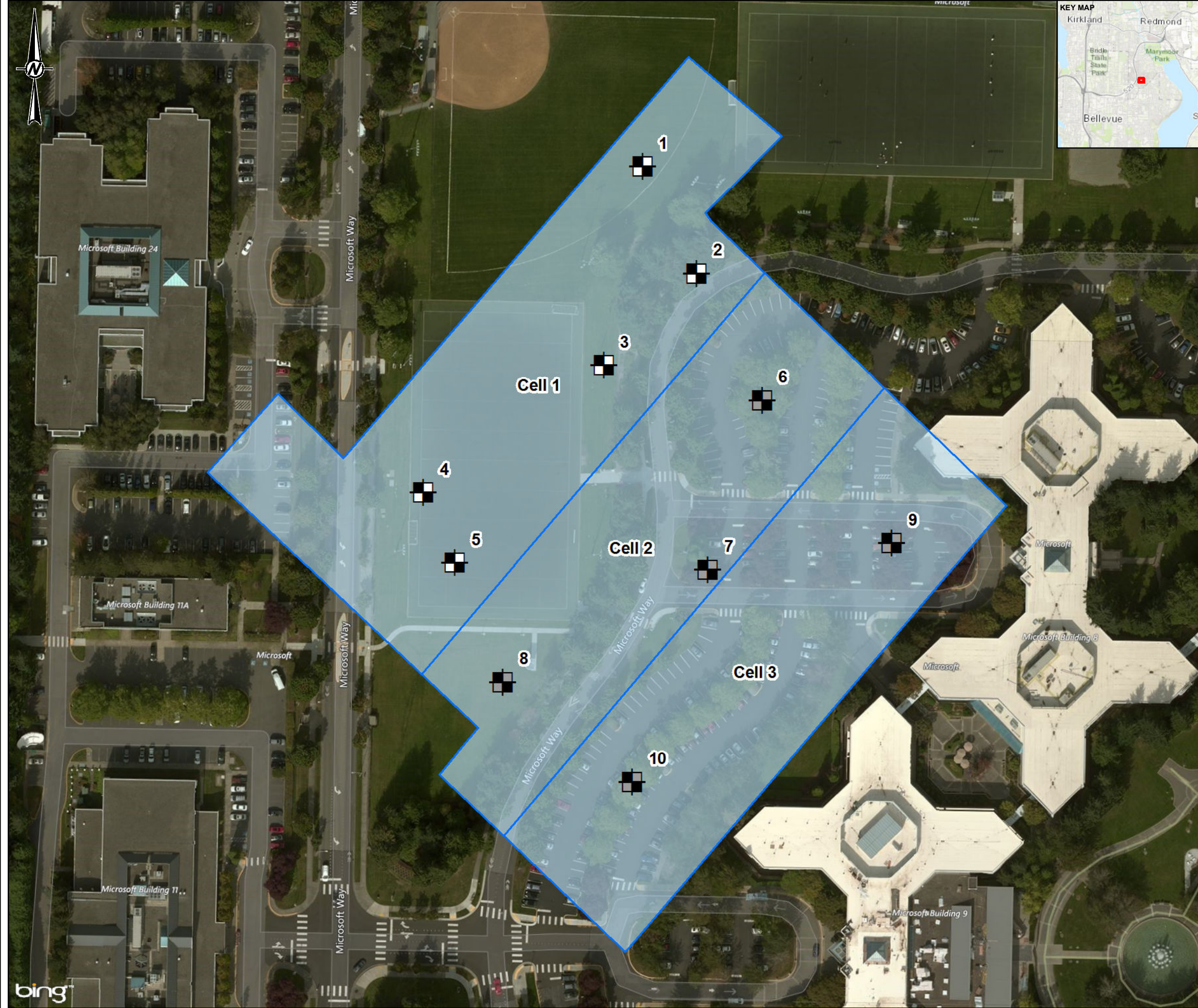
Notes:

- a- MDL is the Method Detection Limit and is specific to a laboratory from the results of MDL studies performed by the laboratory. The MDLs can change based on the results of future MDL studies.
- b- RL is the Reporting Limit and is the laboratory Practical Quantitation Limit (PQL).  
RLs are laboratory specific, but shall be considered minimums.

Figure

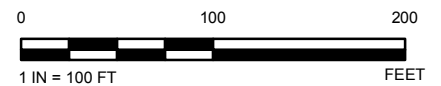


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**LEGEND**

- TEST PIT
- PROPOSED SUBSEQUENT TEST PIT
- FILL SOURCE AREA



**NOTE(S)**  
 1. THE FILL SOURCE AREA MEASURES APPROXIMATELY 7.6 ACRES.

**REFERENCE(S)**  
 1. GOODFELLOW BROS INC. (EXCAVATION AREA, 2019)  
 2. GOLDR ASSOCIATES INC. (TEST PITS, 2019)  
 3. COORDINATE SYSTEM: NAD 1983 STATE PLANE WASHINGTON NORTH (FT)  
 4. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, DELORME, TOMTOM, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), SWISS TOPO, MAPMYINDIA, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY © 2019 MICROSOFT CORPORATION © 2019 DIGITAL GLOBE © CNES (2019) DISTRIBUTION

**CLIENT**  
 LANDSBURG PLP GROUP

**PROJECT**  
 LANDSBURG 2019 REMEDIAL ACTIONS

**TITLE**  
 SOIL CHARACTERIZATION LOCATIONS

CONSULTANT	YYYY-MM-DD	2019-05-20
<b>GOLDER</b>	DESIGNED	JX
	PREPARED	BVJ
	REVIEWED	JX
	APPROVED	GZ

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANS B



**APPENDIX A**

# Laboratory Analytical Report



14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 • (425) 883-3881

May 22, 2019

Gary Zimmerman  
Golder Associates Inc.  
18300 NE Union Hill Road  
Suite 200  
Redmond, WA 98052-3333

Re: Analytical Data for Project 923-1000-005.5000  
Laboratory Reference No. 1905-196

Dear Gary:

Enclosed are the analytical results and associated quality control data for samples submitted on May 14, 2019.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal stroke extending to the right.

David Baumeister  
Project Manager

Enclosures



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OnSite Environmental, Inc. 14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody,  
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 22, 2019  
Samples Submitted: May 14, 2019  
Laboratory Reference: 1905-196  
Project: 923-1000-005.5000

### Case Narrative

Samples were collected on May 14, 2019 and received by the laboratory on May 14, 2019. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

#### Chlorinated Acid Herbicides EPA 8151A Analysis

Negative effects of the matrix from the samples 3A, 4A, and 5A on the instrument caused values for Dalapon, MCP, and Dinoseb in the closing continuing calibration verification standards (CCVs) to go low. Because of this, quantitation limits and sample concentrations can be higher than reported.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



Date of Report: May 22, 2019  
 Samples Submitted: May 14, 2019  
 Laboratory Reference: 1905-196  
 Project: 923-1000-005.5000

**GASOLINE RANGE ORGANICS**  
**NWTPH-Gx**

Matrix: Soil  
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>1A</b>					
Laboratory ID:	05-196-01					
Gasoline	<b>ND</b>	5.4	NWTPH-Gx	5-16-19	5-17-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	84	58-129				
<b>Client ID:</b>	<b>2A</b>					
Laboratory ID:	05-196-03					
Gasoline	<b>ND</b>	5.7	NWTPH-Gx	5-16-19	5-17-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	84	58-129				
<b>Client ID:</b>	<b>3A</b>					
Laboratory ID:	05-196-05					
Gasoline	<b>ND</b>	12	NWTPH-Gx	5-16-19	5-17-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	89	58-129				
<b>Client ID:</b>	<b>4A</b>					
Laboratory ID:	05-196-07					
Gasoline	<b>ND</b>	6.3	NWTPH-Gx	5-16-19	5-17-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	83	58-129				
<b>Client ID:</b>	<b>5A</b>					
Laboratory ID:	05-196-09					
Gasoline	<b>ND</b>	5.7	NWTPH-Gx	5-16-19	5-17-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	84	58-129				



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**GASOLINE RANGE ORGANICS  
 NWTPH-Gx  
 QUALITY CONTROL**

Matrix: Soil  
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>METHOD BLANK</b>						
Laboratory ID:	MB0516S5					
Gasoline	<b>ND</b>	5.0	NWTPH-Gx	5-16-19	5-16-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>83</i>	<i>58-129</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
<b>DUPLICATE</b>								
Laboratory ID:	05-134-06							
	ORIG	DUP						
Gasoline	<b>ND</b>	<b>ND</b>	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				<i>81</i>	<i>86</i>	<i>58-129</i>		





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**DIESEL AND HEAVY OIL RANGE ORGANICS  
 NWTPH-Dx**

Matrix: Soil  
 Units: mg/Kg (ppm)

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>1A</b>					
Laboratory ID:	05-196-01					
Diesel Range Organics	<b>ND</b>	27	NWTPH-Dx	5-15-19	5-17-19	
Lube Oil Range Organics	<b>ND</b>	53	NWTPH-Dx	5-15-19	5-17-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>80</i>	<i>50-150</i>				
<b>Client ID:</b>	<b>2A</b>					
Laboratory ID:	05-196-03					
Diesel Range Organics	<b>ND</b>	27	NWTPH-Dx	5-15-19	5-17-19	
Lube Oil Range Organics	<b>ND</b>	53	NWTPH-Dx	5-15-19	5-17-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>80</i>	<i>50-150</i>				
<b>Client ID:</b>	<b>3A</b>					
Laboratory ID:	05-196-05					
Diesel Range Organics	<b>ND</b>	28	NWTPH-Dx	5-15-19	5-17-19	
Lube Oil Range Organics	<b>ND</b>	55	NWTPH-Dx	5-15-19	5-17-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>78</i>	<i>50-150</i>				
<b>Client ID:</b>	<b>4A</b>					
Laboratory ID:	05-196-07					
Diesel Range Organics	<b>ND</b>	27	NWTPH-Dx	5-15-19	5-17-19	
Lube Oil Range Organics	<b>ND</b>	54	NWTPH-Dx	5-15-19	5-17-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>80</i>	<i>50-150</i>				
<b>Client ID:</b>	<b>5A</b>					
Laboratory ID:	05-196-09					
Diesel Range Organics	<b>ND</b>	27	NWTPH-Dx	5-15-19	5-17-19	
Lube Oil Range Organics	<b>ND</b>	55	NWTPH-Dx	5-15-19	5-17-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>88</i>	<i>50-150</i>				



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**DIESEL AND HEAVY OIL RANGE ORGANICS  
 NWTPH-Dx  
 QUALITY CONTROL**

Matrix: Soil  
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>METHOD BLANK</b>						
Laboratory ID:	MB0515S4					
Diesel Range Organics	<b>ND</b>	25	NWTPH-Dx	5-15-19	5-15-19	
Lube Oil Range Organics	<b>ND</b>	50	NWTPH-Dx	5-15-19	5-15-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>102</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
<b>DUPLICATE</b>								
Laboratory ID:	SB0515S4							
	ORIG	DUP						
Diesel Fuel #2	<b>90.5</b>	<b>81.8</b>	NA	NA	NA	NA	10	NA
Lube Oil Range	<b>ND</b>	<b>ND</b>	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				97	87	50-150		



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**VOLATILE ORGANICS EPA 8260C**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>1A</b>					
Laboratory ID:	05-196-01					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Chloromethane	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
Vinyl Chloride	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Bromomethane	ND	0.0016	EPA 8260C	5-15-19	5-15-19	
Chloroethane	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Acetone	ND	0.011	EPA 8260C	5-15-19	5-15-19	
Iodomethane	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
Carbon Disulfide	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Methylene Chloride	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Methyl t-Butyl Ether	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Vinyl Acetate	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
2-Butanone	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
Bromochloromethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Chloroform	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Benzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Trichloroethene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Dibromomethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Bromodichloromethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
2-Chloroethyl Vinyl Ether	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Methyl Isobutyl Ketone	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
Toluene	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>1A</b>					
Laboratory ID:	05-196-01					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Tetrachloroethene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
2-Hexanone	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
Dibromochloromethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Chlorobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Ethylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
m,p-Xylene	ND	0.0023	EPA 8260C	5-15-19	5-15-19	
o-Xylene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Styrene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Bromoform	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
Isopropylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Bromobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
n-Propylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
2-Chlorotoluene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
4-Chlorotoluene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,3,5-Trimethylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
tert-Butylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2,4-Trimethylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
sec-Butylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
p-Isopropyltoluene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
n-Butylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2-Dibromo-3-chloropropane	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Hexachlorobutadiene	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
Naphthalene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>98</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>71-130</i>				



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Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>2A</b>					
Laboratory ID:	05-196-03					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Chloromethane	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
Vinyl Chloride	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Bromomethane	ND	0.0016	EPA 8260C	5-15-19	5-15-19	
Chloroethane	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Acetone	ND	0.011	EPA 8260C	5-15-19	5-15-19	
Iodomethane	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
Carbon Disulfide	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Methylene Chloride	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Methyl t-Butyl Ether	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Vinyl Acetate	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
2-Butanone	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
Bromochloromethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Chloroform	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Benzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Trichloroethene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Dibromomethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Bromodichloromethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
2-Chloroethyl Vinyl Ether	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Methyl Isobutyl Ketone	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
Toluene	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>2A</b>					
Laboratory ID:	05-196-03					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Tetrachloroethene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
2-Hexanone	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
Dibromochloromethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Chlorobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Ethylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
m,p-Xylene	ND	0.0023	EPA 8260C	5-15-19	5-15-19	
o-Xylene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Styrene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Bromoform	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
Isopropylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Bromobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
n-Propylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
2-Chlorotoluene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
4-Chlorotoluene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,3,5-Trimethylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
tert-Butylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2,4-Trimethylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
sec-Butylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
p-Isopropyltoluene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
n-Butylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2-Dibromo-3-chloropropane	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Hexachlorobutadiene	ND	0.0057	EPA 8260C	5-15-19	5-15-19	
Naphthalene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>71-130</i>				



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Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>3A</b>					
Laboratory ID:	05-196-05					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Chloromethane	ND	0.0055	EPA 8260C	5-15-19	5-15-19	
Vinyl Chloride	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Bromomethane	ND	0.0016	EPA 8260C	5-15-19	5-15-19	
Chloroethane	ND	0.0055	EPA 8260C	5-15-19	5-15-19	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Acetone	ND	0.011	EPA 8260C	5-15-19	5-15-19	
Iodomethane	ND	0.0055	EPA 8260C	5-15-19	5-15-19	
Carbon Disulfide	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Methylene Chloride	ND	0.0055	EPA 8260C	5-15-19	5-15-19	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Methyl t-Butyl Ether	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Vinyl Acetate	ND	0.0055	EPA 8260C	5-15-19	5-15-19	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
2-Butanone	ND	0.0055	EPA 8260C	5-15-19	5-15-19	
Bromochloromethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Chloroform	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Benzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Trichloroethene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Dibromomethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Bromodichloromethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
2-Chloroethyl Vinyl Ether	ND	0.0055	EPA 8260C	5-15-19	5-15-19	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Methyl Isobutyl Ketone	ND	0.0055	EPA 8260C	5-15-19	5-15-19	
Toluene	ND	0.0055	EPA 8260C	5-15-19	5-15-19	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>3A</b>					
Laboratory ID:	05-196-05					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Tetrachloroethene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
2-Hexanone	ND	0.0055	EPA 8260C	5-15-19	5-15-19	
Dibromochloromethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Chlorobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Ethylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
m,p-Xylene	ND	0.0022	EPA 8260C	5-15-19	5-15-19	
o-Xylene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Styrene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Bromoform	ND	0.0055	EPA 8260C	5-15-19	5-15-19	
Isopropylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Bromobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
n-Propylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
2-Chlorotoluene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
4-Chlorotoluene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,3,5-Trimethylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
tert-Butylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2,4-Trimethylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
sec-Butylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
p-Isopropyltoluene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
n-Butylbenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2-Dibromo-3-chloropropane	ND	0.0055	EPA 8260C	5-15-19	5-15-19	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
Hexachlorobutadiene	ND	0.0055	EPA 8260C	5-15-19	5-15-19	
Naphthalene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	5-15-19	5-15-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>97</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>71-130</i>				





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Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>4A</b>					
Laboratory ID:	05-196-07					
Dichlorodifluoromethane	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Chloromethane	ND	0.0046	EPA 8260C	5-15-19	5-15-19	
Vinyl Chloride	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Bromomethane	ND	0.0013	EPA 8260C	5-15-19	5-15-19	
Chloroethane	ND	0.0046	EPA 8260C	5-15-19	5-15-19	
Trichlorofluoromethane	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
1,1-Dichloroethene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Acetone	ND	0.0093	EPA 8260C	5-15-19	5-15-19	
Iodomethane	ND	0.0046	EPA 8260C	5-15-19	5-15-19	
Carbon Disulfide	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Methylene Chloride	ND	0.0046	EPA 8260C	5-15-19	5-15-19	
(trans) 1,2-Dichloroethene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Methyl t-Butyl Ether	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
1,1-Dichloroethane	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Vinyl Acetate	ND	0.0046	EPA 8260C	5-15-19	5-15-19	
2,2-Dichloropropane	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
(cis) 1,2-Dichloroethene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
2-Butanone	ND	0.0046	EPA 8260C	5-15-19	5-15-19	
Bromochloromethane	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Chloroform	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
1,1,1-Trichloroethane	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Carbon Tetrachloride	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
1,1-Dichloropropene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Benzene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
1,2-Dichloroethane	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Trichloroethene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
1,2-Dichloropropane	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Dibromomethane	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Bromodichloromethane	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
2-Chloroethyl Vinyl Ether	ND	0.0046	EPA 8260C	5-15-19	5-15-19	
(cis) 1,3-Dichloropropene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Methyl Isobutyl Ketone	ND	0.0046	EPA 8260C	5-15-19	5-15-19	
Toluene	ND	0.0046	EPA 8260C	5-15-19	5-15-19	
(trans) 1,3-Dichloropropene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>4A</b>					
Laboratory ID:	05-196-07					
1,1,2-Trichloroethane	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Tetrachloroethene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
1,3-Dichloropropane	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
2-Hexanone	ND	0.0046	EPA 8260C	5-15-19	5-15-19	
Dibromochloromethane	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
1,2-Dibromoethane	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Chlorobenzene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
1,1,1,2-Tetrachloroethane	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Ethylbenzene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
m,p-Xylene	ND	0.0019	EPA 8260C	5-15-19	5-15-19	
o-Xylene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Styrene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Bromoform	ND	0.0046	EPA 8260C	5-15-19	5-15-19	
Isopropylbenzene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Bromobenzene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
1,1,2,2-Tetrachloroethane	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
1,2,3-Trichloropropane	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
n-Propylbenzene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
2-Chlorotoluene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
4-Chlorotoluene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
1,3,5-Trimethylbenzene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
tert-Butylbenzene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
1,2,4-Trimethylbenzene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
sec-Butylbenzene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
1,3-Dichlorobenzene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
p-Isopropyltoluene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
1,4-Dichlorobenzene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
1,2-Dichlorobenzene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
n-Butylbenzene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
1,2-Dibromo-3-chloropropane	ND	0.0046	EPA 8260C	5-15-19	5-15-19	
1,2,4-Trichlorobenzene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
Hexachlorobutadiene	ND	0.0046	EPA 8260C	5-15-19	5-15-19	
Naphthalene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
1,2,3-Trichlorobenzene	ND	0.00093	EPA 8260C	5-15-19	5-15-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>94</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>71-130</i>				



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**VOLATILE ORGANICS EPA 8260C**  
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Matrix: Soil  
 Units: mg/kg

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>5A</b>					
Laboratory ID:	05-196-09					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Chloromethane	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
Vinyl Chloride	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Bromomethane	ND	0.0014	EPA 8260C	5-15-19	5-15-19	
Chloroethane	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Acetone	ND	0.010	EPA 8260C	5-15-19	5-15-19	
Iodomethane	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
Carbon Disulfide	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Methylene Chloride	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Vinyl Acetate	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
2-Butanone	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
Bromochloromethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Chloroform	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Benzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Trichloroethene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Dibromomethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Bromodichloromethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
Toluene	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>5A</b>					
Laboratory ID:	05-196-09					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Tetrachloroethene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
2-Hexanone	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
Dibromochloromethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Chlorobenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Ethylbenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
m,p-Xylene	ND	0.0020	EPA 8260C	5-15-19	5-15-19	
o-Xylene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Styrene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Bromoform	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
Isopropylbenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Bromobenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
n-Propylbenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
2-Chlorotoluene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
4-Chlorotoluene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
tert-Butylbenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
sec-Butylbenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
n-Butylbenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
Naphthalene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>96</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>71-130</i>				



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**VOLATILE ORGANICS EPA 8260C**  
**METHOD BLANK QUALITY CONTROL**  
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Matrix: Soil  
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0515S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Chloromethane	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
Vinyl Chloride	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Bromomethane	ND	0.0014	EPA 8260C	5-15-19	5-15-19	
Chloroethane	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Acetone	ND	0.010	EPA 8260C	5-15-19	5-15-19	
Iodomethane	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
Carbon Disulfide	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Methylene Chloride	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Vinyl Acetate	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
2-Butanone	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
Bromochloromethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Chloroform	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Benzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Trichloroethene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Dibromomethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Bromodichloromethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
Toluene	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	



Date of Report: May 22, 2019  
 Samples Submitted: May 14, 2019  
 Laboratory Reference: 1905-196  
 Project: 923-1000-005.5000

**VOLATILE ORGANICS EPA 8260C**  
**METHOD BLANK QUALITY CONTROL**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0515S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Tetrachloroethene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
2-Hexanone	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
Dibromochloromethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Chlorobenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Ethylbenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
m,p-Xylene	ND	0.0020	EPA 8260C	5-15-19	5-15-19	
o-Xylene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Styrene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Bromoform	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
Isopropylbenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Bromobenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
n-Propylbenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
2-Chlorotoluene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
4-Chlorotoluene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
tert-Butylbenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
sec-Butylbenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
n-Butylbenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	5-15-19	5-15-19	
Naphthalene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	5-15-19	5-15-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>95</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>71-130</i>				



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 Project: 923-1000-005.5000

**VOLATILE ORGANICS EPA 8260C  
 SB/SBD QUALITY CONTROL**

Matrix: Soil  
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					Recovery	Limits	RPD	Limit		
<b>SPIKE BLANKS</b>										
Laboratory ID:	SB0515S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	<b>0.0355</b>	<b>0.0367</b>	0.0500	0.0500	71	73	57-133	3	18	
Benzene	<b>0.0404</b>	<b>0.0413</b>	0.0500	0.0500	81	83	71-129	2	16	
Trichloroethene	<b>0.0446</b>	<b>0.0469</b>	0.0500	0.0500	89	94	71-122	5	16	
Toluene	<b>0.0455</b>	<b>0.0469</b>	0.0500	0.0500	91	94	74-125	3	15	
Chlorobenzene	<b>0.0445</b>	<b>0.0459</b>	0.0500	0.0500	89	92	72-120	3	14	
<i>Surrogate:</i>										
Dibromofluoromethane					97	95	76-131			
Toluene-d8					100	102	78-128			
4-Bromofluorobenzene					101	100	71-130			



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 Project: 923-1000-005.5000

**SEMIVOLATILE ORGANICS EPA 8270D/SIM**  
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Matrix: Soil  
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>1A</b>					
<b>Laboratory ID:</b>	<b>05-196-01</b>					
n-Nitrosodimethylamine	ND	0.036	EPA 8270D	5-15-19	5-17-19	
Pyridine	ND	0.36	EPA 8270D	5-15-19	5-17-19	
Phenol	ND	0.036	EPA 8270D	5-15-19	5-17-19	
Aniline	ND	0.18	EPA 8270D	5-15-19	5-17-19	
bis(2-Chloroethyl)ether	ND	0.036	EPA 8270D	5-15-19	5-17-19	
2-Chlorophenol	ND	0.036	EPA 8270D	5-15-19	5-17-19	
1,3-Dichlorobenzene	ND	0.036	EPA 8270D	5-15-19	5-17-19	
1,4-Dichlorobenzene	ND	0.036	EPA 8270D	5-15-19	5-17-19	
Benzyl alcohol	ND	0.18	EPA 8270D	5-15-19	5-17-19	
1,2-Dichlorobenzene	ND	0.036	EPA 8270D	5-15-19	5-17-19	
2-Methylphenol (o-Cresol)	ND	0.036	EPA 8270D	5-15-19	5-17-19	
bis(2-Chloroisopropyl)ether	ND	0.036	EPA 8270D	5-15-19	5-17-19	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.036	EPA 8270D	5-15-19	5-17-19	
n-Nitroso-di-n-propylamine	ND	0.036	EPA 8270D	5-15-19	5-17-19	
Hexachloroethane	ND	0.036	EPA 8270D	5-15-19	5-17-19	
Nitrobenzene	ND	0.036	EPA 8270D	5-15-19	5-17-19	
Isophorone	ND	0.036	EPA 8270D	5-15-19	5-17-19	
2-Nitrophenol	ND	0.036	EPA 8270D	5-15-19	5-17-19	
2,4-Dimethylphenol	ND	0.036	EPA 8270D	5-15-19	5-17-19	
bis(2-Chloroethoxy)methane	ND	0.036	EPA 8270D	5-15-19	5-17-19	
2,4-Dichlorophenol	ND	0.036	EPA 8270D	5-15-19	5-17-19	
1,2,4-Trichlorobenzene	ND	0.036	EPA 8270D	5-15-19	5-17-19	
Naphthalene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
4-Chloroaniline	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Hexachlorobutadiene	ND	0.036	EPA 8270D	5-15-19	5-17-19	
4-Chloro-3-methylphenol	ND	0.036	EPA 8270D	5-15-19	5-17-19	
2-Methylnaphthalene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
1-Methylnaphthalene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Hexachlorocyclopentadiene	ND	0.036	EPA 8270D	5-15-19	5-17-19	
2,4,6-Trichlorophenol	ND	0.036	EPA 8270D	5-15-19	5-17-19	
2,3-Dichloroaniline	ND	0.036	EPA 8270D	5-15-19	5-17-19	
2,4,5-Trichlorophenol	ND	0.036	EPA 8270D	5-15-19	5-17-19	
2-Chloronaphthalene	ND	0.036	EPA 8270D	5-15-19	5-17-19	
2-Nitroaniline	ND	0.036	EPA 8270D	5-15-19	5-17-19	
1,4-Dinitrobenzene	ND	0.036	EPA 8270D	5-15-19	5-17-19	
Dimethylphthalate	ND	0.036	EPA 8270D	5-15-19	5-17-19	
1,3-Dinitrobenzene	ND	0.036	EPA 8270D	5-15-19	5-17-19	
2,6-Dinitrotoluene	ND	0.036	EPA 8270D	5-15-19	5-17-19	
1,2-Dinitrobenzene	ND	0.036	EPA 8270D	5-15-19	5-17-19	
Acenaphthylene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
3-Nitroaniline	ND	0.036	EPA 8270D	5-15-19	5-17-19	





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**SEMIVOLATILE ORGANICS EPA 8270D/SIM**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>1A</b>					
Laboratory ID:	05-196-01					
2,4-Dinitrophenol	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Acenaphthene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
4-Nitrophenol	ND	0.036	EPA 8270D	5-15-19	5-17-19	
2,4-Dinitrotoluene	ND	0.036	EPA 8270D	5-15-19	5-17-19	
Dibenzofuran	ND	0.036	EPA 8270D	5-15-19	5-17-19	
2,3,5,6-Tetrachlorophenol	ND	0.036	EPA 8270D	5-15-19	5-17-19	
2,3,4,6-Tetrachlorophenol	ND	0.036	EPA 8270D	5-15-19	5-17-19	
Diethylphthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
4-Chlorophenyl-phenylether	ND	0.036	EPA 8270D	5-15-19	5-17-19	
4-Nitroaniline	ND	0.036	EPA 8270D	5-15-19	5-17-19	
Fluorene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
4,6-Dinitro-2-methylphenol	ND	0.18	EPA 8270D	5-15-19	5-17-19	
n-Nitrosodiphenylamine	ND	0.036	EPA 8270D	5-15-19	5-17-19	
1,2-Diphenylhydrazine	ND	0.036	EPA 8270D	5-15-19	5-17-19	
4-Bromophenyl-phenylether	ND	0.036	EPA 8270D	5-15-19	5-17-19	
Hexachlorobenzene	ND	0.036	EPA 8270D	5-15-19	5-17-19	
Pentachlorophenol	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Phenanthrene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Anthracene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Carbazole	ND	0.036	EPA 8270D	5-15-19	5-17-19	
Di-n-butylphthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Fluoranthene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Benzidine	ND	0.36	EPA 8270D	5-15-19	5-17-19	
Pyrene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Butylbenzylphthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
bis-2-Ethylhexyladipate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
3,3'-Dichlorobenzidine	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Benzo[a]anthracene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Chrysene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
bis(2-Ethylhexyl)phthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Di-n-octylphthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Benzo[b]fluoranthene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Benzo(j,k)fluoranthene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Benzo[a]pyrene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Indeno[1,2,3-cd]pyrene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Dibenz[a,h]anthracene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Benzo[g,h,i]perylene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>73</i>	<i>21 - 107</i>				
<i>Phenol-d6</i>	<i>80</i>	<i>30 - 106</i>				
<i>Nitrobenzene-d5</i>	<i>78</i>	<i>28 - 109</i>				
<i>2-Fluorobiphenyl</i>	<i>81</i>	<i>37 - 107</i>				
<i>2,4,6-Tribromophenol</i>	<i>99</i>	<i>39 - 116</i>				
<i>Terphenyl-d14</i>	<i>100</i>	<i>41 - 113</i>				



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**SEMIVOLATILE ORGANICS EPA 8270D/SIM**  
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Matrix: Soil  
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>2A</b>					
<b>Laboratory ID:</b>	<b>05-196-03</b>					
n-Nitrosodimethylamine	ND	0.035	EPA 8270D	5-15-19	5-17-19	
Pyridine	ND	0.35	EPA 8270D	5-15-19	5-17-19	
Phenol	ND	0.035	EPA 8270D	5-15-19	5-17-19	
Aniline	ND	0.18	EPA 8270D	5-15-19	5-17-19	
bis(2-Chloroethyl)ether	ND	0.035	EPA 8270D	5-15-19	5-17-19	
2-Chlorophenol	ND	0.035	EPA 8270D	5-15-19	5-17-19	
1,3-Dichlorobenzene	ND	0.035	EPA 8270D	5-15-19	5-17-19	
1,4-Dichlorobenzene	ND	0.035	EPA 8270D	5-15-19	5-17-19	
Benzyl alcohol	ND	0.18	EPA 8270D	5-15-19	5-17-19	
1,2-Dichlorobenzene	ND	0.035	EPA 8270D	5-15-19	5-17-19	
2-Methylphenol (o-Cresol)	ND	0.035	EPA 8270D	5-15-19	5-17-19	
bis(2-Chloroisopropyl)ether	ND	0.035	EPA 8270D	5-15-19	5-17-19	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.035	EPA 8270D	5-15-19	5-17-19	
n-Nitroso-di-n-propylamine	ND	0.035	EPA 8270D	5-15-19	5-17-19	
Hexachloroethane	ND	0.035	EPA 8270D	5-15-19	5-17-19	
Nitrobenzene	ND	0.035	EPA 8270D	5-15-19	5-17-19	
Isophorone	ND	0.035	EPA 8270D	5-15-19	5-17-19	
2-Nitrophenol	ND	0.035	EPA 8270D	5-15-19	5-17-19	
2,4-Dimethylphenol	ND	0.035	EPA 8270D	5-15-19	5-17-19	
bis(2-Chloroethoxy)methane	ND	0.035	EPA 8270D	5-15-19	5-17-19	
2,4-Dichlorophenol	ND	0.035	EPA 8270D	5-15-19	5-17-19	
1,2,4-Trichlorobenzene	ND	0.035	EPA 8270D	5-15-19	5-17-19	
Naphthalene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
4-Chloroaniline	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Hexachlorobutadiene	ND	0.035	EPA 8270D	5-15-19	5-17-19	
4-Chloro-3-methylphenol	ND	0.035	EPA 8270D	5-15-19	5-17-19	
2-Methylnaphthalene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
1-Methylnaphthalene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Hexachlorocyclopentadiene	ND	0.035	EPA 8270D	5-15-19	5-17-19	
2,4,6-Trichlorophenol	ND	0.035	EPA 8270D	5-15-19	5-17-19	
2,3-Dichloroaniline	ND	0.035	EPA 8270D	5-15-19	5-17-19	
2,4,5-Trichlorophenol	ND	0.035	EPA 8270D	5-15-19	5-17-19	
2-Chloronaphthalene	ND	0.035	EPA 8270D	5-15-19	5-17-19	
2-Nitroaniline	ND	0.035	EPA 8270D	5-15-19	5-17-19	
1,4-Dinitrobenzene	ND	0.035	EPA 8270D	5-15-19	5-17-19	
Dimethylphthalate	ND	0.035	EPA 8270D	5-15-19	5-17-19	
1,3-Dinitrobenzene	ND	0.035	EPA 8270D	5-15-19	5-17-19	
2,6-Dinitrotoluene	ND	0.035	EPA 8270D	5-15-19	5-17-19	
1,2-Dinitrobenzene	ND	0.035	EPA 8270D	5-15-19	5-17-19	
Acenaphthylene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
3-Nitroaniline	ND	0.035	EPA 8270D	5-15-19	5-17-19	



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**SEMIVOLATILE ORGANICS EPA 8270D/SIM**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>2A</b>					
Laboratory ID:	05-196-03					
2,4-Dinitrophenol	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Acenaphthene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
4-Nitrophenol	ND	0.035	EPA 8270D	5-15-19	5-17-19	
2,4-Dinitrotoluene	ND	0.035	EPA 8270D	5-15-19	5-17-19	
Dibenzofuran	ND	0.035	EPA 8270D	5-15-19	5-17-19	
2,3,5,6-Tetrachlorophenol	ND	0.035	EPA 8270D	5-15-19	5-17-19	
2,3,4,6-Tetrachlorophenol	ND	0.035	EPA 8270D	5-15-19	5-17-19	
Diethylphthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
4-Chlorophenyl-phenylether	ND	0.035	EPA 8270D	5-15-19	5-17-19	
4-Nitroaniline	ND	0.035	EPA 8270D	5-15-19	5-17-19	
Fluorene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
4,6-Dinitro-2-methylphenol	ND	0.18	EPA 8270D	5-15-19	5-17-19	
n-Nitrosodiphenylamine	ND	0.035	EPA 8270D	5-15-19	5-17-19	
1,2-Diphenylhydrazine	ND	0.035	EPA 8270D	5-15-19	5-17-19	
4-Bromophenyl-phenylether	ND	0.035	EPA 8270D	5-15-19	5-17-19	
Hexachlorobenzene	ND	0.035	EPA 8270D	5-15-19	5-17-19	
Pentachlorophenol	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Phenanthrene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Anthracene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Carbazole	ND	0.035	EPA 8270D	5-15-19	5-17-19	
Di-n-butylphthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Fluoranthene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Benzidine	ND	0.35	EPA 8270D	5-15-19	5-17-19	
Pyrene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Butylbenzylphthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
bis-2-Ethylhexyladipate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
3,3'-Dichlorobenzidine	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Benzo[a]anthracene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Chrysene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
bis(2-Ethylhexyl)phthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Di-n-octylphthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Benzo[b]fluoranthene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Benzo(j,k)fluoranthene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Benzo[a]pyrene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Indeno[1,2,3-cd]pyrene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Dibenz[a,h]anthracene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
Benzo[g,h,i]perylene	ND	0.0071	EPA 8270D/SIM	5-15-19	5-15-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>54</i>	<i>21 - 107</i>				
<i>Phenol-d6</i>	<i>58</i>	<i>30 - 106</i>				
<i>Nitrobenzene-d5</i>	<i>59</i>	<i>28 - 109</i>				
<i>2-Fluorobiphenyl</i>	<i>58</i>	<i>37 - 107</i>				
<i>2,4,6-Tribromophenol</i>	<i>79</i>	<i>39 - 116</i>				
<i>Terphenyl-d14</i>	<i>76</i>	<i>41 - 113</i>				



Date of Report: May 22, 2019  
 Samples Submitted: May 14, 2019  
 Laboratory Reference: 1905-196  
 Project: 923-1000-005.5000

**SEMIVOLATILE ORGANICS EPA 8270D/SIM**  
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Matrix: Soil  
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>3A</b>					
<b>Laboratory ID:</b>	<b>05-196-05</b>					
n-Nitrosodimethylamine	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Pyridine	ND	0.37	EPA 8270D	5-15-19	5-17-19	
Phenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Aniline	ND	0.18	EPA 8270D	5-15-19	5-17-19	
bis(2-Chloroethyl)ether	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2-Chlorophenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
1,3-Dichlorobenzene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
1,4-Dichlorobenzene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Benzyl alcohol	ND	0.18	EPA 8270D	5-15-19	5-17-19	
1,2-Dichlorobenzene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2-Methylphenol (o-Cresol)	ND	0.037	EPA 8270D	5-15-19	5-17-19	
bis(2-Chloroisopropyl)ether	ND	0.037	EPA 8270D	5-15-19	5-17-19	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.037	EPA 8270D	5-15-19	5-17-19	
n-Nitroso-di-n-propylamine	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Hexachloroethane	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Nitrobenzene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Isophorone	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2-Nitrophenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2,4-Dimethylphenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
bis(2-Chloroethoxy)methane	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2,4-Dichlorophenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
1,2,4-Trichlorobenzene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Naphthalene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-15-19	
4-Chloroaniline	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Hexachlorobutadiene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
4-Chloro-3-methylphenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2-Methylnaphthalene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-15-19	
1-Methylnaphthalene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-15-19	
Hexachlorocyclopentadiene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2,4,6-Trichlorophenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2,3-Dichloroaniline	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2,4,5-Trichlorophenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2-Chloronaphthalene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2-Nitroaniline	ND	0.037	EPA 8270D	5-15-19	5-17-19	
1,4-Dinitrobenzene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Dimethylphthalate	ND	0.037	EPA 8270D	5-15-19	5-17-19	
1,3-Dinitrobenzene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2,6-Dinitrotoluene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
1,2-Dinitrobenzene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Acenaphthylene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-15-19	
3-Nitroaniline	ND	0.037	EPA 8270D	5-15-19	5-17-19	



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**SEMIVOLATILE ORGANICS EPA 8270D/SIM**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>3A</b>					
Laboratory ID:	05-196-05					
2,4-Dinitrophenol	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Acenaphthene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-15-19	
4-Nitrophenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2,4-Dinitrotoluene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Dibenzofuran	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2,3,5,6-Tetrachlorophenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2,3,4,6-Tetrachlorophenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Diethylphthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
4-Chlorophenyl-phenylether	ND	0.037	EPA 8270D	5-15-19	5-17-19	
4-Nitroaniline	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Fluorene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-15-19	
4,6-Dinitro-2-methylphenol	ND	0.18	EPA 8270D	5-15-19	5-17-19	
n-Nitrosodiphenylamine	ND	0.037	EPA 8270D	5-15-19	5-17-19	
1,2-Diphenylhydrazine	ND	0.037	EPA 8270D	5-15-19	5-17-19	
4-Bromophenyl-phenylether	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Hexachlorobenzene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Pentachlorophenol	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Phenanthrene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-15-19	
Anthracene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-15-19	
Carbazole	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Di-n-butylphthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Fluoranthene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-15-19	
Benzidine	ND	0.37	EPA 8270D	5-15-19	5-17-19	
Pyrene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-15-19	
Butylbenzylphthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
bis-2-Ethylhexyladipate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
3,3'-Dichlorobenzidine	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Benzo[a]anthracene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-15-19	
Chrysene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-15-19	
bis(2-Ethylhexyl)phthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Di-n-octylphthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Benzo[b]fluoranthene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-15-19	
Benzo(j,k)fluoranthene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-15-19	
Benzo[a]pyrene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-15-19	
Indeno[1,2,3-cd]pyrene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-15-19	
Dibenz[a,h]anthracene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-15-19	
Benzo[g,h,i]perylene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-15-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>71</i>	<i>21 - 107</i>				
<i>Phenol-d6</i>	<i>77</i>	<i>30 - 106</i>				
<i>Nitrobenzene-d5</i>	<i>74</i>	<i>28 - 109</i>				
<i>2-Fluorobiphenyl</i>	<i>73</i>	<i>37 - 107</i>				
<i>2,4,6-Tribromophenol</i>	<i>85</i>	<i>39 - 116</i>				
<i>Terphenyl-d14</i>	<i>92</i>	<i>41 - 113</i>				



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**SEMIVOLATILE ORGANICS EPA 8270D/SIM**  
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Matrix: Soil  
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>4A</b>					
<b>Laboratory ID:</b>	<b>05-196-07</b>					
n-Nitrosodimethylamine	ND	0.036	EPA 8270D	5-15-19	5-15-19	
Pyridine	ND	0.36	EPA 8270D	5-15-19	5-15-19	
Phenol	ND	0.036	EPA 8270D	5-15-19	5-15-19	
Aniline	ND	0.18	EPA 8270D	5-15-19	5-15-19	
bis(2-Chloroethyl)ether	ND	0.036	EPA 8270D	5-15-19	5-15-19	
2-Chlorophenol	ND	0.036	EPA 8270D	5-15-19	5-15-19	
1,3-Dichlorobenzene	ND	0.036	EPA 8270D	5-15-19	5-15-19	
1,4-Dichlorobenzene	ND	0.036	EPA 8270D	5-15-19	5-15-19	
Benzyl alcohol	ND	0.18	EPA 8270D	5-15-19	5-15-19	
1,2-Dichlorobenzene	ND	0.036	EPA 8270D	5-15-19	5-15-19	
2-Methylphenol (o-Cresol)	ND	0.036	EPA 8270D	5-15-19	5-15-19	
bis(2-Chloroisopropyl)ether	ND	0.036	EPA 8270D	5-15-19	5-15-19	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.036	EPA 8270D	5-15-19	5-15-19	
n-Nitroso-di-n-propylamine	ND	0.036	EPA 8270D	5-15-19	5-15-19	
Hexachloroethane	ND	0.036	EPA 8270D	5-15-19	5-15-19	
Nitrobenzene	ND	0.036	EPA 8270D	5-15-19	5-15-19	
Isophorone	ND	0.036	EPA 8270D	5-15-19	5-15-19	
2-Nitrophenol	ND	0.036	EPA 8270D	5-15-19	5-15-19	
2,4-Dimethylphenol	ND	0.036	EPA 8270D	5-15-19	5-15-19	
bis(2-Chloroethoxy)methane	ND	0.036	EPA 8270D	5-15-19	5-15-19	
2,4-Dichlorophenol	ND	0.036	EPA 8270D	5-15-19	5-15-19	
1,2,4-Trichlorobenzene	ND	0.036	EPA 8270D	5-15-19	5-15-19	
Naphthalene	ND	0.0072	EPA 8270D/SIM	5-15-19	5-15-19	
4-Chloroaniline	ND	0.18	EPA 8270D	5-15-19	5-15-19	
Hexachlorobutadiene	ND	0.036	EPA 8270D	5-15-19	5-15-19	
4-Chloro-3-methylphenol	ND	0.036	EPA 8270D	5-15-19	5-15-19	
2-Methylnaphthalene	ND	0.0072	EPA 8270D/SIM	5-15-19	5-15-19	
1-Methylnaphthalene	ND	0.0072	EPA 8270D/SIM	5-15-19	5-15-19	
Hexachlorocyclopentadiene	ND	0.036	EPA 8270D	5-15-19	5-15-19	
2,4,6-Trichlorophenol	ND	0.036	EPA 8270D	5-15-19	5-15-19	
2,3-Dichloroaniline	ND	0.036	EPA 8270D	5-15-19	5-15-19	
2,4,5-Trichlorophenol	ND	0.036	EPA 8270D	5-15-19	5-15-19	
2-Chloronaphthalene	ND	0.036	EPA 8270D	5-15-19	5-15-19	
2-Nitroaniline	ND	0.036	EPA 8270D	5-15-19	5-15-19	
1,4-Dinitrobenzene	ND	0.036	EPA 8270D	5-15-19	5-15-19	
Dimethylphthalate	ND	0.036	EPA 8270D	5-15-19	5-15-19	
1,3-Dinitrobenzene	ND	0.036	EPA 8270D	5-15-19	5-15-19	
2,6-Dinitrotoluene	ND	0.036	EPA 8270D	5-15-19	5-15-19	
1,2-Dinitrobenzene	ND	0.036	EPA 8270D	5-15-19	5-15-19	
Acenaphthylene	ND	0.0072	EPA 8270D/SIM	5-15-19	5-15-19	
3-Nitroaniline	ND	0.036	EPA 8270D	5-15-19	5-15-19	





Date of Report: May 22, 2019  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>4A</b>					
Laboratory ID:	05-196-07					
2,4-Dinitrophenol	ND	0.18	EPA 8270D	5-15-19	5-15-19	
Acenaphthene	ND	0.0072	EPA 8270D/SIM	5-15-19	5-15-19	
4-Nitrophenol	ND	0.036	EPA 8270D	5-15-19	5-15-19	
2,4-Dinitrotoluene	ND	0.036	EPA 8270D	5-15-19	5-15-19	
Dibenzofuran	ND	0.036	EPA 8270D	5-15-19	5-15-19	
2,3,5,6-Tetrachlorophenol	ND	0.036	EPA 8270D	5-15-19	5-15-19	
2,3,4,6-Tetrachlorophenol	ND	0.036	EPA 8270D	5-15-19	5-15-19	
Diethylphthalate	ND	0.18	EPA 8270D	5-15-19	5-15-19	
4-Chlorophenyl-phenylether	ND	0.036	EPA 8270D	5-15-19	5-15-19	
4-Nitroaniline	ND	0.036	EPA 8270D	5-15-19	5-15-19	
Fluorene	ND	0.0072	EPA 8270D/SIM	5-15-19	5-15-19	
4,6-Dinitro-2-methylphenol	ND	0.18	EPA 8270D	5-15-19	5-15-19	
n-Nitrosodiphenylamine	ND	0.036	EPA 8270D	5-15-19	5-15-19	
1,2-Diphenylhydrazine	ND	0.036	EPA 8270D	5-15-19	5-15-19	
4-Bromophenyl-phenylether	ND	0.036	EPA 8270D	5-15-19	5-15-19	
Hexachlorobenzene	ND	0.036	EPA 8270D	5-15-19	5-15-19	
Pentachlorophenol	ND	0.18	EPA 8270D	5-15-19	5-15-19	
Phenanthrene	ND	0.0072	EPA 8270D/SIM	5-15-19	5-15-19	
Anthracene	ND	0.0072	EPA 8270D/SIM	5-15-19	5-15-19	
Carbazole	ND	0.036	EPA 8270D	5-15-19	5-15-19	
Di-n-butylphthalate	ND	0.18	EPA 8270D	5-15-19	5-15-19	
Fluoranthene	ND	0.0072	EPA 8270D/SIM	5-15-19	5-15-19	
Benzidine	ND	0.36	EPA 8270D	5-15-19	5-15-19	
Pyrene	ND	0.0072	EPA 8270D/SIM	5-15-19	5-15-19	
Butylbenzylphthalate	ND	0.18	EPA 8270D	5-15-19	5-15-19	
bis-2-Ethylhexyladipate	ND	0.18	EPA 8270D	5-15-19	5-15-19	
3,3'-Dichlorobenzidine	ND	0.18	EPA 8270D	5-15-19	5-15-19	
Benzo[a]anthracene	ND	0.0072	EPA 8270D/SIM	5-15-19	5-15-19	
Chrysene	ND	0.0072	EPA 8270D/SIM	5-15-19	5-15-19	
bis(2-Ethylhexyl)phthalate	ND	0.18	EPA 8270D	5-15-19	5-15-19	
Di-n-octylphthalate	ND	0.18	EPA 8270D	5-15-19	5-15-19	
Benzo[b]fluoranthene	ND	0.0072	EPA 8270D/SIM	5-15-19	5-15-19	
Benzo(j,k)fluoranthene	ND	0.0072	EPA 8270D/SIM	5-15-19	5-15-19	
Benzo[a]pyrene	ND	0.0072	EPA 8270D/SIM	5-15-19	5-15-19	
Indeno[1,2,3-cd]pyrene	ND	0.0072	EPA 8270D/SIM	5-15-19	5-15-19	
Dibenz[a,h]anthracene	ND	0.0072	EPA 8270D/SIM	5-15-19	5-15-19	
Benzo[g,h,i]perylene	ND	0.0072	EPA 8270D/SIM	5-15-19	5-15-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>65</i>	<i>21 - 107</i>				
<i>Phenol-d6</i>	<i>71</i>	<i>30 - 106</i>				
<i>Nitrobenzene-d5</i>	<i>69</i>	<i>28 - 109</i>				
<i>2-Fluorobiphenyl</i>	<i>73</i>	<i>37 - 107</i>				
<i>2,4,6-Tribromophenol</i>	<i>81</i>	<i>39 - 116</i>				
<i>Terphenyl-d14</i>	<i>85</i>	<i>41 - 113</i>				



Date of Report: May 22, 2019  
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 Laboratory Reference: 1905-196  
 Project: 923-1000-005.5000

**SEMIVOLATILE ORGANICS EPA 8270D/SIM**  
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Matrix: Soil  
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>5A</b>					
<b>Laboratory ID:</b>	<b>05-196-09</b>					
n-Nitrosodimethylamine	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Pyridine	ND	0.37	EPA 8270D	5-15-19	5-17-19	
Phenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Aniline	ND	0.18	EPA 8270D	5-15-19	5-17-19	
bis(2-Chloroethyl)ether	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2-Chlorophenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
1,3-Dichlorobenzene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
1,4-Dichlorobenzene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Benzyl alcohol	ND	0.18	EPA 8270D	5-15-19	5-17-19	
1,2-Dichlorobenzene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2-Methylphenol (o-Cresol)	ND	0.037	EPA 8270D	5-15-19	5-17-19	
bis(2-Chloroisopropyl)ether	ND	0.037	EPA 8270D	5-15-19	5-17-19	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.037	EPA 8270D	5-15-19	5-17-19	
n-Nitroso-di-n-propylamine	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Hexachloroethane	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Nitrobenzene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Isophorone	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2-Nitrophenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2,4-Dimethylphenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
bis(2-Chloroethoxy)methane	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2,4-Dichlorophenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
1,2,4-Trichlorobenzene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Naphthalene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-16-19	
4-Chloroaniline	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Hexachlorobutadiene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
4-Chloro-3-methylphenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2-Methylnaphthalene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-16-19	
1-Methylnaphthalene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-16-19	
Hexachlorocyclopentadiene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2,4,6-Trichlorophenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2,3-Dichloroaniline	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2,4,5-Trichlorophenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2-Chloronaphthalene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2-Nitroaniline	ND	0.037	EPA 8270D	5-15-19	5-17-19	
1,4-Dinitrobenzene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Dimethylphthalate	ND	0.037	EPA 8270D	5-15-19	5-17-19	
1,3-Dinitrobenzene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2,6-Dinitrotoluene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
1,2-Dinitrobenzene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Acenaphthylene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-16-19	
3-Nitroaniline	ND	0.037	EPA 8270D	5-15-19	5-17-19	





Date of Report: May 22, 2019  
 Samples Submitted: May 14, 2019  
 Laboratory Reference: 1905-196  
 Project: 923-1000-005.5000

**SEMIVOLATILE ORGANICS EPA 8270D/SIM**  
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>5A</b>					
Laboratory ID:	05-196-09					
2,4-Dinitrophenol	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Acenaphthene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-16-19	
4-Nitrophenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2,4-Dinitrotoluene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Dibenzofuran	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2,3,5,6-Tetrachlorophenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
2,3,4,6-Tetrachlorophenol	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Diethylphthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
4-Chlorophenyl-phenylether	ND	0.037	EPA 8270D	5-15-19	5-17-19	
4-Nitroaniline	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Fluorene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-16-19	
4,6-Dinitro-2-methylphenol	ND	0.18	EPA 8270D	5-15-19	5-17-19	
n-Nitrosodiphenylamine	ND	0.037	EPA 8270D	5-15-19	5-17-19	
1,2-Diphenylhydrazine	ND	0.037	EPA 8270D	5-15-19	5-17-19	
4-Bromophenyl-phenylether	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Hexachlorobenzene	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Pentachlorophenol	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Phenanthrene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-16-19	
Anthracene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-16-19	
Carbazole	ND	0.037	EPA 8270D	5-15-19	5-17-19	
Di-n-butylphthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Fluoranthene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-16-19	
Benzidine	ND	0.37	EPA 8270D	5-15-19	5-17-19	
Pyrene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-16-19	
Butylbenzylphthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
bis-2-Ethylhexyladipate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
3,3'-Dichlorobenzidine	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Benzo[a]anthracene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-16-19	
Chrysene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-16-19	
bis(2-Ethylhexyl)phthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Di-n-octylphthalate	ND	0.18	EPA 8270D	5-15-19	5-17-19	
Benzo[b]fluoranthene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-16-19	
Benzo(j,k)fluoranthene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-16-19	
Benzo[a]pyrene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-16-19	
Indeno[1,2,3-cd]pyrene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-16-19	
Dibenz[a,h]anthracene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-16-19	
Benzo[g,h,i]perylene	ND	0.0073	EPA 8270D/SIM	5-15-19	5-16-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>80</i>	<i>21 - 107</i>				
<i>Phenol-d6</i>	<i>87</i>	<i>30 - 106</i>				
<i>Nitrobenzene-d5</i>	<i>84</i>	<i>28 - 109</i>				
<i>2-Fluorobiphenyl</i>	<i>83</i>	<i>37 - 107</i>				
<i>2,4,6-Tribromophenol</i>	<i>98</i>	<i>39 - 116</i>				
<i>Terphenyl-d14</i>	<i>95</i>	<i>41 - 113</i>				



Date of Report: May 22, 2019  
 Samples Submitted: May 14, 2019  
 Laboratory Reference: 1905-196  
 Project: 923-1000-005.5000

**SEMIVOLATILE ORGANICS EPA 8270D/SIM  
 METHOD BLANK QUALITY CONTROL**

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Matrix: Soil  
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0515S2					
n-Nitrosodimethylamine	ND	0.033	EPA 8270D	5-15-19	5-15-19	
Pyridine	ND	0.33	EPA 8270D	5-15-19	5-15-19	
Phenol	ND	0.033	EPA 8270D	5-15-19	5-15-19	
Aniline	ND	0.17	EPA 8270D	5-15-19	5-15-19	
bis(2-Chloroethyl)ether	ND	0.033	EPA 8270D	5-15-19	5-15-19	
2-Chlorophenol	ND	0.033	EPA 8270D	5-15-19	5-15-19	
1,3-Dichlorobenzene	ND	0.033	EPA 8270D	5-15-19	5-15-19	
1,4-Dichlorobenzene	ND	0.033	EPA 8270D	5-15-19	5-15-19	
Benzyl alcohol	ND	0.17	EPA 8270D	5-15-19	5-15-19	
1,2-Dichlorobenzene	ND	0.033	EPA 8270D	5-15-19	5-15-19	
2-Methylphenol (o-Cresol)	ND	0.033	EPA 8270D	5-15-19	5-15-19	
bis(2-Chloroisopropyl)ether	ND	0.033	EPA 8270D	5-15-19	5-15-19	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.033	EPA 8270D	5-15-19	5-15-19	
n-Nitroso-di-n-propylamine	ND	0.033	EPA 8270D	5-15-19	5-15-19	
Hexachloroethane	ND	0.033	EPA 8270D	5-15-19	5-15-19	
Nitrobenzene	ND	0.033	EPA 8270D	5-15-19	5-15-19	
Isophorone	ND	0.033	EPA 8270D	5-15-19	5-15-19	
2-Nitrophenol	ND	0.033	EPA 8270D	5-15-19	5-15-19	
2,4-Dimethylphenol	ND	0.033	EPA 8270D	5-15-19	5-15-19	
bis(2-Chloroethoxy)methane	ND	0.033	EPA 8270D	5-15-19	5-15-19	
2,4-Dichlorophenol	ND	0.033	EPA 8270D	5-15-19	5-15-19	
1,2,4-Trichlorobenzene	ND	0.033	EPA 8270D	5-15-19	5-15-19	
Naphthalene	ND	0.0067	EPA 8270D/SIM	5-15-19	5-15-19	
4-Chloroaniline	ND	0.17	EPA 8270D	5-15-19	5-15-19	
Hexachlorobutadiene	ND	0.033	EPA 8270D	5-15-19	5-15-19	
4-Chloro-3-methylphenol	ND	0.033	EPA 8270D	5-15-19	5-15-19	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	5-15-19	5-15-19	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	5-15-19	5-15-19	
Hexachlorocyclopentadiene	ND	0.033	EPA 8270D	5-15-19	5-15-19	
2,4,6-Trichlorophenol	ND	0.033	EPA 8270D	5-15-19	5-15-19	
2,3-Dichloroaniline	ND	0.033	EPA 8270D	5-15-19	5-15-19	
2,4,5-Trichlorophenol	ND	0.033	EPA 8270D	5-15-19	5-15-19	
2-Chloronaphthalene	ND	0.033	EPA 8270D	5-15-19	5-15-19	
2-Nitroaniline	ND	0.033	EPA 8270D	5-15-19	5-15-19	
1,4-Dinitrobenzene	ND	0.033	EPA 8270D	5-15-19	5-15-19	
Dimethylphthalate	ND	0.033	EPA 8270D	5-15-19	5-15-19	
1,3-Dinitrobenzene	ND	0.033	EPA 8270D	5-15-19	5-15-19	
2,6-Dinitrotoluene	ND	0.033	EPA 8270D	5-15-19	5-15-19	
1,2-Dinitrobenzene	ND	0.033	EPA 8270D	5-15-19	5-15-19	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	5-15-19	5-15-19	
3-Nitroaniline	ND	0.033	EPA 8270D	5-15-19	5-15-19	



OnSite Environmental, Inc. 14648 NE 95<sup>th</sup> Street, Redmond, WA 98052 (425) 883-3881

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: May 22, 2019  
 Samples Submitted: May 14, 2019  
 Laboratory Reference: 1905-196  
 Project: 923-1000-005.5000

**SEMIVOLATILE ORGANICS EPA 8270D/SIM  
 METHOD BLANK QUALITY CONTROL**

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0515S2					
2,4-Dinitrophenol	ND	0.17	EPA 8270D	5-15-19	5-15-19	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	5-15-19	5-15-19	
4-Nitrophenol	ND	0.033	EPA 8270D	5-15-19	5-15-19	
2,4-Dinitrotoluene	ND	0.033	EPA 8270D	5-15-19	5-15-19	
Dibenzofuran	ND	0.033	EPA 8270D	5-15-19	5-15-19	
2,3,5,6-Tetrachlorophenol	ND	0.033	EPA 8270D	5-15-19	5-15-19	
2,3,4,6-Tetrachlorophenol	ND	0.033	EPA 8270D	5-15-19	5-15-19	
Diethylphthalate	ND	0.17	EPA 8270D	5-15-19	5-15-19	
4-Chlorophenyl-phenylether	ND	0.033	EPA 8270D	5-15-19	5-15-19	
4-Nitroaniline	ND	0.033	EPA 8270D	5-15-19	5-15-19	
Fluorene	ND	0.0067	EPA 8270D/SIM	5-15-19	5-15-19	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	5-15-19	5-15-19	
n-Nitrosodiphenylamine	ND	0.033	EPA 8270D	5-15-19	5-15-19	
1,2-Diphenylhydrazine	ND	0.033	EPA 8270D	5-15-19	5-15-19	
4-Bromophenyl-phenylether	ND	0.033	EPA 8270D	5-15-19	5-15-19	
Hexachlorobenzene	ND	0.033	EPA 8270D	5-15-19	5-15-19	
Pentachlorophenol	ND	0.17	EPA 8270D	5-15-19	5-15-19	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	5-15-19	5-15-19	
Anthracene	ND	0.0067	EPA 8270D/SIM	5-15-19	5-15-19	
Carbazole	ND	0.033	EPA 8270D	5-15-19	5-15-19	
Di-n-butylphthalate	ND	0.17	EPA 8270D	5-15-19	5-15-19	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	5-15-19	5-15-19	
Benzidine	ND	0.33	EPA 8270D	5-15-19	5-15-19	
Pyrene	ND	0.0067	EPA 8270D/SIM	5-15-19	5-15-19	
Butylbenzylphthalate	ND	0.17	EPA 8270D	5-15-19	5-15-19	
bis-2-Ethylhexyladipate	ND	0.17	EPA 8270D	5-15-19	5-15-19	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	5-15-19	5-15-19	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	5-15-19	5-15-19	
Chrysene	ND	0.0067	EPA 8270D/SIM	5-15-19	5-15-19	
bis(2-Ethylhexyl)phthalate	ND	0.17	EPA 8270D	5-15-19	5-15-19	
Di-n-octylphthalate	ND	0.17	EPA 8270D	5-15-19	5-15-19	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	5-15-19	5-15-19	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	5-15-19	5-15-19	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	5-15-19	5-15-19	
Indeno[1,2,3-cd]pyrene	ND	0.0067	EPA 8270D/SIM	5-15-19	5-15-19	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	5-15-19	5-15-19	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	5-15-19	5-15-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>71</i>	<i>21 - 107</i>				
<i>Phenol-d6</i>	<i>78</i>	<i>30 - 106</i>				
<i>Nitrobenzene-d5</i>	<i>74</i>	<i>28 - 109</i>				
<i>2-Fluorobiphenyl</i>	<i>75</i>	<i>37 - 107</i>				
<i>2,4,6-Tribromophenol</i>	<i>90</i>	<i>39 - 116</i>				
<i>Terphenyl-d14</i>	<i>101</i>	<i>41 - 113</i>				



Date of Report: May 22, 2019  
 Samples Submitted: May 14, 2019  
 Laboratory Reference: 1905-196  
 Project: 923-1000-005.5000

**SEMIVOLATILE ORGANICS EPA 8270D/SIM  
 MS/MSD QUALITY CONTROL**

Matrix: Soil  
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery		RPD	RPD	Limit	Flags
	MS	MSD	MS	MSD	Result	Recovery	Limits	RPD	Limit				
<b>MATRIX SPIKES</b>													
Laboratory ID:	05-196-07												
	MS	MSD	MS	MSD		MS	MSD						
Phenol	<b>0.966</b>	<b>1.07</b>	1.33	1.33	ND	73	80	30 - 108	10			34	
2-Chlorophenol	<b>0.969</b>	<b>1.10</b>	1.33	1.33	ND	73	83	30 - 113	13			38	
1,4-Dichlorobenzene	<b>0.462</b>	<b>0.517</b>	0.667	0.667	ND	69	78	24 - 116	11			36	
n-Nitroso-di-n-propylamine	<b>0.465</b>	<b>0.509</b>	0.667	0.667	ND	70	76	34 - 112	9			34	
1,2,4-Trichlorobenzene	<b>0.480</b>	<b>0.527</b>	0.667	0.667	ND	72	79	34 - 115	9			37	
4-Chloro-3-methylphenol	<b>1.18</b>	<b>1.21</b>	1.33	1.33	ND	89	91	41 - 117	3			29	
Acenaphthene	<b>0.555</b>	<b>0.563</b>	0.667	0.667	ND	83	84	41 - 111	1			30	
4-Nitrophenol	<b>1.37</b>	<b>1.34</b>	1.33	1.33	ND	103	101	30 - 127	2			32	
2,4-Dinitrotoluene	<b>0.582</b>	<b>0.574</b>	0.667	0.667	ND	87	86	32 - 114	1			31	
Pentachlorophenol	<b>1.39</b>	<b>1.36</b>	1.33	1.33	ND	105	102	36 - 147	2			34	
Pyrene	<b>0.590</b>	<b>0.616</b>	0.667	0.667	ND	88	92	33 - 127	4			31	
<i>Surrogate:</i>													
2-Fluorophenol						70	78	21 - 107					
Phenol-d6						75	82	30 - 106					
Nitrobenzene-d5						74	82	28 - 109					
2-Fluorobiphenyl						76	84	37 - 107					
2,4,6-Tribromophenol						92	88	39 - 116					
Terphenyl-d14						88	90	41 - 113					



Date of Report: May 22, 2019  
 Samples Submitted: May 14, 2019  
 Laboratory Reference: 1905-196  
 Project: 923-1000-005.5000

### PCBs EPA 8082A

Matrix: Soil  
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>1A</b>					
Laboratory ID:	05-196-01					
Aroclor 1016	ND	0.053	EPA 8082A	5-15-19	5-21-19	
Aroclor 1221	ND	0.053	EPA 8082A	5-15-19	5-21-19	
Aroclor 1232	ND	0.053	EPA 8082A	5-15-19	5-21-19	
Aroclor 1242	ND	0.053	EPA 8082A	5-15-19	5-21-19	
Aroclor 1248	ND	0.053	EPA 8082A	5-15-19	5-21-19	
Aroclor 1254	ND	0.053	EPA 8082A	5-15-19	5-21-19	
Aroclor 1260	ND	0.053	EPA 8082A	5-15-19	5-21-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
DCB	88	37-122				
<b>Client ID:</b>	<b>2A</b>					
Laboratory ID:	05-196-03					
Aroclor 1016	ND	0.053	EPA 8082A	5-15-19	5-21-19	
Aroclor 1221	ND	0.053	EPA 8082A	5-15-19	5-21-19	
Aroclor 1232	ND	0.053	EPA 8082A	5-15-19	5-21-19	
Aroclor 1242	ND	0.053	EPA 8082A	5-15-19	5-21-19	
Aroclor 1248	ND	0.053	EPA 8082A	5-15-19	5-21-19	
Aroclor 1254	ND	0.053	EPA 8082A	5-15-19	5-21-19	
Aroclor 1260	ND	0.053	EPA 8082A	5-15-19	5-21-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
DCB	82	37-122				
<b>Client ID:</b>	<b>3A</b>					
Laboratory ID:	05-196-05					
Aroclor 1016	ND	0.055	EPA 8082A	5-15-19	5-21-19	
Aroclor 1221	ND	0.055	EPA 8082A	5-15-19	5-21-19	
Aroclor 1232	ND	0.055	EPA 8082A	5-15-19	5-21-19	
Aroclor 1242	ND	0.055	EPA 8082A	5-15-19	5-21-19	
Aroclor 1248	ND	0.055	EPA 8082A	5-15-19	5-21-19	
Aroclor 1254	ND	0.055	EPA 8082A	5-15-19	5-21-19	
Aroclor 1260	ND	0.055	EPA 8082A	5-15-19	5-21-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
DCB	80	37-122				



Date of Report: May 22, 2019  
 Samples Submitted: May 14, 2019  
 Laboratory Reference: 1905-196  
 Project: 923-1000-005.5000

### PCBs EPA 8082A

Matrix: Soil  
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>4A</b>					
Laboratory ID:	05-196-07					
Aroclor 1016	<b>ND</b>	0.054	EPA 8082A	5-15-19	5-21-19	
Aroclor 1221	<b>ND</b>	0.054	EPA 8082A	5-15-19	5-21-19	
Aroclor 1232	<b>ND</b>	0.054	EPA 8082A	5-15-19	5-21-19	
Aroclor 1242	<b>ND</b>	0.054	EPA 8082A	5-15-19	5-21-19	
Aroclor 1248	<b>ND</b>	0.054	EPA 8082A	5-15-19	5-21-19	
Aroclor 1254	<b>ND</b>	0.054	EPA 8082A	5-15-19	5-21-19	
Aroclor 1260	<b>ND</b>	0.054	EPA 8082A	5-15-19	5-21-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>DCB</i>	<i>86</i>	<i>37-122</i>				
<b>Client ID:</b>	<b>5A</b>					
Laboratory ID:	05-196-09					
Aroclor 1016	<b>ND</b>	0.055	EPA 8082A	5-15-19	5-21-19	
Aroclor 1221	<b>ND</b>	0.055	EPA 8082A	5-15-19	5-21-19	
Aroclor 1232	<b>ND</b>	0.055	EPA 8082A	5-15-19	5-21-19	
Aroclor 1242	<b>ND</b>	0.055	EPA 8082A	5-15-19	5-21-19	
Aroclor 1248	<b>ND</b>	0.055	EPA 8082A	5-15-19	5-21-19	
Aroclor 1254	<b>ND</b>	0.055	EPA 8082A	5-15-19	5-21-19	
Aroclor 1260	<b>ND</b>	0.055	EPA 8082A	5-15-19	5-21-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>DCB</i>	<i>78</i>	<i>37-122</i>				



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**PCBs EPA 8082A  
 QUALITY CONTROL**

Matrix: Soil  
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>METHOD BLANK</b>						
Laboratory ID:	MB0515S2					
Aroclor 1016	<b>ND</b>	0.050	EPA 8082A	5-15-19	5-21-19	
Aroclor 1221	<b>ND</b>	0.050	EPA 8082A	5-15-19	5-21-19	
Aroclor 1232	<b>ND</b>	0.050	EPA 8082A	5-15-19	5-21-19	
Aroclor 1242	<b>ND</b>	0.050	EPA 8082A	5-15-19	5-21-19	
Aroclor 1248	<b>ND</b>	0.050	EPA 8082A	5-15-19	5-21-19	
Aroclor 1254	<b>ND</b>	0.050	EPA 8082A	5-15-19	5-21-19	
Aroclor 1260	<b>ND</b>	0.050	EPA 8082A	5-15-19	5-21-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>		<i>Control Limits</i>			
<i>DCB</i>	87		37-122			

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
<b>SPIKE BLANKS</b>											
Laboratory ID:	SB0515S2										
	SB	SBD	SB	SBD		SB	SBD				
Aroclor 1260	<b>0.481</b>	<b>0.515</b>	0.500	0.500	N/A	<b>96</b>	<b>103</b>	49-120	7	18	
<i>Surrogate:</i>											
<i>DCB</i>						84	88	37-122			





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**ORGANOCHLORINE  
 PESTICIDES EPA 8081B**

Matrix: Soil  
 Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>1A</b>					
Laboratory ID:	05-196-01					
alpha-BHC	ND	5.3	EPA 8081B	5-15-19	5-21-19	
gamma-BHC	ND	5.3	EPA 8081B	5-15-19	5-21-19	
beta-BHC	ND	5.3	EPA 8081B	5-15-19	5-21-19	
delta-BHC	ND	5.3	EPA 8081B	5-15-19	5-21-19	
Heptachlor	ND	5.3	EPA 8081B	5-15-19	5-21-19	
Aldrin	ND	5.3	EPA 8081B	5-15-19	5-21-19	
Heptachlor Epoxide	ND	5.3	EPA 8081B	5-15-19	5-21-19	
gamma-Chlordane	ND	11	EPA 8081B	5-15-19	5-21-19	
alpha-Chlordane	ND	11	EPA 8081B	5-15-19	5-21-19	
4,4'-DDE	ND	11	EPA 8081B	5-15-19	5-21-19	
Endosulfan I	ND	5.3	EPA 8081B	5-15-19	5-21-19	
Dieldrin	ND	11	EPA 8081B	5-15-19	5-21-19	
Endrin	ND	11	EPA 8081B	5-15-19	5-21-19	
4,4'-DDD	ND	11	EPA 8081B	5-15-19	5-21-19	
Endosulfan II	ND	11	EPA 8081B	5-15-19	5-21-19	
4,4'-DDT	ND	11	EPA 8081B	5-15-19	5-21-19	
Endrin Aldehyde	ND	11	EPA 8081B	5-15-19	5-21-19	
Methoxychlor	ND	11	EPA 8081B	5-15-19	5-21-19	
Endosulfan Sulfate	ND	11	EPA 8081B	5-15-19	5-21-19	
Endrin Ketone	ND	11	EPA 8081B	5-15-19	5-21-19	
Toxaphene	ND	53	EPA 8081B	5-15-19	5-21-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	62	31-97				
DCB	69	26-105				



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**ORGANOCHLORINE  
 PESTICIDES EPA 8081B**

Matrix: Soil  
 Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>2A</b>					
Laboratory ID:	05-196-03					
alpha-BHC	ND	5.3	EPA 8081B	5-15-19	5-21-19	
gamma-BHC	ND	5.3	EPA 8081B	5-15-19	5-21-19	
beta-BHC	ND	5.3	EPA 8081B	5-15-19	5-21-19	
delta-BHC	ND	5.3	EPA 8081B	5-15-19	5-21-19	
Heptachlor	ND	5.3	EPA 8081B	5-15-19	5-21-19	
Aldrin	ND	5.3	EPA 8081B	5-15-19	5-21-19	
Heptachlor Epoxide	ND	5.3	EPA 8081B	5-15-19	5-21-19	
gamma-Chlordane	ND	11	EPA 8081B	5-15-19	5-21-19	
alpha-Chlordane	ND	11	EPA 8081B	5-15-19	5-21-19	
4,4'-DDE	ND	11	EPA 8081B	5-15-19	5-21-19	
Endosulfan I	ND	5.3	EPA 8081B	5-15-19	5-21-19	
Dieldrin	ND	11	EPA 8081B	5-15-19	5-21-19	
Endrin	ND	11	EPA 8081B	5-15-19	5-21-19	
4,4'-DDD	ND	11	EPA 8081B	5-15-19	5-21-19	
Endosulfan II	ND	11	EPA 8081B	5-15-19	5-21-19	
4,4'-DDT	ND	11	EPA 8081B	5-15-19	5-21-19	
Endrin Aldehyde	ND	11	EPA 8081B	5-15-19	5-21-19	
Methoxychlor	ND	11	EPA 8081B	5-15-19	5-21-19	
Endosulfan Sulfate	ND	11	EPA 8081B	5-15-19	5-21-19	
Endrin Ketone	ND	11	EPA 8081B	5-15-19	5-21-19	
Toxaphene	ND	53	EPA 8081B	5-15-19	5-21-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	59	31-97				
DCB	67	26-105				



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**ORGANOCHLORINE  
 PESTICIDES EPA 8081B**

Matrix: Soil  
 Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>3A</b>					
Laboratory ID:	05-196-05					
alpha-BHC	ND	5.5	EPA 8081B	5-15-19	5-21-19	
gamma-BHC	ND	5.5	EPA 8081B	5-15-19	5-21-19	
beta-BHC	ND	5.5	EPA 8081B	5-15-19	5-21-19	
delta-BHC	ND	5.5	EPA 8081B	5-15-19	5-21-19	
Heptachlor	ND	5.5	EPA 8081B	5-15-19	5-21-19	
Aldrin	ND	5.5	EPA 8081B	5-15-19	5-21-19	
Heptachlor Epoxide	ND	5.5	EPA 8081B	5-15-19	5-21-19	
gamma-Chlordane	ND	11	EPA 8081B	5-15-19	5-21-19	
alpha-Chlordane	ND	11	EPA 8081B	5-15-19	5-21-19	
4,4'-DDE	ND	11	EPA 8081B	5-15-19	5-21-19	
Endosulfan I	ND	5.5	EPA 8081B	5-15-19	5-21-19	
Dieldrin	ND	11	EPA 8081B	5-15-19	5-21-19	
Endrin	ND	11	EPA 8081B	5-15-19	5-21-19	
4,4'-DDD	ND	11	EPA 8081B	5-15-19	5-21-19	
Endosulfan II	ND	11	EPA 8081B	5-15-19	5-21-19	
4,4'-DDT	ND	11	EPA 8081B	5-15-19	5-21-19	
Endrin Aldehyde	ND	11	EPA 8081B	5-15-19	5-21-19	
Methoxychlor	ND	11	EPA 8081B	5-15-19	5-21-19	
Endosulfan Sulfate	ND	11	EPA 8081B	5-15-19	5-21-19	
Endrin Ketone	ND	11	EPA 8081B	5-15-19	5-21-19	
Toxaphene	ND	55	EPA 8081B	5-15-19	5-21-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	59	31-97				
DCB	68	26-105				



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**ORGANOCHLORINE  
 PESTICIDES EPA 8081B**

Matrix: Soil  
 Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>4A</b>					
Laboratory ID:	05-196-07					
alpha-BHC	ND	5.4	EPA 8081B	5-15-19	5-21-19	
gamma-BHC	ND	5.4	EPA 8081B	5-15-19	5-21-19	
beta-BHC	ND	5.4	EPA 8081B	5-15-19	5-21-19	
delta-BHC	ND	5.4	EPA 8081B	5-15-19	5-21-19	
Heptachlor	ND	5.4	EPA 8081B	5-15-19	5-21-19	
Aldrin	ND	5.4	EPA 8081B	5-15-19	5-21-19	
Heptachlor Epoxide	ND	5.4	EPA 8081B	5-15-19	5-21-19	
gamma-Chlordane	ND	11	EPA 8081B	5-15-19	5-21-19	
alpha-Chlordane	ND	11	EPA 8081B	5-15-19	5-21-19	
4,4'-DDE	ND	11	EPA 8081B	5-15-19	5-21-19	
Endosulfan I	ND	5.4	EPA 8081B	5-15-19	5-21-19	
Dieldrin	ND	11	EPA 8081B	5-15-19	5-21-19	
Endrin	ND	11	EPA 8081B	5-15-19	5-21-19	
4,4'-DDD	ND	11	EPA 8081B	5-15-19	5-21-19	
Endosulfan II	ND	11	EPA 8081B	5-15-19	5-21-19	
4,4'-DDT	ND	11	EPA 8081B	5-15-19	5-21-19	
Endrin Aldehyde	ND	11	EPA 8081B	5-15-19	5-21-19	
Methoxychlor	ND	11	EPA 8081B	5-15-19	5-21-19	
Endosulfan Sulfate	ND	11	EPA 8081B	5-15-19	5-21-19	
Endrin Ketone	ND	11	EPA 8081B	5-15-19	5-21-19	
Toxaphene	ND	54	EPA 8081B	5-15-19	5-21-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	66	31-97				
DCB	72	26-105				



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**ORGANOCHLORINE  
 PESTICIDES EPA 8081B**

Matrix: Soil  
 Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>5A</b>					
Laboratory ID:	05-196-09					
alpha-BHC	ND	5.5	EPA 8081B	5-15-19	5-21-19	
gamma-BHC	ND	5.5	EPA 8081B	5-15-19	5-21-19	
beta-BHC	ND	5.5	EPA 8081B	5-15-19	5-21-19	
delta-BHC	ND	5.5	EPA 8081B	5-15-19	5-21-19	
Heptachlor	ND	5.5	EPA 8081B	5-15-19	5-21-19	
Aldrin	ND	5.5	EPA 8081B	5-15-19	5-21-19	
Heptachlor Epoxide	ND	5.5	EPA 8081B	5-15-19	5-21-19	
gamma-Chlordane	ND	11	EPA 8081B	5-15-19	5-21-19	
alpha-Chlordane	ND	11	EPA 8081B	5-15-19	5-21-19	
4,4'-DDE	ND	11	EPA 8081B	5-15-19	5-21-19	
Endosulfan I	ND	5.5	EPA 8081B	5-15-19	5-21-19	
Dieldrin	ND	11	EPA 8081B	5-15-19	5-21-19	
Endrin	ND	11	EPA 8081B	5-15-19	5-21-19	
4,4'-DDD	ND	11	EPA 8081B	5-15-19	5-21-19	
Endosulfan II	ND	11	EPA 8081B	5-15-19	5-21-19	
4,4'-DDT	ND	11	EPA 8081B	5-15-19	5-21-19	
Endrin Aldehyde	ND	11	EPA 8081B	5-15-19	5-21-19	
Methoxychlor	ND	11	EPA 8081B	5-15-19	5-21-19	
Endosulfan Sulfate	ND	11	EPA 8081B	5-15-19	5-21-19	
Endrin Ketone	ND	11	EPA 8081B	5-15-19	5-21-19	
Toxaphene	ND	55	EPA 8081B	5-15-19	5-21-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
TCMX	59	31-97				
DCB	66	26-105				



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**ORGANOCHLORINE  
 PESTICIDES EPA 8081B  
 METHOD BLANK QUALITY CONTROL**

Matrix: Soil  
 Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>METHOD BLANK</b>						
Laboratory ID:	MB0515S2					
alpha-BHC	ND	5.0	EPA 8081B	5-15-19	5-21-19	
gamma-BHC	ND	5.0	EPA 8081B	5-15-19	5-21-19	
beta-BHC	ND	5.0	EPA 8081B	5-15-19	5-21-19	
delta-BHC	ND	5.0	EPA 8081B	5-15-19	5-21-19	
Heptachlor	ND	5.0	EPA 8081B	5-15-19	5-21-19	
Aldrin	ND	5.0	EPA 8081B	5-15-19	5-21-19	
Heptachlor Epoxide	ND	5.0	EPA 8081B	5-15-19	5-21-19	
gamma-Chlordane	ND	10	EPA 8081B	5-15-19	5-21-19	
alpha-Chlordane	ND	10	EPA 8081B	5-15-19	5-21-19	
4,4'-DDE	ND	10	EPA 8081B	5-15-19	5-21-19	
Endosulfan I	ND	5.0	EPA 8081B	5-15-19	5-21-19	
Dieldrin	ND	10	EPA 8081B	5-15-19	5-21-19	
Endrin	ND	10	EPA 8081B	5-15-19	5-21-19	
4,4'-DDD	ND	10	EPA 8081B	5-15-19	5-21-19	
Endosulfan II	ND	10	EPA 8081B	5-15-19	5-21-19	
4,4'-DDT	ND	10	EPA 8081B	5-15-19	5-21-19	
Endrin Aldehyde	ND	10	EPA 8081B	5-15-19	5-21-19	
Methoxychlor	ND	10	EPA 8081B	5-15-19	5-21-19	
Endosulfan Sulfate	ND	10	EPA 8081B	5-15-19	5-21-19	
Endrin Ketone	ND	10	EPA 8081B	5-15-19	5-21-19	
Toxaphene	ND	50	EPA 8081B	5-15-19	5-21-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>TCMX</i>	<i>70</i>	<i>31-97</i>				
<i>DCB</i>	<i>80</i>	<i>26-105</i>				



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**ORGANOCHLORINE  
 PESTICIDES EPA 8081B  
 SB/SBD QUALITY CONTROL**

Matrix: Soil  
 Units: ug/Kg (ppb)

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
	SB	SBD	SB	SBD	Result	Recovery	Limits	Limit			
<b>SPIKE BLANKS</b>											
Laboratory ID:	SB0515S2										
	SB	SBD	SB	SBD		SB	SBD				
alpha-BHC	78.0	81.0	100	100	N/A	78	81	55-94	4	15	
gamma-BHC	80.3	81.0	100	100	N/A	80	81	55-97	1	15	
beta-BHC	72.0	73.3	100	100	N/A	72	73	50-110	2	15	
delta-BHC	77.6	79.1	100	100	N/A	78	79	50-98	2	16	
Heptachlor	72.1	74.5	100	100	N/A	72	74	54-111	3	15	
Aldrin	72.8	75.7	100	100	N/A	73	76	51-103	4	15	
Heptachlor Epoxide	71.0	73.8	100	100	N/A	71	74	49-114	4	15	
gamma-Chlordane	77.6	77.5	100	100	N/A	78	78	51-110	0	15	
alpha-Chlordane	77.6	76.1	100	100	N/A	78	76	47-114	2	15	
4,4'-DDE	81.7	84.8	100	100	N/A	82	85	58-103	4	15	
Endosulfan I	72.6	72.2	100	100	N/A	73	72	56-109	1	15	
Dieldrin	75.0	74.8	100	100	N/A	75	75	51-112	0	15	
Endrin	74.0	74.7	100	100	N/A	74	75	49-117	1	15	
4,4'-DDD	86.2	87.4	100	100	N/A	86	87	56-110	1	15	
Endosulfan II	78.3	78.0	100	100	N/A	78	78	51-116	0	15	
4,4'-DDT	88.0	91.1	100	100	N/A	88	91	51-110	3	15	
Endrin Aldehyde	75.4	74.8	100	100	N/A	75	75	54-115	1	15	
Methoxychlor	82.8	87.0	100	100	N/A	83	87	53-115	5	15	
Endosulfan Sulfate	80.7	80.4	100	100	N/A	81	80	52-109	0	15	
Endrin Ketone	76.8	79.9	100	100	N/A	77	80	51-112	4	15	
Surrogate:											
TCMX						65	69	31-97			
DCB						79	81	26-105			





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**CHLORINATED ACID  
 HERBICIDES EPA 8151A**

Matrix: Soil  
 Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>1A</b>					
Laboratory ID:	05-196-01					
Dalapon	ND	200	EPA 8151A	5-19-19	5-21-19	
Dicamba	ND	10	EPA 8151A	5-19-19	5-21-19	
MCPPP	ND	1000	EPA 8151A	5-19-19	5-21-19	
MCPA	ND	2500	EPA 8151A	5-19-19	5-21-19	
Dichlorprop	ND	76	EPA 8151A	5-19-19	5-21-19	
2,4-D	ND	10	EPA 8151A	5-19-19	5-21-19	
Pentachlorophenol	ND	5.1	EPA 8151A	5-19-19	5-21-19	
2,4,5-TP (Silvex)	ND	10	EPA 8151A	5-19-19	5-21-19	
2,4,5-T	ND	10	EPA 8151A	5-19-19	5-21-19	
2,4-DB	ND	10	EPA 8151A	5-19-19	5-21-19	
Dinoseb	ND	10	EPA 8151A	5-19-19	5-21-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
DCAA	92	10-114				
<b>Client ID:</b>	<b>2A</b>					
Laboratory ID:	05-196-03					
Dalapon	ND	190	EPA 8151A	5-19-19	5-21-19	
Dicamba	ND	10	EPA 8151A	5-19-19	5-21-19	
MCPPP	ND	990	EPA 8151A	5-19-19	5-21-19	
MCPA	ND	2500	EPA 8151A	5-19-19	5-21-19	
Dichlorprop	ND	75	EPA 8151A	5-19-19	5-21-19	
2,4-D	ND	10	EPA 8151A	5-19-19	5-21-19	
Pentachlorophenol	ND	5.0	EPA 8151A	5-19-19	5-21-19	
2,4,5-TP (Silvex)	ND	10	EPA 8151A	5-19-19	5-21-19	
2,4,5-T	ND	10	EPA 8151A	5-19-19	5-21-19	
2,4-DB	ND	10	EPA 8151A	5-19-19	5-21-19	
Dinoseb	ND	10	EPA 8151A	5-19-19	5-21-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
DCAA	84	10-114				



Date of Report: May 22, 2019  
 Samples Submitted: May 14, 2019  
 Laboratory Reference: 1905-196  
 Project: 923-1000-005.5000

**CHLORINATED ACID  
 HERBICIDES EPA 8151A**

Matrix: Soil  
 Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>3A</b>					
Laboratory ID:	05-196-05					
Dalapon	ND	200	EPA 8151A	5-19-19	5-21-19	
Dicamba	ND	10	EPA 8151A	5-19-19	5-21-19	
MCPPP	ND	1000	EPA 8151A	5-19-19	5-21-19	
MCPA	ND	2600	EPA 8151A	5-19-19	5-21-19	
Dichlorprop	ND	78	EPA 8151A	5-19-19	5-21-19	
2,4-D	ND	10	EPA 8151A	5-19-19	5-21-19	
Pentachlorophenol	ND	5.2	EPA 8151A	5-19-19	5-21-19	
2,4,5-TP (Silvex)	ND	10	EPA 8151A	5-19-19	5-21-19	
2,4,5-T	ND	10	EPA 8151A	5-19-19	5-21-19	
2,4-DB	ND	10	EPA 8151A	5-19-19	5-21-19	
Dinoseb	ND	10	EPA 8151A	5-19-19	5-21-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
DCAA	83	10-114				
<b>Client ID:</b>	<b>4A</b>					
Laboratory ID:	05-196-07					
Dalapon	ND	200	EPA 8151A	5-19-19	5-21-19	
Dicamba	ND	10	EPA 8151A	5-19-19	5-21-19	
MCPPP	ND	1000	EPA 8151A	5-19-19	5-21-19	
MCPA	ND	2500	EPA 8151A	5-19-19	5-21-19	
Dichlorprop	ND	77	EPA 8151A	5-19-19	5-21-19	
2,4-D	ND	10	EPA 8151A	5-19-19	5-21-19	
Pentachlorophenol	ND	5.1	EPA 8151A	5-19-19	5-21-19	
2,4,5-TP (Silvex)	ND	10	EPA 8151A	5-19-19	5-21-19	
2,4,5-T	ND	10	EPA 8151A	5-19-19	5-21-19	
2,4-DB	ND	10	EPA 8151A	5-19-19	5-21-19	
Dinoseb	ND	10	EPA 8151A	5-19-19	5-21-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
DCAA	73	10-114				



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**CHLORINATED ACID  
 HERBICIDES EPA 8151A**

Matrix: Soil  
 Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>5A</b>					
Laboratory ID:	05-196-09					
Dalapon	<b>ND</b>	200	EPA 8151A	5-19-19	5-21-19	
Dicamba	<b>ND</b>	10	EPA 8151A	5-19-19	5-21-19	
MCPP	<b>ND</b>	1000	EPA 8151A	5-19-19	5-21-19	
MCPA	<b>ND</b>	2600	EPA 8151A	5-19-19	5-21-19	
Dichlorprop	<b>ND</b>	78	EPA 8151A	5-19-19	5-21-19	
2,4-D	<b>ND</b>	10	EPA 8151A	5-19-19	5-21-19	
Pentachlorophenol	<b>ND</b>	5.2	EPA 8151A	5-19-19	5-21-19	
2,4,5-TP (Silvex)	<b>ND</b>	10	EPA 8151A	5-19-19	5-21-19	
2,4,5-T	<b>ND</b>	10	EPA 8151A	5-19-19	5-21-19	
2,4-DB	<b>ND</b>	10	EPA 8151A	5-19-19	5-21-19	
Dinoseb	<b>ND</b>	10	EPA 8151A	5-19-19	5-21-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
DCAA	86	10-114				



Date of Report: May 22, 2019  
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**CHLORINATED ACID  
 HERBICIDES EPA 8151A  
 QUALITY CONTROL**

Matrix: Soil  
 Units: ug/Kg (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>METHOD BLANK</b>						
Laboratory ID:	MB0519S1					
Dalapon	ND	180	EPA 8151A	5-19-19	5-22-19	
Dicamba	ND	9.4	EPA 8151A	5-19-19	5-22-19	
MCPP	ND	940	EPA 8151A	5-19-19	5-22-19	
MCPA	ND	2300	EPA 8151A	5-19-19	5-22-19	
Dichlorprop	ND	71	EPA 8151A	5-19-19	5-22-19	
2,4-D	ND	9.4	EPA 8151A	5-19-19	5-22-19	
Pentachlorophenol	ND	4.8	EPA 8151A	5-19-19	5-22-19	
2,4,5-TP (Silvex)	ND	9.5	EPA 8151A	5-19-19	5-22-19	
2,4,5-T	ND	9.5	EPA 8151A	5-19-19	5-22-19	
2,4-DB	ND	9.5	EPA 8151A	5-19-19	5-22-19	
Dinoseb	ND	9.5	EPA 8151A	5-19-19	5-22-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
DCAA	95	10-114				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
<b>SPIKE BLANKS</b>								
Laboratory ID:	SB0519S1							
	SB	SBD	SB	SBD	SB	SBD		
Dalapon	697	758	1250	1250	N/A	56 61	10-140	8 35
Dicamba	194	201	250	250	N/A	78 80	35-117	4 27
MCPP	22100	21100	25000	25000	N/A	88 84	40-140	5 35
MCPA	21800	20200	25000	25000	N/A	87 81	40-140	8 35
Dichlorprop	241	228	250	250	N/A	96 91	40-140	6 35
2,4-D	278	255	250	250	N/A	111 102	22-111	9 24
Pentachlorophenol	21.3	20.2	25.0	25.0	N/A	85 81	24-117	5 33
2,4,5-TP (Silvex)	295	277	250	250	N/A	118 111	40-140	6 35
2,4,5-T	326	315	250	250	N/A	130 126	18-137	3 25
2,4-DB	312	280	250	250	N/A	125 112	10-147	11 22
Dinoseb	182	175	250	250	N/A	73 70	40-140	4 35
<i>Surrogate:</i>								
DCAA						98 91	10-114	



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 Samples Submitted: May 14, 2019  
 Laboratory Reference: 1905-196  
 Project: 923-1000-005.5000

**TOTAL METALS  
 EPA 6010D/7471B**

Matrix: Soil  
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>Client ID:</b>	<b>1A</b>					
Laboratory ID:	05-196-01					
Arsenic	<b>ND</b>	11	EPA 6010D	5-16-19	5-16-19	
Cadmium	<b>ND</b>	0.53	EPA 6010D	5-16-19	5-16-19	
Chromium	<b>41</b>	0.53	EPA 6010D	5-16-19	5-16-19	
Lead	<b>ND</b>	5.3	EPA 6010D	5-16-19	5-16-19	
Mercury	<b>ND</b>	0.27	EPA 7471B	5-17-19	5-17-19	

<b>Client ID:</b>	<b>2A</b>					
Laboratory ID:	05-196-03					
Arsenic	<b>ND</b>	11	EPA 6010D	5-16-19	5-16-19	
Cadmium	<b>ND</b>	0.53	EPA 6010D	5-16-19	5-16-19	
Chromium	<b>38</b>	0.53	EPA 6010D	5-16-19	5-16-19	
Lead	<b>ND</b>	5.3	EPA 6010D	5-16-19	5-16-19	
Mercury	<b>ND</b>	0.27	EPA 7471B	5-17-19	5-17-19	

<b>Client ID:</b>	<b>3A</b>					
Laboratory ID:	05-196-05					
Arsenic	<b>ND</b>	11	EPA 6010D	5-16-19	5-16-19	
Cadmium	<b>ND</b>	0.55	EPA 6010D	5-16-19	5-16-19	
Chromium	<b>35</b>	0.55	EPA 6010D	5-16-19	5-16-19	
Lead	<b>ND</b>	5.5	EPA 6010D	5-16-19	5-16-19	
Mercury	<b>ND</b>	0.27	EPA 7471B	5-17-19	5-17-19	

<b>Client ID:</b>	<b>4A</b>					
Laboratory ID:	05-196-07					
Arsenic	<b>ND</b>	11	EPA 6010D	5-16-19	5-16-19	
Cadmium	<b>ND</b>	0.54	EPA 6010D	5-16-19	5-16-19	
Chromium	<b>45</b>	0.54	EPA 6010D	5-16-19	5-16-19	
Lead	<b>ND</b>	5.4	EPA 6010D	5-16-19	5-16-19	
Mercury	<b>ND</b>	0.27	EPA 7471B	5-17-19	5-17-19	



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 Project: 923-1000-005.5000

**TOTAL METALS  
 EPA 6010D/7471B**

Matrix: Soil  
 Units: mg/Kg (ppm)

<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>Method</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>	<b>Flags</b>
<b>Client ID:</b>	<b>5A</b>					
Laboratory ID:	05-196-09					
Arsenic	<b>ND</b>	11	EPA 6010D	5-16-19	5-16-19	
Cadmium	<b>ND</b>	0.55	EPA 6010D	5-16-19	5-16-19	
Chromium	<b>30</b>	0.55	EPA 6010D	5-16-19	5-16-19	
Lead	<b>ND</b>	5.5	EPA 6010D	5-16-19	5-16-19	
Mercury	<b>ND</b>	0.27	EPA 7471B	5-17-19	5-17-19	



Date of Report: May 22, 2019  
 Samples Submitted: May 14, 2019  
 Laboratory Reference: 1905-196  
 Project: 923-1000-005.5000

**TOTAL METALS  
 EPA 6010D/7471B  
 QUALITY CONTROL**

Matrix: Soil  
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<b>METHOD BLANK</b>						
Laboratory ID:	MB0516SM3					
Arsenic	ND	10	EPA 6010D	5-16-19	5-16-19	
Cadmium	ND	0.50	EPA 6010D	5-16-19	5-16-19	
Chromium	ND	0.50	EPA 6010D	5-16-19	5-16-19	
Lead	ND	5.0	EPA 6010D	5-16-19	5-16-19	

Laboratory ID:	MB0517S1					
Mercury	ND	0.25	EPA 7471B	5-17-19	5-17-19	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
<b>DUPLICATE</b>								
Laboratory ID:	05-196-01							
	ORIG	DUP						
Arsenic	ND	ND	NA	NA	NA	NA	NA	20
Cadmium	ND	ND	NA	NA	NA	NA	NA	20
Chromium	38.1	36.4	NA	NA	NA	NA	5	20
Lead	ND	ND	NA	NA	NA	NA	NA	20

Laboratory ID:	05-196-01							
Mercury	ND	ND	NA	NA	NA	NA	NA	20

**MATRIX SPIKES**

Laboratory ID:	05-196-01									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	93.1	94.4	100	100	ND	93	94	75-125	1	20
Cadmium	44.8	44.3	50.0	50.0	ND	90	89	75-125	1	20
Chromium	128	116	100	100	38.1	90	78	75-125	10	20
Lead	229	233	250	250	ND	91	93	75-125	2	20

Laboratory ID:	05-196-01									
Mercury	0.538	0.540	0.500	0.500	0.0169	104	105	80-120	0	20





Date of Report: May 22, 2019  
Samples Submitted: May 14, 2019  
Laboratory Reference: 1905-196  
Project: 923-1000-005.5000

**% MOISTURE**

<b>Client ID</b>	<b>Lab ID</b>	<b>% Moisture</b>	<b>Date Analyzed</b>
1A	05-196-01	6	5-15-19
2A	05-196-03	6	5-15-19
3A	05-196-05	9	5-15-19
4A	05-196-07	7	5-15-19
5A	05-196-09	9	5-15-19





### Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
  - B - The analyte indicated was also found in the blank sample.
  - C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
  - E - The value reported exceeds the quantitation range and is an estimate.
  - F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
  - H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
  - I - Compound recovery is outside of the control limits.
  - J - The value reported was below the practical quantitation limit. The value is an estimate.
  - K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
  - L - The RPD is outside of the control limits.
  - M - Hydrocarbons in the gasoline range are impacting the diesel range result.
  - M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
  - N - Hydrocarbons in the lube oil range are impacting the diesel range result.
  - N1 - Hydrocarbons in diesel range are impacting lube oil range results.
  - O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
  - P - The RPD of the detected concentrations between the two columns is greater than 40.
  - Q - Surrogate recovery is outside of the control limits.
  - S - Surrogate recovery data is not available due to the necessary dilution of the sample.
  - T - The sample chromatogram is not similar to a typical \_\_\_\_\_.
  - U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
  - U1 - The practical quantitation limit is elevated due to interferences present in the sample.
  - V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
  - W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
  - X - Sample extract treated with a mercury cleanup procedure.
  - X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.
  - Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
  - Z -
- ND - Not Detected at PQL  
 PQL - Practical Quantitation Limit  
 RPD - Relative Percent Difference





**MA Onsite Environmental Inc.**  
 Analytical Laboratory Testing Services  
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# Chain of Custody

Turnaround Request  
(in working days)  
(Check One)

- Same Day       1 Day
- 2 Days         3 Days
- Standard (7 Days)

5 Business days  
(other)

Laboratory Number: **05-196**

Company: Go Lda  
 Project Number: 923-1000-055-5000  
 Project Name: Landsburg  
 Project Manager: Gary Zimmerman  
 Sampled by: Joseph Xi, Gary Zimmerman

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers		Laboratory Tests																	
					Soil	G	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx ( <input type="checkbox"/> Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCPA Metals <u>(select) D3</u>	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
1	1A	5/14/19	0542	Soil	G					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2	1B		0548							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3	2A		0552							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4	2B		0602							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	3A		0607							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6	3B		0613							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7	4A		0617							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8	4B		0620							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
9	5A		0624							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10	5B		0628							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Relinquished Signature: Joseph Xi Company: Golden Date: 5/14/19 Time: 1705  
 Received Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 Relinquished \_\_\_\_\_ Date: \_\_\_\_\_  
 Received \_\_\_\_\_ Date: \_\_\_\_\_  
 Relinquished \_\_\_\_\_ Date: \_\_\_\_\_  
 Reviewed/Date: \_\_\_\_\_

Comments/Special Instructions  
 Please analyze in accordance w/ MSA method  
 Cold & Onsite Env.  
 Analyze for caddisflies listed in Table 3-1 of  
 Soils Characterization Work Plan - (See David)

Data Package: Standard  Level III  Level IV   
 Chromatograms with final report  Electronic Data Deliverables (EDDs)