

APPENDIX B
LABORATORY ANALYTICAL RESULTS

INTERIM ACTION REPORT
Block 38 West Site
500 Through 536 Westlake Avenue North
Seattle, Washington

Farallon PN: 397-019



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

July 30, 2014

Cliff Schmitt
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 397-010
Laboratory Reference No. 1407-172

Dear Cliff:

Enclosed are the analytical results and associated quality control data for samples submitted on July 22, 2014.

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

Date of Report: July 30, 2014
Samples Submitted: July 22, 2014
Laboratory Reference: 1407-172
Project: 397-010

Case Narrative

Samples were collected on July 21 and 22, 2014 and received by the laboratory on July 22, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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.

NWTPH Gx/BTEX Analysis

The chromatogram for sample F-MW-130-GW1-072114 is not similar to a typical gas.

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: July 30, 2014
 Samples Submitted: July 22, 2014
 Laboratory Reference: 1407-172
 Project: 397-010

NWTPH-Gx/BTEX

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	F-MW-130-GW1-072114					
Laboratory ID:	07-172-02					
Benzene	5.1	1.0	EPA 8021B	7-24-14	7-24-14	
Toluene	7.5	1.0	EPA 8021B	7-24-14	7-24-14	
Ethyl Benzene	2.2	1.0	EPA 8021B	7-24-14	7-24-14	
m,p-Xylene	3.4	1.0	EPA 8021B	7-24-14	7-24-14	
o-Xylene	3.3	1.0	EPA 8021B	7-24-14	7-24-14	
Gasoline	2100	100	NWTPH-Gx	7-24-14	7-24-14	T
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>95</i>	<i>71-112</i>				

Date of Report: July 30, 2014
 Samples Submitted: July 22, 2014
 Laboratory Reference: 1407-172
 Project: 397-010

**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0724W1					
Benzene	ND	1.0	EPA 8021B	7-24-14	7-24-14	
Toluene	ND	1.0	EPA 8021B	7-24-14	7-24-14	
Ethyl Benzene	ND	1.0	EPA 8021B	7-24-14	7-24-14	
m,p-Xylene	ND	1.0	EPA 8021B	7-24-14	7-24-14	
o-Xylene	ND	1.0	EPA 8021B	7-24-14	7-24-14	
Gasoline	ND	100	NWTPH-Gx	7-24-14	7-24-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	99	71-112				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	07-209-02							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				97	96	71-112		

MATRIX SPIKES

Laboratory ID:	07-209-02									
	MS	MSD	MS	MSD	MS	MSD				
Benzene	52.9	54.0	50.0	50.0	ND	106	108	78-120	2	12
Toluene	54.7	55.9	50.0	50.0	ND	109	112	80-121	2	12
Ethyl Benzene	55.1	55.9	50.0	50.0	ND	110	112	81-120	1	13
m,p-Xylene	55.8	56.7	50.0	50.0	ND	112	113	81-119	2	13
o-Xylene	55.4	56.0	50.0	50.0	ND	111	112	79-117	1	13
<i>Surrogate:</i>										
<i>Fluorobenzene</i>					102	102	71-112			

Date of Report: July 30, 2014
 Samples Submitted: July 22, 2014
 Laboratory Reference: 1407-172
 Project: 397-010

HALOGENATED VOLATILES EPA 8260C

page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	F-MW-130-GW1-072114					
Laboratory ID:	07-172-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Chloromethane	ND	1.0	EPA 8260C	7-23-14	7-23-14	
Vinyl Chloride	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Bromomethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Chloroethane	ND	1.0	EPA 8260C	7-23-14	7-23-14	
Trichlorofluoromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1-Dichloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Iodomethane	ND	1.0	EPA 8260C	7-23-14	7-23-14	
Methylene Chloride	ND	1.0	EPA 8260C	7-23-14	7-23-14	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1-Dichloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
2,2-Dichloropropane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Bromochloromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Chloroform	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Carbon Tetrachloride	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1-Dichloropropene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dichloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Trichloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dichloropropane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Dibromomethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Bromodichloromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	7-23-14	7-23-14	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-23-14	7-23-14	

Date of Report: July 30, 2014
 Samples Submitted: July 22, 2014
 Laboratory Reference: 1407-172
 Project: 397-010

HALOGENATED VOLATILES EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	F-MW-130-GW1-072114					
Laboratory ID:	07-172-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Tetrachloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,3-Dichloropropane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Dibromochloromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dibromoethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Chlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Bromoform	ND	1.0	EPA 8260C	7-23-14	7-23-14	
Bromobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
2-Chlorotoluene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
4-Chlorotoluene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	7-23-14	7-23-14	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Hexachlorobutadiene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>62-122</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>71-120</i>				

Date of Report: July 30, 2014
 Samples Submitted: July 22, 2014
 Laboratory Reference: 1407-172
 Project: 397-010

**HALOGENATED VOLATILES EPA 8260C
 METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0723W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Chloromethane	ND	1.0	EPA 8260C	7-23-14	7-23-14	
Vinyl Chloride	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Bromomethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Chloroethane	ND	1.0	EPA 8260C	7-23-14	7-23-14	
Trichlorofluoromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1-Dichloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Iodomethane	ND	1.0	EPA 8260C	7-23-14	7-23-14	
Methylene Chloride	ND	1.0	EPA 8260C	7-23-14	7-23-14	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1-Dichloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
2,2-Dichloropropane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Bromochloromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Chloroform	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Carbon Tetrachloride	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1-Dichloropropene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dichloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Trichloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dichloropropane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Dibromomethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Bromodichloromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	7-23-14	7-23-14	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-23-14	7-23-14	

Date of Report: July 30, 2014
 Samples Submitted: July 22, 2014
 Laboratory Reference: 1407-172
 Project: 397-010

**HALOGENATED VOLATILES EPA 8260C
 METHOD BLANK QUALITY CONTROL**

Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0723W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Tetrachloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,3-Dichloropropane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Dibromochloromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dibromoethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Chlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Bromoform	ND	1.0	EPA 8260C	7-23-14	7-23-14	
Bromobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
2-Chlorotoluene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
4-Chlorotoluene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	7-23-14	7-23-14	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Hexachlorobutadiene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>62-122</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>71-120</i>				

Date of Report: July 30, 2014
 Samples Submitted: July 22, 2014
 Laboratory Reference: 1407-172
 Project: 397-010

**HALOGENATED VOLATILES EPA 8260C
 SB/SBD QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0723W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.90	10.1	10.0	10.0	99	101	63-142	2	17	
Benzene	10.1	10.0	10.0	10.0	101	100	78-125	1	15	
Trichloroethene	10.4	10.0	10.0	10.0	104	100	75-125	4	15	
Toluene	10.1	9.91	10.0	10.0	101	99	80-125	2	15	
Chlorobenzene	9.83	9.74	10.0	10.0	98	97	80-140	1	15	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					<i>95</i>	<i>98</i>	<i>62-122</i>			
<i>Toluene-d8</i>					<i>101</i>	<i>101</i>	<i>70-120</i>			
<i>4-Bromofluorobenzene</i>					<i>95</i>	<i>97</i>	<i>71-120</i>			



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 gas.
 - 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



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

July 30, 2014

Cliff Schmitt
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 397-010
Laboratory Reference No. 1407-172

Dear Cliff:

Enclosed are the analytical results and associated quality control data for samples submitted on July 22, 2014.

Please note that this is a revised report, and replaces the original dated July 30, 2014, due to a requested change of the Halogenated Volatiles to full list Volatiles.

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,

David Baumeister
Project Manager

Enclosures

Date of Report: July 30, 2014
Samples Submitted: July 22, 2014
Laboratory Reference: 1407-172
Project: 397-010

Case Narrative

Samples were collected on July 21 and 22, 2014 and received by the laboratory on July 22, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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.

NWTPH Gx/BTEX Analysis

The chromatogram for sample F-MW-130-GW1-072114 is not similar to a typical gas.

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: July 30, 2014
 Samples Submitted: July 22, 2014
 Laboratory Reference: 1407-172
 Project: 397-010

NWTPH-Gx/BTEX

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	F-MW-130-GW1-072114					
Laboratory ID:	07-172-02					
Benzene	5.1	1.0	EPA 8021B	7-24-14	7-24-14	
Toluene	7.5	1.0	EPA 8021B	7-24-14	7-24-14	
Ethyl Benzene	2.2	1.0	EPA 8021B	7-24-14	7-24-14	
m,p-Xylene	3.4	1.0	EPA 8021B	7-24-14	7-24-14	
o-Xylene	3.3	1.0	EPA 8021B	7-24-14	7-24-14	
Gasoline	2100	100	NWTPH-Gx	7-24-14	7-24-14	T
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	95	71-112				

Date of Report: July 30, 2014
 Samples Submitted: July 22, 2014
 Laboratory Reference: 1407-172
 Project: 397-010

**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0724W1					
Benzene	ND	1.0	EPA 8021B	7-24-14	7-24-14	
Toluene	ND	1.0	EPA 8021B	7-24-14	7-24-14	
Ethyl Benzene	ND	1.0	EPA 8021B	7-24-14	7-24-14	
m,p-Xylene	ND	1.0	EPA 8021B	7-24-14	7-24-14	
o-Xylene	ND	1.0	EPA 8021B	7-24-14	7-24-14	
Gasoline	ND	100	NWTPH-Gx	7-24-14	7-24-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	99	71-112				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	07-209-02							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				97	96	71-112		

MATRIX SPIKES

Laboratory ID:	07-209-02									
	MS	MSD	MS	MSD	MS	MSD				
Benzene	52.9	54.0	50.0	50.0	ND	106	108	78-120	2	12
Toluene	54.7	55.9	50.0	50.0	ND	109	112	80-121	2	12
Ethyl Benzene	55.1	55.9	50.0	50.0	ND	110	112	81-120	1	13
m,p-Xylene	55.8	56.7	50.0	50.0	ND	112	113	81-119	2	13
o-Xylene	55.4	56.0	50.0	50.0	ND	111	112	79-117	1	13
<i>Surrogate:</i>										
<i>Fluorobenzene</i>					102	102	71-112			

Date of Report: July 30, 2014
 Samples Submitted: July 22, 2014
 Laboratory Reference: 1407-172
 Project: 397-010

VOLATILES EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	F-MW-130-GW1-072114					
Laboratory ID:	07-172-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Chloromethane	ND	1.0	EPA 8260C	7-23-14	7-23-14	
Vinyl Chloride	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Bromomethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Chloroethane	ND	1.0	EPA 8260C	7-23-14	7-23-14	
Trichlorofluoromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1-Dichloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Acetone	ND	6.4	EPA 8260C	7-23-14	7-23-14	
Iodomethane	ND	1.0	EPA 8260C	7-23-14	7-23-14	
Carbon Disulfide	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Methylene Chloride	ND	1.0	EPA 8260C	7-23-14	7-23-14	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1-Dichloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Vinyl Acetate	ND	1.0	EPA 8260C	7-23-14	7-23-14	
2,2-Dichloropropane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
2-Butanone	ND	5.0	EPA 8260C	7-23-14	7-23-14	
Bromochloromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Chloroform	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Carbon Tetrachloride	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1-Dichloropropene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Benzene	6.1	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dichloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Trichloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dichloropropane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Dibromomethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Bromodichloromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
2-Chloroethyl Vinyl Ether	ND	1.9	EPA 8260C	7-23-14	7-23-14	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	7-23-14	7-23-14	
Toluene	4.3	1.0	EPA 8260C	7-23-14	7-23-14	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-23-14	7-23-14	

Date of Report: July 30, 2014
 Samples Submitted: July 22, 2014
 Laboratory Reference: 1407-172
 Project: 397-010

VOLATILES EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	F-MW-130-GW1-072114					
Laboratory ID:	07-172-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Tetrachloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,3-Dichloropropane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
2-Hexanone	ND	2.9	EPA 8260C	7-23-14	7-23-14	
Dibromochloromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dibromoethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Chlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Ethylbenzene	1.6	0.20	EPA 8260C	7-23-14	7-23-14	
m,p-Xylene	2.2	0.40	EPA 8260C	7-23-14	7-23-14	
o-Xylene	2.3	0.20	EPA 8260C	7-23-14	7-23-14	
Styrene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Bromoform	ND	1.0	EPA 8260C	7-23-14	7-23-14	
Isopropylbenzene	0.23	0.20	EPA 8260C	7-23-14	7-23-14	
Bromobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
n-Propylbenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
2-Chlorotoluene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
4-Chlorotoluene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,3,5-Trimethylbenzene	1.2	0.20	EPA 8260C	7-23-14	7-23-14	
tert-Butylbenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2,4-Trimethylbenzene	2.6	0.20	EPA 8260C	7-23-14	7-23-14	
sec-Butylbenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
p-Isopropyltoluene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
n-Butylbenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	7-23-14	7-23-14	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Hexachlorobutadiene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Naphthalene	650	1.0	EPA 8260C	7-23-14	7-23-14	E
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	99	62-122				
<i>Toluene-d8</i>	101	70-120				
<i>4-Bromofluorobenzene</i>	99	71-120				

Date of Report: July 30, 2014
 Samples Submitted: July 22, 2014
 Laboratory Reference: 1407-172
 Project: 397-010

**VOLATILES EPA 8260C
 METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0723W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Chloromethane	ND	1.0	EPA 8260C	7-23-14	7-23-14	
Vinyl Chloride	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Bromomethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Chloroethane	ND	1.0	EPA 8260C	7-23-14	7-23-14	
Trichlorofluoromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1-Dichloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Acetone	ND	6.4	EPA 8260C	7-23-14	7-23-14	
Iodomethane	ND	1.0	EPA 8260C	7-23-14	7-23-14	
Carbon Disulfide	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Methylene Chloride	ND	1.0	EPA 8260C	7-23-14	7-23-14	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1-Dichloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Vinyl Acetate	ND	1.0	EPA 8260C	7-23-14	7-23-14	
2,2-Dichloropropane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
2-Butanone	ND	5.0	EPA 8260C	7-23-14	7-23-14	
Bromochloromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Chloroform	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Carbon Tetrachloride	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1-Dichloropropene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Benzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dichloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Trichloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dichloropropane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Dibromomethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Bromodichloromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
2-Chloroethyl Vinyl Ether	ND	1.9	EPA 8260C	7-23-14	7-23-14	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	7-23-14	7-23-14	
Toluene	ND	1.0	EPA 8260C	7-23-14	7-23-14	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-23-14	7-23-14	

Date of Report: July 30, 2014
 Samples Submitted: July 22, 2014
 Laboratory Reference: 1407-172
 Project: 397-010

VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL
 Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0723W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Tetrachloroethene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,3-Dichloropropane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
2-Hexanone	ND	2.9	EPA 8260C	7-23-14	7-23-14	
Dibromochloromethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dibromoethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Chlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Ethylbenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
m,p-Xylene	ND	0.40	EPA 8260C	7-23-14	7-23-14	
o-Xylene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Styrene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Bromoform	ND	1.0	EPA 8260C	7-23-14	7-23-14	
Isopropylbenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Bromobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	7-23-14	7-23-14	
n-Propylbenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
2-Chlorotoluene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
4-Chlorotoluene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
tert-Butylbenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
sec-Butylbenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
p-Isopropyltoluene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
n-Butylbenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	7-23-14	7-23-14	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Hexachlorobutadiene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
Naphthalene	ND	1.0	EPA 8260C	7-23-14	7-23-14	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	7-23-14	7-23-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>62-122</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>71-120</i>				

Date of Report: July 30, 2014
 Samples Submitted: July 22, 2014
 Laboratory Reference: 1407-172
 Project: 397-010

**VOLATILES EPA 8260C
 SB/SBD QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0723W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.90	10.1	10.0	10.0	99	101	63-142	2	17	
Benzene	10.1	10.0	10.0	10.0	101	100	78-125	1	15	
Trichloroethene	10.4	10.0	10.0	10.0	104	100	75-125	4	15	
Toluene	10.1	9.91	10.0	10.0	101	99	80-125	2	15	
Chlorobenzene	9.83	9.74	10.0	10.0	98	97	80-140	1	15	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					95	98	62-122			
<i>Toluene-d8</i>					101	101	70-120			
<i>4-Bromofluorobenzene</i>					95	97	71-120			



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 gas.
- 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



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

July 28, 2014

Jennifer Moore
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 397-010
Laboratory Reference No. 1407-225

Dear Jennifer:

Enclosed are the analytical results and associated quality control data for samples submitted on July 24, 2014.

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 "D. Baumeister", with a long horizontal stroke extending to the right.

David Baumeister
Project Manager

Enclosures

Date of Report: July 28, 2014
Samples Submitted: July 24, 2014
Laboratory Reference: 1407-225
Project: 397-010

Case Narrative

Samples were collected on July 24, 2014 and received by the laboratory on July 24, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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.

Date of Report: July 28, 2014
 Samples Submitted: July 24, 2014
 Laboratory Reference: 1407-225
 Project: 397-010

NWTPH-Gx/BTEX

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	F-MW-130-072414					
Laboratory ID:	07-225-01					
Benzene	ND	1.0	EPA 8021B	7-25-14	7-25-14	
Toluene	ND	1.0	EPA 8021B	7-25-14	7-25-14	
Ethyl Benzene	ND	1.0	EPA 8021B	7-25-14	7-25-14	
m,p-Xylene	ND	1.0	EPA 8021B	7-25-14	7-25-14	
o-Xylene	ND	1.0	EPA 8021B	7-25-14	7-25-14	
Gasoline	ND	100	NWTPH-Gx	7-25-14	7-25-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	93	71-112				

Date of Report: July 28, 2014
 Samples Submitted: July 24, 2014
 Laboratory Reference: 1407-225
 Project: 397-010

**NWTPH-Gx/BTEX
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0725W1					
Benzene	ND	1.0	EPA 8021B	7-25-14	7-25-14	
Toluene	ND	1.0	EPA 8021B	7-25-14	7-25-14	
Ethyl Benzene	ND	1.0	EPA 8021B	7-25-14	7-25-14	
m,p-Xylene	ND	1.0	EPA 8021B	7-25-14	7-25-14	
o-Xylene	ND	1.0	EPA 8021B	7-25-14	7-25-14	
Gasoline	ND	100	NWTPH-Gx	7-25-14	7-25-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	95	71-112				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	07-225-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				93	93	71-112		

SPIKE BLANKS

Laboratory ID:	SB0725W1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	51.0	49.9	50.0	50.0	102	100	86-116	2	11
Toluene	51.5	50.6	50.0	50.0	103	101	86-117	2	12
Ethyl Benzene	50.9	49.7	50.0	50.0	102	99	86-118	2	13
m,p-Xylene	51.0	49.9	50.0	50.0	102	100	86-118	2	14
o-Xylene	50.9	49.9	50.0	50.0	102	100	85-117	2	14
<i>Surrogate:</i>									
<i>Fluorobenzene</i>					94	95	71-112		

Date of Report: July 28, 2014
 Samples Submitted: July 24, 2014
 Laboratory Reference: 1407-225
 Project: 397-010

HALOGENATED VOLATILES EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	F-MW-130-072414					
Laboratory ID:	07-225-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Chloromethane	ND	1.0	EPA 8260C	7-25-14	7-25-14	
Vinyl Chloride	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Bromomethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Chloroethane	ND	1.0	EPA 8260C	7-25-14	7-25-14	
Trichlorofluoromethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,1-Dichloroethene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Iodomethane	ND	1.0	EPA 8260C	7-25-14	7-25-14	
Methylene Chloride	ND	1.0	EPA 8260C	7-25-14	7-25-14	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,1-Dichloroethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
2,2-Dichloropropane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
(cis) 1,2-Dichloroethene	0.51	0.20	EPA 8260C	7-25-14	7-25-14	
Bromochloromethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Chloroform	0.91	0.20	EPA 8260C	7-25-14	7-25-14	
1,1,1-Trichloroethane	0.26	0.20	EPA 8260C	7-25-14	7-25-14	
Carbon Tetrachloride	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,1-Dichloropropene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,2-Dichloroethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Trichloroethene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,2-Dichloropropane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Dibromomethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Bromodichloromethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	7-25-14	7-25-14	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-25-14	7-25-14	

Date of Report: July 28, 2014
 Samples Submitted: July 24, 2014
 Laboratory Reference: 1407-225
 Project: 397-010

HALOGENATED VOLATILES EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	F-MW-130-072414					
Laboratory ID:	07-225-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Tetrachloroethene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,3-Dichloropropane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Dibromochloromethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,2-Dibromoethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Chlorobenzene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Bromoform	ND	1.0	EPA 8260C	7-25-14	7-25-14	
Bromobenzene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
2-Chlorotoluene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
4-Chlorotoluene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260C	7-25-14	7-25-14	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Hexachlorobutadiene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>62-122</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>71-120</i>				

Date of Report: July 28, 2014
 Samples Submitted: July 24, 2014
 Laboratory Reference: 1407-225
 Project: 397-010

**HALOGENATED VOLATILES EPA 8260C
 METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0725W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Chloromethane	ND	1.0	EPA 8260C	7-25-14	7-25-14	
Vinyl Chloride	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Bromomethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Chloroethane	ND	1.0	EPA 8260C	7-25-14	7-25-14	
Trichlorofluoromethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,1-Dichloroethene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Iodomethane	ND	1.0	EPA 8260C	7-25-14	7-25-14	
Methylene Chloride	ND	1.0	EPA 8260C	7-25-14	7-25-14	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,1-Dichloroethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
2,2-Dichloropropane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Bromochloromethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Chloroform	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Carbon Tetrachloride	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,1-Dichloropropene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,2-Dichloroethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Trichloroethene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,2-Dichloropropane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Dibromomethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Bromodichloromethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	7-25-14	7-25-14	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-25-14	7-25-14	

Date of Report: July 28, 2014
 Samples Submitted: July 24, 2014
 Laboratory Reference: 1407-225
 Project: 397-010

**HALOGENATED VOLATILES EPA 8260C
 METHOD BLANK QUALITY CONTROL**

Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0725W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Tetrachloroethene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,3-Dichloropropane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Dibromochloromethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,2-Dibromoethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Chlorobenzene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Bromoform	ND	1.0	EPA 8260C	7-25-14	7-25-14	
Bromobenzene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	7-25-14	7-25-14	
2-Chlorotoluene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
4-Chlorotoluene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260C	7-25-14	7-25-14	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
Hexachlorobutadiene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	7-25-14	7-25-14	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	93	62-122				
<i>Toluene-d8</i>	99	70-120				
<i>4-Bromofluorobenzene</i>	95	71-120				

Date of Report: July 28, 2014
 Samples Submitted: July 24, 2014
 Laboratory Reference: 1407-225
 Project: 397-010

**HALOGENATED VOLATILES EPA 8260C
 MS/MSD QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD		Flags
	MS	MSD	MS	MSD	Result	Recovery	Limits	RPD	Limit		
MATRIX SPIKES											
Laboratory ID:	07-225-01										
	MS	MSD	MS	MSD		MS	MSD				
1,1-Dichloroethene	9.22	9.29	10.0	10.0	ND	92	93	57-133	1	15	
Benzene	9.68	9.81	10.0	10.0	ND	97	98	78-117	1	15	
Trichloroethene	9.61	9.56	10.0	10.0	ND	96	96	77-120	1	15	
Toluene	9.48	9.60	10.0	10.0	ND	95	96	80-115	1	15	
Chlorobenzene	9.26	9.32	10.0	10.0	ND	93	93	80-122	1	15	
<i>Surrogate:</i>											
Dibromofluoromethane						99	102	62-122			
Toluene-d8						99	101	70-120			
4-Bromofluorobenzene						95	97	71-120			



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



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

July 11, 2017

Rob Leet
Farallon Consulting
1809 7th Ave., Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1707-004

Dear Rob:

Enclosed are the analytical results and associated quality control data for samples submitted on July 3, 2017.

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 flourish extending to the right.

David Baumeister
Project Manager

Enclosures



Date of Report: July 11, 2017
Samples Submitted: July 3, 2017
Laboratory Reference: 1707-004
Project: 397-019

Case Narrative

Samples were collected on July 3, 2017 and received by the laboratory on July 3, 2017. 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.



Date of Report: July 11, 2017
 Samples Submitted: July 3, 2017
 Laboratory Reference: 1707-004
 Project: 397-019

NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-130-070317					
Laboratory ID:	07-004-01					
Gasoline	ND	100	NWTPH-Gx	7-6-17	7-6-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	83	61-118				



Date of Report: July 11, 2017
 Samples Submitted: July 3, 2017
 Laboratory Reference: 1707-004
 Project: 397-019

**NWTPH-Gx
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0706W1					
Gasoline	ND	100	NWTPH-Gx	7-6-17	7-6-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	83	61-118				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	06-353-32							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				86	85	61-118		



Date of Report: July 11, 2017
 Samples Submitted: July 3, 2017
 Laboratory Reference: 1707-004
 Project: 397-019

VOLATILES EPA 8260C
 Page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-130-070317					
Laboratory ID:	07-004-01					
Dichlorodifluoromethane	ND	0.35	EPA 8260C	7-5-17	7-5-17	
Chloromethane	ND	1.3	EPA 8260C	7-5-17	7-5-17	
Vinyl Chloride	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Bromomethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Chloroethane	ND	1.0	EPA 8260C	7-5-17	7-5-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Acetone	ND	5.0	EPA 8260C	7-5-17	7-5-17	
Iodomethane	ND	1.7	EPA 8260C	7-5-17	7-5-17	
Carbon Disulfide	ND	0.43	EPA 8260C	7-5-17	7-5-17	
Methylene Chloride	ND	1.0	EPA 8260C	7-5-17	7-5-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Vinyl Acetate	ND	1.0	EPA 8260C	7-5-17	7-5-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
2-Butanone	ND	5.0	EPA 8260C	7-5-17	7-5-17	
Bromochloromethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Chloroform	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Benzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Trichloroethene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Dibromomethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Bromodichloromethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	7-5-17	7-5-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	7-5-17	7-5-17	
Toluene	ND	1.0	EPA 8260C	7-5-17	7-5-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-5-17	7-5-17	



Date of Report: July 11, 2017
 Samples Submitted: July 3, 2017
 Laboratory Reference: 1707-004
 Project: 397-019

VOLATILES EPA 8260C
 Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-130-070317					
Laboratory ID:	07-004-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Tetrachloroethene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
2-Hexanone	ND	2.0	EPA 8260C	7-5-17	7-5-17	
Dibromochloromethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Chlorobenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Ethylbenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
m,p-Xylene	ND	0.40	EPA 8260C	7-5-17	7-5-17	
o-Xylene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Styrene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Bromoform	ND	1.0	EPA 8260C	7-5-17	7-5-17	
Isopropylbenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Bromobenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
n-Propylbenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
n-Butylbenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	7-5-17	7-5-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Naphthalene	ND	1.0	EPA 8260C	7-5-17	7-5-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>77-129</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>105</i>	<i>80-125</i>				



Date of Report: July 11, 2017
 Samples Submitted: July 3, 2017
 Laboratory Reference: 1707-004
 Project: 397-019

VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL
 Page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0705W2					
Dichlorodifluoromethane	ND	0.35	EPA 8260C	7-5-17	7-5-17	
Chloromethane	ND	1.3	EPA 8260C	7-5-17	7-5-17	
Vinyl Chloride	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Bromomethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Chloroethane	ND	1.0	EPA 8260C	7-5-17	7-5-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Acetone	ND	5.0	EPA 8260C	7-5-17	7-5-17	
Iodomethane	ND	1.7	EPA 8260C	7-5-17	7-5-17	
Carbon Disulfide	ND	0.43	EPA 8260C	7-5-17	7-5-17	
Methylene Chloride	ND	1.0	EPA 8260C	7-5-17	7-5-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Vinyl Acetate	ND	1.0	EPA 8260C	7-5-17	7-5-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
2-Butanone	ND	5.0	EPA 8260C	7-5-17	7-5-17	
Bromochloromethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Chloroform	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Benzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Trichloroethene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Dibromomethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Bromodichloromethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	7-5-17	7-5-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	7-5-17	7-5-17	
Toluene	ND	1.0	EPA 8260C	7-5-17	7-5-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-5-17	7-5-17	



Date of Report: July 11, 2017
 Samples Submitted: July 3, 2017
 Laboratory Reference: 1707-004
 Project: 397-019

VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL
 Page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:		MB0705W2				
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Tetrachloroethene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
2-Hexanone	ND	2.0	EPA 8260C	7-5-17	7-5-17	
Dibromochloromethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Chlorobenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Ethylbenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
m,p-Xylene	ND	0.40	EPA 8260C	7-5-17	7-5-17	
o-Xylene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Styrene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Bromoform	ND	1.0	EPA 8260C	7-5-17	7-5-17	
Isopropylbenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Bromobenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	7-5-17	7-5-17	
n-Propylbenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
n-Butylbenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	7-5-17	7-5-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
Naphthalene	ND	1.0	EPA 8260C	7-5-17	7-5-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	7-5-17	7-5-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>94</i>	<i>77-129</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>80-125</i>				



Date of Report: July 11, 2017
 Samples Submitted: July 3, 2017
 Laboratory Reference: 1707-004
 Project: 397-019

**VOLATILES EPA 8260C
 SB/SBD QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB0705W2									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	7.70	7.67	10.0	10.0	77	77	63-127	0	17	
Benzene	10.0	10.2	10.0	10.0	100	102	76-121	2	12	
Trichloroethene	8.43	8.41	10.0	10.0	84	84	64-120	0	15	
Toluene	10.3	10.6	10.0	10.0	103	106	82-120	3	13	
Chlorobenzene	8.96	9.40	10.0	10.0	90	94	80-120	5	14	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					<i>100</i>	<i>100</i>	<i>77-129</i>			
<i>Toluene-d8</i>					<i>95</i>	<i>95</i>	<i>80-127</i>			
<i>4-Bromofluorobenzene</i>					<i>103</i>	<i>103</i>	<i>80-125</i>			





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





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

August 24, 2018

Javan Ruark
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1808-217

Dear Javan:

Enclosed are the analytical results and associated quality control data for samples submitted on August 21, 2018.

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 "D. Baumeister", with a long horizontal stroke extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: August 24, 2018
Samples Submitted: August 21, 2018
Laboratory Reference: 1808-217
Project: 397-019

Case Narrative

Samples were collected on August 20, 2018 and received by the laboratory on August 21, 2018. 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.

NWTPH Gx/BTEX Analysis

The MTCA Method A cleanup level of 0.030 ppm for Benzene is not achievable for sample FB-02-10.0-082018 due to the low dry weight of the sample.

Total Metals EPA 6010D/7471B Analysis

The duplicate RPD for Chromium is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-02-5.0-082018					
Laboratory ID:	08-217-02					
Benzene	ND	0.020	EPA 8021B	8-21-18	8-21-18	
Toluene	ND	0.054	EPA 8021B	8-21-18	8-21-18	
Ethyl Benzene	ND	0.054	EPA 8021B	8-21-18	8-21-18	
m,p-Xylene	ND	0.054	EPA 8021B	8-21-18	8-21-18	
o-Xylene	ND	0.054	EPA 8021B	8-21-18	8-21-18	
Gasoline	ND	5.4	NWTPH-Gx	8-21-18	8-21-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	90	57-129				
Client ID:	FB-02-10.0-082018					
Laboratory ID:	08-217-03					
Benzene	ND	0.037	EPA 8021B	8-21-18	8-21-18	
Toluene	ND	0.19	EPA 8021B	8-21-18	8-21-18	
Ethyl Benzene	ND	0.19	EPA 8021B	8-21-18	8-21-18	
m,p-Xylene	ND	0.19	EPA 8021B	8-21-18	8-21-18	
o-Xylene	ND	0.19	EPA 8021B	8-21-18	8-21-18	
Gasoline	ND	19	NWTPH-Gx	8-21-18	8-21-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	97	57-129				
Client ID:	FB-02-25.0-082018					
Laboratory ID:	08-217-06					
Benzene	ND	0.020	EPA 8021B	8-21-18	8-21-18	
Toluene	ND	0.052	EPA 8021B	8-21-18	8-21-18	
Ethyl Benzene	ND	0.052	EPA 8021B	8-21-18	8-21-18	
m,p-Xylene	ND	0.052	EPA 8021B	8-21-18	8-21-18	
o-Xylene	ND	0.052	EPA 8021B	8-21-18	8-21-18	
Gasoline	ND	5.2	NWTPH-Gx	8-21-18	8-21-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	85	57-129				



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-02-35.0-082018					
Laboratory ID:	08-217-08					
Benzene	ND	0.020	EPA 8021B	8-21-18	8-21-18	
Toluene	ND	0.058	EPA 8021B	8-21-18	8-21-18	
Ethyl Benzene	ND	0.058	EPA 8021B	8-21-18	8-21-18	
m,p-Xylene	ND	0.058	EPA 8021B	8-21-18	8-21-18	
o-Xylene	ND	0.058	EPA 8021B	8-21-18	8-21-18	
Gasoline	ND	5.8	NWTPH-Gx	8-21-18	8-21-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	85	57-129				



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0821S1					
Benzene	ND	0.020	EPA 8021B	8-21-18	8-21-18	
Toluene	ND	0.050	EPA 8021B	8-21-18	8-21-18	
Ethyl Benzene	ND	0.050	EPA 8021B	8-21-18	8-21-18	
m,p-Xylene	ND	0.050	EPA 8021B	8-21-18	8-21-18	
o-Xylene	ND	0.050	EPA 8021B	8-21-18	8-21-18	
Gasoline	ND	5.0	NWTPH-Gx	8-21-18	8-21-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	84	57-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-170-14							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				89	91	57-129		

SPIKE BLANKS

Laboratory ID:	SB0821S1							
	SB	SBD	SB	SBD	SB	SBD		
Benzene	0.875	0.882	1.00	1.00	88	88	69-111	1 10
Toluene	0.868	0.873	1.00	1.00	87	87	70-114	1 11
Ethyl Benzene	0.868	0.876	1.00	1.00	87	88	70-115	1 10
m,p-Xylene	0.860	0.863	1.00	1.00	86	86	72-115	0 10
o-Xylene	0.890	0.884	1.00	1.00	89	88	71-115	1 11
<i>Surrogate:</i>								
<i>Fluorobenzene</i>					86	86	57-129	



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-02-5.0-082018					
Laboratory ID:	08-217-02					
Diesel Range Organics	280	150	NWTPH-Dx	8-22-18	8-22-18	N
Lube Oil Range Organics	670	310	NWTPH-Dx	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	86	50-150				

Client ID:	FB-02-10.0-082018					
Laboratory ID:	08-217-03					
Diesel Range Organics	ND	61	NWTPH-Dx	8-22-18	8-22-18	
Lube Oil Range Organics	270	120	NWTPH-Dx	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	103	50-150				

Client ID:	FB-02-25.0-082018					
Laboratory ID:	08-217-06					
Diesel Range Organics	ND	30	NWTPH-Dx	8-22-18	8-22-18	
Lube Oil Range Organics	ND	60	NWTPH-Dx	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	96	50-150				

Client ID:	FB-02-35.0-082018					
Laboratory ID:	08-217-08					
Diesel Range Organics	ND	31	NWTPH-Dx	8-22-18	8-22-18	
Lube Oil Range Organics	ND	62	NWTPH-Dx	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	81	50-150				



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0822S2					
Diesel Range Organics	ND	25	NWTPH-Dx	8-22-18	8-22-18	
Lube Oil Range Organics	ND	50	NWTPH-Dx	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	121	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-170-16							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range Organics	149	126	NA	NA	NA	NA	17	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				115	103	50-150		



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-02-10.0-082018					
Laboratory ID:	08-217-03					
Dichlorodifluoromethane	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
Chloromethane	ND	0.014	EPA 8260C	8-21-18	8-21-18	
Vinyl Chloride	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
Bromomethane	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
Chloroethane	ND	0.014	EPA 8260C	8-21-18	8-21-18	
Trichlorofluoromethane	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
1,1-Dichloroethene	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
Iodomethane	ND	0.028	EPA 8260C	8-21-18	8-21-18	
Methylene Chloride	ND	0.014	EPA 8260C	8-21-18	8-21-18	
(trans) 1,2-Dichloroethene	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
1,1-Dichloroethane	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
2,2-Dichloropropane	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
(cis) 1,2-Dichloroethene	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
Bromochloromethane	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
Chloroform	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
1,1,1-Trichloroethane	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
Carbon Tetrachloride	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
1,1-Dichloropropene	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
1,2-Dichloroethane	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
Trichloroethene	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
1,2-Dichloropropane	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
Dibromomethane	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
Bromodichloromethane	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
2-Chloroethyl Vinyl Ether	ND	0.014	EPA 8260C	8-21-18	8-21-18	
(cis) 1,3-Dichloropropene	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
(trans) 1,3-Dichloropropene	ND	0.0028	EPA 8260C	8-21-18	8-21-18	



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-02-10.0-082018					
Laboratory ID:	08-217-03					
1,1,2-Trichloroethane	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
Tetrachloroethene	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
1,3-Dichloropropane	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
Dibromochloromethane	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
1,2-Dibromoethane	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
Chlorobenzene	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
1,1,1,2-Tetrachloroethane	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
Bromoform	ND	0.014	EPA 8260C	8-21-18	8-21-18	
Bromobenzene	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
1,1,2,2-Tetrachloroethane	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
1,2,3-Trichloropropane	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
2-Chlorotoluene	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
4-Chlorotoluene	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
1,3-Dichlorobenzene	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
1,4-Dichlorobenzene	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
1,2-Dichlorobenzene	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
1,2-Dibromo-3-chloropropane	ND	0.014	EPA 8260C	8-21-18	8-21-18	
1,2,4-Trichlorobenzene	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
Hexachlorobutadiene	ND	0.014	EPA 8260C	8-21-18	8-21-18	
1,2,3-Trichlorobenzene	ND	0.0028	EPA 8260C	8-21-18	8-21-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>94</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>87</i>	<i>71-132</i>				



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-02-25.0-082018					
Laboratory ID:	08-217-06					
Dichlorodifluoromethane	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
Chloromethane	ND	0.0043	EPA 8260C	8-21-18	8-21-18	
Vinyl Chloride	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
Bromomethane	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
Chloroethane	ND	0.0043	EPA 8260C	8-21-18	8-21-18	
Trichlorofluoromethane	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
1,1-Dichloroethene	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
Iodomethane	ND	0.0085	EPA 8260C	8-21-18	8-21-18	
Methylene Chloride	ND	0.0043	EPA 8260C	8-21-18	8-21-18	
(trans) 1,2-Dichloroethene	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
1,1-Dichloroethane	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
2,2-Dichloropropane	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
(cis) 1,2-Dichloroethene	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
Bromochloromethane	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
Chloroform	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
1,1,1-Trichloroethane	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
Carbon Tetrachloride	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
1,1-Dichloropropene	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
1,2-Dichloroethane	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
Trichloroethene	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
1,2-Dichloropropane	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
Dibromomethane	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
Bromodichloromethane	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
2-Chloroethyl Vinyl Ether	ND	0.0043	EPA 8260C	8-21-18	8-21-18	
(cis) 1,3-Dichloropropene	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
(trans) 1,3-Dichloropropene	ND	0.00085	EPA 8260C	8-21-18	8-21-18	



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-02-25.0-082018					
Laboratory ID:	08-217-06					
1,1,2-Trichloroethane	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
Tetrachloroethene	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
1,3-Dichloropropane	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
Dibromochloromethane	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
1,2-Dibromoethane	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
Chlorobenzene	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
1,1,1,2-Tetrachloroethane	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
Bromoform	ND	0.0043	EPA 8260C	8-21-18	8-21-18	
Bromobenzene	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
1,1,2,2-Tetrachloroethane	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
1,2,3-Trichloropropane	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
2-Chlorotoluene	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
4-Chlorotoluene	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
1,3-Dichlorobenzene	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
1,4-Dichlorobenzene	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
1,2-Dichlorobenzene	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
1,2-Dibromo-3-chloropropane	ND	0.0043	EPA 8260C	8-21-18	8-21-18	
1,2,4-Trichlorobenzene	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
Hexachlorobutadiene	ND	0.0043	EPA 8260C	8-21-18	8-21-18	
1,2,3-Trichlorobenzene	ND	0.00085	EPA 8260C	8-21-18	8-21-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>94</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>108</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>105</i>	<i>71-132</i>				



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0821S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
Chloromethane	ND	0.0050	EPA 8260C	8-21-18	8-21-18	
Vinyl Chloride	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
Bromomethane	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
Chloroethane	ND	0.0050	EPA 8260C	8-21-18	8-21-18	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
Iodomethane	ND	0.0050	EPA 8260C	8-21-18	8-21-18	
Methylene Chloride	ND	0.0065	EPA 8260C	8-21-18	8-21-18	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
Bromochloromethane	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
Chloroform	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
Trichloroethene	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
Dibromomethane	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
Bromodichloromethane	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	8-21-18	8-21-18	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	8-21-18	8-21-18	



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:		MB0821S1				
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
Tetrachloroethene	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
Dibromochloromethane	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
Chlorobenzene	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
Bromoform	ND	0.0050	EPA 8260C	8-21-18	8-21-18	
Bromobenzene	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
2-Chlorotoluene	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
4-Chlorotoluene	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	8-21-18	8-21-18	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	8-21-18	8-21-18	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	8-21-18	8-21-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>89</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>89</i>	<i>71-132</i>				



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

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

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0821S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0511	0.0534	0.0500	0.0500	102	107	53-141	4	17	
Benzene	0.0432	0.0439	0.0500	0.0500	86	88	70-130	2	15	
Trichloroethene	0.0520	0.0545	0.0500	0.0500	104	109	74-122	5	16	
Toluene	0.0493	0.0505	0.0500	0.0500	99	101	76-130	2	15	
Chlorobenzene	0.0477	0.0479	0.0500	0.0500	95	96	75-120	0	14	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					95	92	68-139			
<i>Toluene-d8</i>					97	98	79-128			
<i>4-Bromofluorobenzene</i>					94	92	71-132			



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-02-25.0-082018					
Laboratory ID:	08-217-06					
n-Nitrosodimethylamine	ND	0.040	EPA 8270D	8-22-18	8-22-18	
Pyridine	ND	0.40	EPA 8270D	8-22-18	8-22-18	
Phenol	ND	0.040	EPA 8270D	8-22-18	8-22-18	
Aniline	ND	0.20	EPA 8270D	8-22-18	8-22-18	
bis(2-Chloroethyl)ether	ND	0.040	EPA 8270D	8-22-18	8-22-18	
2-Chlorophenol	ND	0.040	EPA 8270D	8-22-18	8-22-18	
1,3-Dichlorobenzene	ND	0.040	EPA 8270D	8-22-18	8-22-18	
1,4-Dichlorobenzene	ND	0.040	EPA 8270D	8-22-18	8-22-18	
Benzyl alcohol	ND	0.20	EPA 8270D	8-22-18	8-22-18	
1,2-Dichlorobenzene	ND	0.040	EPA 8270D	8-22-18	8-22-18	
2-Methylphenol (o-Cresol)	ND	0.040	EPA 8270D	8-22-18	8-22-18	
bis(2-Chloroisopropyl)ether	ND	0.040	EPA 8270D	8-22-18	8-22-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.040	EPA 8270D	8-22-18	8-22-18	
n-Nitroso-di-n-propylamine	ND	0.040	EPA 8270D	8-22-18	8-22-18	
Hexachloroethane	ND	0.040	EPA 8270D	8-22-18	8-22-18	
Nitrobenzene	ND	0.040	EPA 8270D	8-22-18	8-22-18	
Isophorone	ND	0.040	EPA 8270D	8-22-18	8-22-18	
2-Nitrophenol	ND	0.040	EPA 8270D	8-22-18	8-22-18	
2,4-Dimethylphenol	ND	0.040	EPA 8270D	8-22-18	8-22-18	
bis(2-Chloroethoxy)methane	ND	0.040	EPA 8270D	8-22-18	8-22-18	
2,4-Dichlorophenol	ND	0.040	EPA 8270D	8-22-18	8-22-18	
1,2,4-Trichlorobenzene	ND	0.040	EPA 8270D	8-22-18	8-22-18	
Naphthalene	0.083	0.040	EPA 8270D	8-22-18	8-22-18	
4-Chloroaniline	ND	0.20	EPA 8270D	8-22-18	8-22-18	
Hexachlorobutadiene	ND	0.040	EPA 8270D	8-22-18	8-22-18	
4-Chloro-3-methylphenol	ND	0.040	EPA 8270D	8-22-18	8-22-18	
2-Methylnaphthalene	0.024	0.0080	EPA 8270D/SIM	8-22-18	8-22-18	
1-Methylnaphthalene	0.020	0.0080	EPA 8270D/SIM	8-22-18	8-22-18	
Hexachlorocyclopentadiene	ND	0.040	EPA 8270D	8-22-18	8-22-18	
2,4,6-Trichlorophenol	ND	0.040	EPA 8270D	8-22-18	8-22-18	
2,3-Dichloroaniline	ND	0.040	EPA 8270D	8-22-18	8-22-18	
2,4,5-Trichlorophenol	ND	0.040	EPA 8270D	8-22-18	8-22-18	
2-Chloronaphthalene	ND	0.040	EPA 8270D	8-22-18	8-22-18	
2-Nitroaniline	ND	0.040	EPA 8270D	8-22-18	8-22-18	
1,4-Dinitrobenzene	ND	0.040	EPA 8270D	8-22-18	8-22-18	
Dimethylphthalate	ND	0.040	EPA 8270D	8-22-18	8-22-18	
1,3-Dinitrobenzene	ND	0.040	EPA 8270D	8-22-18	8-22-18	
2,6-Dinitrotoluene	ND	0.040	EPA 8270D	8-22-18	8-22-18	
1,2-Dinitrobenzene	ND	0.040	EPA 8270D	8-22-18	8-22-18	
Acenaphthylene	ND	0.0080	EPA 8270D/SIM	8-22-18	8-22-18	
3-Nitroaniline	ND	0.040	EPA 8270D	8-22-18	8-22-18	



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-02-25.0-082018					
Laboratory ID:	08-217-06					
2,4-Dinitrophenol	ND	0.20	EPA 8270D	8-22-18	8-22-18	
Acenaphthene	0.027	0.0080	EPA 8270D/SIM	8-22-18	8-22-18	
4-Nitrophenol	ND	0.040	EPA 8270D	8-22-18	8-22-18	
2,4-Dinitrotoluene	ND	0.040	EPA 8270D	8-22-18	8-22-18	
Dibenzofuran	ND	0.040	EPA 8270D	8-22-18	8-22-18	
2,3,5,6-Tetrachlorophenol	ND	0.040	EPA 8270D	8-22-18	8-22-18	
2,3,4,6-Tetrachlorophenol	ND	0.040	EPA 8270D	8-22-18	8-22-18	
Diethylphthalate	ND	0.20	EPA 8270D	8-22-18	8-22-18	
4-Chlorophenyl-phenylether	ND	0.040	EPA 8270D	8-22-18	8-22-18	
4-Nitroaniline	ND	0.040	EPA 8270D	8-22-18	8-22-18	
Fluorene	ND	0.0080	EPA 8270D/SIM	8-22-18	8-22-18	
4,6-Dinitro-2-methylphenol	ND	0.20	EPA 8270D	8-22-18	8-22-18	
n-Nitrosodiphenylamine	ND	0.040	EPA 8270D	8-22-18	8-22-18	
1,2-Diphenylhydrazine	ND	0.040	EPA 8270D	8-22-18	8-22-18	
4-Bromophenyl-phenylether	ND	0.040	EPA 8270D	8-22-18	8-22-18	
Hexachlorobenzene	ND	0.040	EPA 8270D	8-22-18	8-22-18	
Pentachlorophenol	ND	0.20	EPA 8270D	8-22-18	8-22-18	
Phenanthrene	ND	0.0080	EPA 8270D/SIM	8-22-18	8-22-18	
Anthracene	ND	0.0080	EPA 8270D/SIM	8-22-18	8-22-18	
Carbazole	ND	0.040	EPA 8270D	8-22-18	8-22-18	
Di-n-butylphthalate	ND	0.20	EPA 8270D	8-22-18	8-22-18	
Fluoranthene	ND	0.0080	EPA 8270D/SIM	8-22-18	8-22-18	
Benzidine	ND	0.40	EPA 8270D	8-22-18	8-22-18	
Pyrene	ND	0.0080	EPA 8270D/SIM	8-22-18	8-22-18	
Butylbenzylphthalate	ND	0.20	EPA 8270D	8-22-18	8-22-18	
bis-2-Ethylhexyladipate	ND	0.20	EPA 8270D	8-22-18	8-22-18	
3,3'-Dichlorobenzidine	ND	0.20	EPA 8270D	8-22-18	8-22-18	
Benzo[a]anthracene	ND	0.0080	EPA 8270D/SIM	8-22-18	8-22-18	
Chrysene	ND	0.0080	EPA 8270D/SIM	8-22-18	8-22-18	
bis(2-Ethylhexyl)phthalate	ND	0.20	EPA 8270D	8-22-18	8-22-18	
Di-n-octylphthalate	ND	0.20	EPA 8270D	8-22-18	8-22-18	
Benzo[b]fluoranthene	ND	0.0080	EPA 8270D/SIM	8-22-18	8-22-18	
Benzo(j,k)fluoranthene	ND	0.0080	EPA 8270D/SIM	8-22-18	8-22-18	
Benzo[a]pyrene	ND	0.0080	EPA 8270D/SIM	8-22-18	8-22-18	
Indeno[1,2,3-cd]pyrene	ND	0.0080	EPA 8270D/SIM	8-22-18	8-22-18	
Dibenz[a,h]anthracene	ND	0.0080	EPA 8270D/SIM	8-22-18	8-22-18	
Benzo[g,h,i]perylene	ND	0.0080	EPA 8270D/SIM	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	74	19 - 103				
Phenol-d6	72	30 - 103				
Nitrobenzene-d5	69	27 - 105				
2-Fluorobiphenyl	77	36 - 102				
2,4,6-Tribromophenol	82	33 - 110				
Terphenyl-d14	74	38 - 108				



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

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

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0822S1					
n-Nitrosodimethylamine	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Pyridine	ND	0.33	EPA 8270D	8-22-18	8-22-18	
Phenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Aniline	ND	0.17	EPA 8270D	8-22-18	8-22-18	
bis(2-Chloroethyl)ether	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2-Chlorophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,3-Dichlorobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,4-Dichlorobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Benzyl alcohol	ND	0.17	EPA 8270D	8-22-18	8-22-18	
1,2-Dichlorobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2-Methylphenol (o-Cresol)	ND	0.033	EPA 8270D	8-22-18	8-22-18	
bis(2-Chloroisopropyl)ether	ND	0.033	EPA 8270D	8-22-18	8-22-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.033	EPA 8270D	8-22-18	8-22-18	
n-Nitroso-di-n-propylamine	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Hexachloroethane	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Nitrobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Isophorone	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2-Nitrophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,4-Dimethylphenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
bis(2-Chloroethoxy)methane	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,4-Dichlorophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,2,4-Trichlorobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Naphthalene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
4-Chloroaniline	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Hexachlorobutadiene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
4-Chloro-3-methylphenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Hexachlorocyclopentadiene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,4,6-Trichlorophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,3-Dichloroaniline	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,4,5-Trichlorophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2-Chloronaphthalene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2-Nitroaniline	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,4-Dinitrobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Dimethylphthalate	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,3-Dinitrobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,6-Dinitrotoluene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,2-Dinitrobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
3-Nitroaniline	ND	0.033	EPA 8270D	8-22-18	8-22-18	



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

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

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0822S1					
2,4-Dinitrophenol	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
4-Nitrophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,4-Dinitrotoluene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Dibenzofuran	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,3,5,6-Tetrachlorophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,3,4,6-Tetrachlorophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Diethylphthalate	ND	0.17	EPA 8270D	8-22-18	8-22-18	
4-Chlorophenyl-phenylether	ND	0.033	EPA 8270D	8-22-18	8-22-18	
4-Nitroaniline	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Fluorene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	8-22-18	8-22-18	
n-Nitrosodiphenylamine	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,2-Diphenylhydrazine	ND	0.033	EPA 8270D	8-22-18	8-22-18	
4-Bromophenyl-phenylether	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Hexachlorobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Pentachlorophenol	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Anthracene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Carbazole	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Di-n-butylphthalate	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Benzidine	ND	0.33	EPA 8270D	8-22-18	8-22-18	
Pyrene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Butylbenzylphthalate	ND	0.17	EPA 8270D	8-22-18	8-22-18	
bis(2-Ethylhexyl)adipate	ND	0.17	EPA 8270D	8-22-18	8-22-18	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Chrysene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
bis(2-Ethylhexyl)phthalate	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Di-n-octylphthalate	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Indeno[1,2,3-cd]pyrene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	86	19 - 103				
Phenol-d6	87	30 - 103				
Nitrobenzene-d5	84	27 - 105				
2-Fluorobiphenyl	92	36 - 102				
2,4,6-Tribromophenol	99	33 - 110				
Terphenyl-d14	92	38 - 108				



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

**SEMIVOLATILE ORGANICS EPA 8270D/SIM
 SB/SBD QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
	SB	SBD	SB	SBD	SB	SBD				
SPIKE BLANKS										
Laboratory ID:	SB0822S1									
Phenol	0.988	1.12	1.33	1.33	74	84	45 - 94	13	29	
2-Chlorophenol	1.05	1.21	1.33	1.33	79	91	46 - 94	14	33	
1,4-Dichlorobenzene	0.511	0.581	0.667	0.667	77	87	42 - 91	13	37	
n-Nitroso-di-n-propylamine	0.506	0.568	0.667	0.667	76	85	45 - 100	12	26	
1,2,4-Trichlorobenzene	0.559	0.579	0.667	0.667	84	87	45 - 100	4	32	
4-Chloro-3-methylphenol	1.09	1.13	1.33	1.33	82	85	55 - 97	4	21	
Acenaphthene	0.539	0.564	0.667	0.667	81	85	48 - 91	5	21	
4-Nitrophenol	1.06	1.17	1.33	1.33	80	88	53 - 102	10	20	
2,4-Dinitrotoluene	0.527	0.583	0.667	0.667	79	87	47 - 96	10	19	
Pentachlorophenol	1.34	1.40	1.33	1.33	101	105	35 - 125	4	26	
Pyrene	0.534	0.561	0.667	0.667	80	84	55 - 110	5	17	
<i>Surrogate:</i>										
2-Fluorophenol					72	81	19 - 103			
Phenol-d6					73	80	30 - 103			
Nitrobenzene-d5					72	73	27 - 105			
2-Fluorobiphenyl					79	80	36 - 102			
2,4,6-Tribromophenol					86	85	33 - 110			
Terphenyl-d14					76	78	38 - 108			



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-02-10.0-082018					
Laboratory ID:	08-217-03					
Arsenic	ND	12	EPA 6010D	8-23-18	8-23-18	
Barium	190	6.1	EPA 6010D	8-23-18	8-23-18	
Cadmium	ND	1.2	EPA 6010D	8-23-18	8-23-18	
Chromium	36	1.2	EPA 6010D	8-23-18	8-23-18	
Lead	24	12	EPA 6010D	8-23-18	8-23-18	
Mercury	1.2	0.61	EPA 7471B	8-22-18	8-22-18	
Selenium	ND	12	EPA 6010D	8-23-18	8-23-18	
Silver	ND	2.5	EPA 6010D	8-23-18	8-23-18	



Date of Report: August 24, 2018
 Samples Submitted: August 21, 2018
 Laboratory Reference: 1808-217
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0823SM1					
Arsenic	ND	5.0	EPA 6010D	8-23-18	8-23-18	
Barium	ND	2.5	EPA 6010D	8-23-18	8-23-18	
Cadmium	ND	0.50	EPA 6010D	8-23-18	8-23-18	
Chromium	ND	0.50	EPA 6010D	8-23-18	8-23-18	
Lead	ND	5.0	EPA 6010D	8-23-18	8-23-18	
Selenium	ND	5.0	EPA 6010D	8-23-18	8-23-18	
Silver	ND	1.0	EPA 6010D	8-23-18	8-23-18	

Laboratory ID:	MB0822S1					
Mercury	ND	0.25	EPA 7471B	8-22-18	8-22-18	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-239-08							
	ORIG	DUP						
Arsenic	ND	ND	NA	NA	NA	NA	20	
Barium	92.2	83.3	NA	NA	NA	10	20	
Cadmium	ND	ND	NA	NA	NA	NA	20	
Chromium	8.30	5.65	NA	NA	NA	38	20	K
Lead	ND	ND	NA	NA	NA	NA	20	
Selenium	ND	ND	NA	NA	NA	NA	20	
Silver	ND	ND	NA	NA	NA	NA	20	

Laboratory ID:	08-218-01							
Mercury	ND	ND	NA	NA	NA	NA	20	

MATRIX SPIKES

Laboratory ID:	08-239-08									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	93.1	95.5	100	100	ND	93	96	75-125	3	20
Barium	188	184	100	100	92.2	96	92	75-125	2	20
Cadmium	46.3	45.8	50.0	50.0	ND	93	92	75-125	1	20
Chromium	102	102	100	100	8.30	94	94	75-125	0	20
Lead	232	233	250	250	ND	93	93	75-125	1	20
Selenium	91.2	92.2	100	100	ND	91	92	75-125	1	20
Silver	21.8	21.9	25.0	25.0	ND	87	88	75-125	1	20

Laboratory ID:	08-218-01									
Mercury	0.562	0.540	0.500	0.500	0.0190	109	104	80-120	4	20



OnSite Environmental, Inc. 14648 NE 95th 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: August 24, 2018
Samples Submitted: August 21, 2018
Laboratory Reference: 1808-217
Project: 397-019

% MOISTURE

Date Analyzed: 8-22-18

Client ID	Lab ID	% Moisture
FB-02-5.0-082018	08-217-02	18
FB-02-10.0-082018	08-217-03	59
FB-02-25.0-082018	08-217-06	17
FB-02-35.0-082018	08-217-08	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





MVA Onsite Environmental Inc.
 Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
 (in working days)
 (Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)
 (TPH analysis 5 Days)

(other) _____

Company: **Fire Alton**
 Project Number: **397-019**
 Project Name: **Block 38 West Property**
 Project Manager: **Jarvan Ruark**
 Sampled by: **Greg Peters**

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	FB-02-3.0-082018	8/20/18	1555	Soil	5
2	FB-02-5.0-082018		1220		
3	FB-02-10.0-082018		1235		
4	FB-02-15.0-082018		1245		
5	FB-02-20.0-082018		1310		
6	FB-02-25.0-082018		1430		
7	FB-02-30.0-082018		1454		
8	FB-02-35.0-082018		1520		

Lab ID	Date	Time	Comments/Special Instructions
1	8/20/18	1555	
2	8/20/18	1220	
3	8/20/18	1235	
4	8/20/18	1245	
5	8/20/18	1310	
6	8/20/18	1430	
7	8/20/18	1454	
8	8/20/18	1520	

Lab ID	Date	Time	Comments/Special Instructions
1	8/20/18	1555	
2	8/20/18	1220	
3	8/20/18	1235	
4	8/20/18	1245	
5	8/20/18	1310	
6	8/20/18	1430	
7	8/20/18	1454	
8	8/20/18	1520	

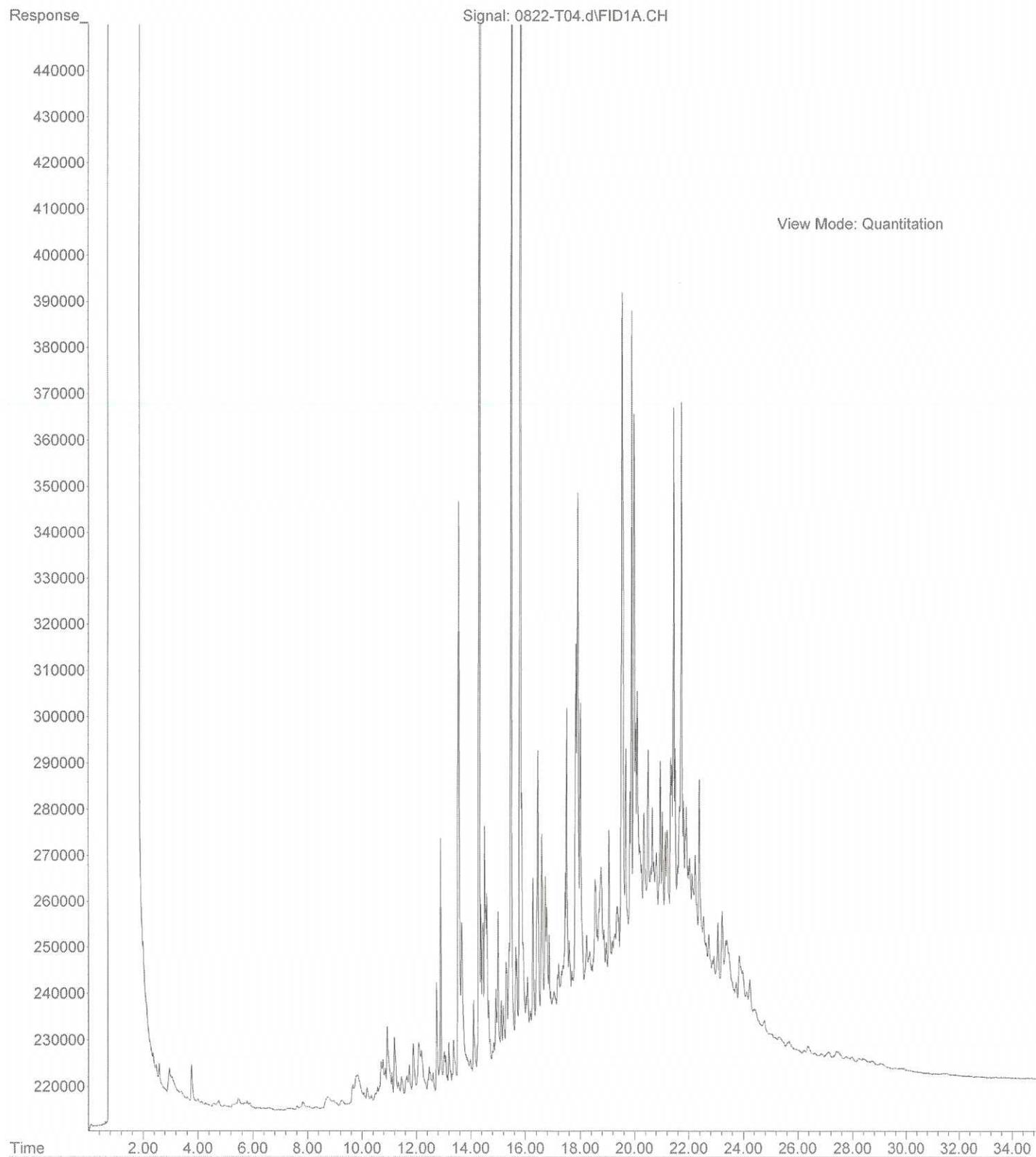
Signature	Company	Date	Time	Comments/Special Instructions
<i>[Signature]</i>	Fire Alton	8/20/18	1845	
<i>[Signature]</i>	OGE	8/21/18	1020	

Please contact Project Manager for averages and turnaround time requests!!
AS 8/22/18

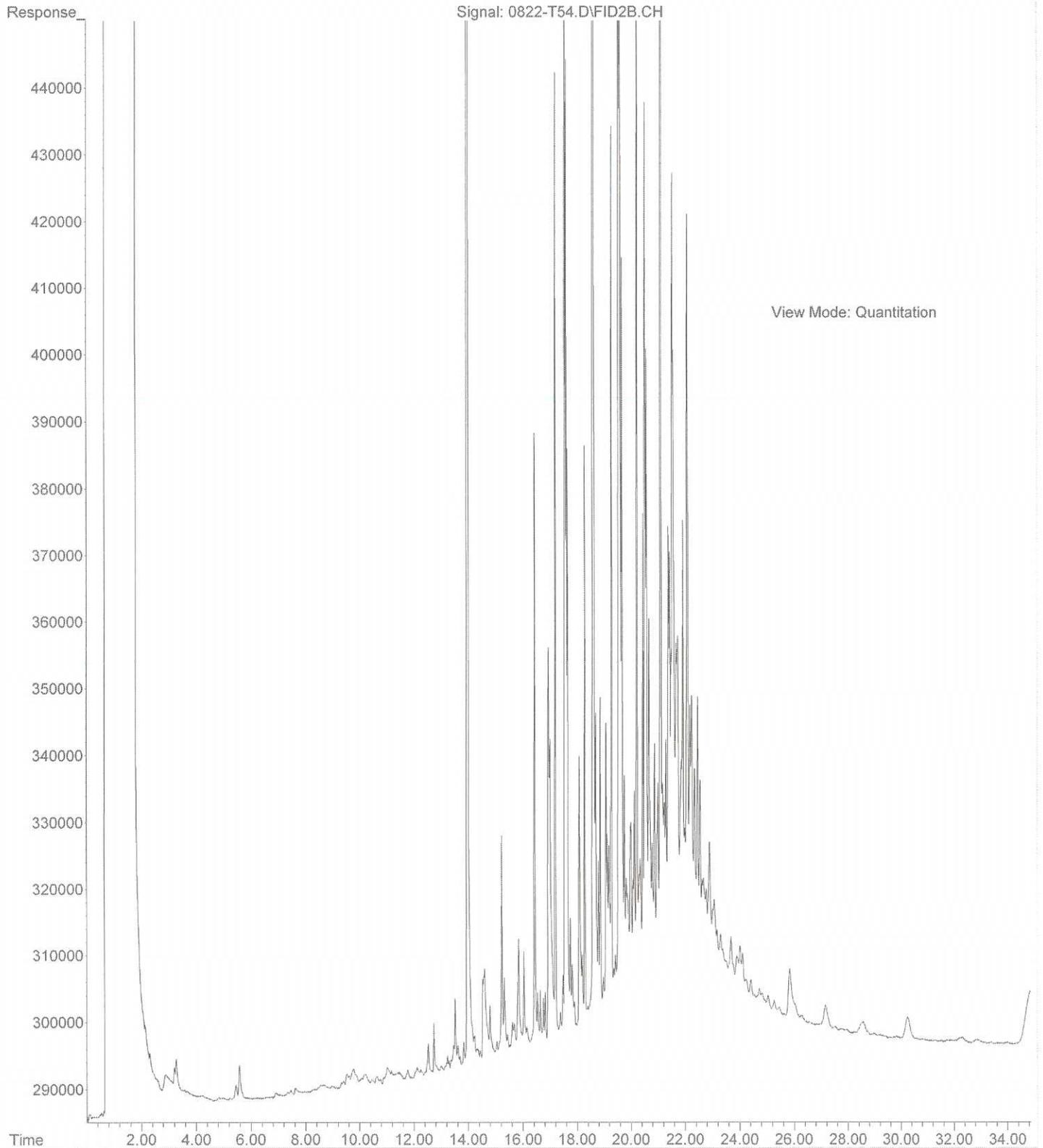
Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)

File :C:\msdchem\1\data\T180822\0822-T04.d
Operator : JT
Acquired : 22 Aug 2018 11:01 using AcqMethod T180110F.M
Instrument : Teri
Sample Name: 08-217-02 5X
Misc Info :
Vial Number: 4



File :C:\msdchem\1\data\T180822.SEC\0822-T54.D
Operator : JT
Acquired : 22 Aug 2018 11:01 using AcqMethod T180110F.M
Instrument : Teri
Sample Name: 08-217-03
Misc Info :
Vial Number: 54





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

August 30, 2018

Javan Ruark
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1808-229

Dear Javan:

Enclosed are the analytical results and associated quality control data for samples submitted on August 22, 2018.

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



OnSite Environmental, Inc. 14648 NE 95th 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: August 30, 2018
Samples Submitted: August 22, 2018
Laboratory Reference: 1808-229
Project: 397-019

Case Narrative

Samples were collected on August 21, 2018 and received by the laboratory on August 22, 2018. 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.

NWTPH Gx/BTEX Analysis

The MTCA Method A cleanup level of 0.030 ppm for Benzene is not achievable for sample FB-04-5.0-082118 due to the low dry weight of the sample.

Total Metals EPA 6010D/7471B Analysis

The duplicate RPD for Chromium is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-04-5.0-082118					
Laboratory ID:	08-229-02					
Benzene	ND	0.033	EPA 8021B	8-22-18	8-22-18	
Toluene	ND	0.16	EPA 8021B	8-22-18	8-22-18	
Ethyl Benzene	ND	0.16	EPA 8021B	8-22-18	8-22-18	
m,p-Xylene	ND	0.16	EPA 8021B	8-22-18	8-22-18	
o-Xylene	ND	0.16	EPA 8021B	8-22-18	8-22-18	
Gasoline	ND	16	NWTPH-Gx	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	104	57-129				
Client ID:	FB-04-20.0-082118					
Laboratory ID:	08-229-05					
Benzene	ND	0.020	EPA 8021B	8-22-18	8-22-18	
Toluene	ND	0.053	EPA 8021B	8-22-18	8-22-18	
Ethyl Benzene	ND	0.053	EPA 8021B	8-22-18	8-22-18	
m,p-Xylene	ND	0.053	EPA 8021B	8-22-18	8-22-18	
o-Xylene	ND	0.053	EPA 8021B	8-22-18	8-22-18	
Gasoline	ND	5.3	NWTPH-Gx	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	85	57-129				
Client ID:	FB-04-30.0-082118					
Laboratory ID:	08-229-07					
Benzene	ND	0.020	EPA 8021B	8-22-18	8-22-18	
Toluene	ND	0.055	EPA 8021B	8-22-18	8-22-18	
Ethyl Benzene	ND	0.055	EPA 8021B	8-22-18	8-22-18	
m,p-Xylene	ND	0.055	EPA 8021B	8-22-18	8-22-18	
o-Xylene	ND	0.055	EPA 8021B	8-22-18	8-22-18	
Gasoline	ND	5.5	NWTPH-Gx	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	88	57-129				



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-01-5.0-082118					
Laboratory ID:	08-229-08					
Benzene	ND	0.020	EPA 8021B	8-22-18	8-22-18	
Toluene	ND	0.062	EPA 8021B	8-22-18	8-22-18	
Ethyl Benzene	ND	0.062	EPA 8021B	8-22-18	8-22-18	
m,p-Xylene	ND	0.062	EPA 8021B	8-22-18	8-22-18	
o-Xylene	ND	0.062	EPA 8021B	8-22-18	8-22-18	
Gasoline	ND	6.2	NWTPH-Gx	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	90	57-129				
Client ID:	FB-01-15.0-082118					
Laboratory ID:	08-229-09					
Benzene	ND	0.020	EPA 8021B	8-22-18	8-22-18	
Toluene	ND	0.091	EPA 8021B	8-22-18	8-22-18	
Ethyl Benzene	ND	0.091	EPA 8021B	8-22-18	8-22-18	
m,p-Xylene	ND	0.091	EPA 8021B	8-22-18	8-22-18	
o-Xylene	ND	0.091	EPA 8021B	8-22-18	8-22-18	
Gasoline	ND	9.1	NWTPH-Gx	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	105	57-129				
Client ID:	FB-01-30.0-082118					
Laboratory ID:	08-229-12					
Benzene	ND	0.020	EPA 8021B	8-22-18	8-22-18	
Toluene	ND	0.051	EPA 8021B	8-22-18	8-22-18	
Ethyl Benzene	ND	0.051	EPA 8021B	8-22-18	8-22-18	
m,p-Xylene	ND	0.051	EPA 8021B	8-22-18	8-22-18	
o-Xylene	ND	0.051	EPA 8021B	8-22-18	8-22-18	
Gasoline	ND	5.1	NWTPH-Gx	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	85	57-129				



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0822S1					
Benzene	ND	0.020	EPA 8021B	8-22-18	8-22-18	
Toluene	ND	0.050	EPA 8021B	8-22-18	8-22-18	
Ethyl Benzene	ND	0.050	EPA 8021B	8-22-18	8-22-18	
m,p-Xylene	ND	0.050	EPA 8021B	8-22-18	8-22-18	
o-Xylene	ND	0.050	EPA 8021B	8-22-18	8-22-18	
Gasoline	ND	5.0	NWTPH-Gx	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	83	57-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-229-02							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				104	102	57-129		

SPIKE BLANKS

Laboratory ID:	SB0822S1							
	SB	SBD	SB	SBD	SB	SBD		
Benzene	0.855	0.924	1.00	1.00	86	92	69-111	8 10
Toluene	0.842	0.912	1.00	1.00	84	91	70-114	8 11
Ethyl Benzene	0.843	0.915	1.00	1.00	84	92	70-115	8 10
m,p-Xylene	0.826	0.900	1.00	1.00	83	90	72-115	9 10
o-Xylene	0.853	0.919	1.00	1.00	85	92	71-115	7 11
<i>Surrogate:</i>								
<i>Fluorobenzene</i>					83	89	57-129	



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-01-5.0-082118					
Laboratory ID:	08-229-08					
Diesel Range Organics	520	320	NWTPH-Dx	8-22-18	8-24-18	
Lube Oil Range Organics	3700	640	NWTPH-Dx	8-22-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	---	50-150				S

Client ID:	FB-01-15.0-082118					
Laboratory ID:	08-229-09					
Diesel Range Organics	ND	40	NWTPH-Dx	8-22-18	8-23-18	
Lube Oil Range Organics	250	81	NWTPH-Dx	8-22-18	8-23-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	116	50-150				

Client ID:	FB-01-30.0-082118					
Laboratory ID:	08-229-12					
Diesel Range Organics	ND	29	NWTPH-Dx	8-22-18	8-23-18	
Lube Oil Range Organics	ND	58	NWTPH-Dx	8-22-18	8-23-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	89	50-150				



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0822S4					
Diesel Range Organics	ND	25	NWTPH-Dx	8-22-18	8-22-18	
Lube Oil Range Organics	ND	50	NWTPH-Dx	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	131	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-231-10							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				55	64	50-150		



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-01-5.0-082118					
Laboratory ID:	08-229-08					
Diesel Range Organics	510	160	NWTPH-Dx	8-22-18	8-25-18	X1,N
Lube Oil Range Organics	1100	320	NWTPH-Dx	8-22-18	8-25-18	X1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>109</i>	<i>50-150</i>				

Client ID:	FB-01-15.0-082118					
Laboratory ID:	08-229-09					
Diesel Range Organics	ND	40	NWTPH-Dx	8-22-18	8-25-18	X1
Lube Oil Range Organics	ND	81	NWTPH-Dx	8-22-18	8-25-18	X1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>97</i>	<i>50-150</i>				



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0822S4					
Diesel Range Organics	ND	25	NWTPH-Dx	8-22-18	8-25-18	X1
Lube Oil Range Organics	ND	50	NWTPH-Dx	8-22-18	8-25-18	X1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	102	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-231-10							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>			55	64	50-150			



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-04-5.0-082118					
Laboratory ID:	08-229-02					
Diesel Range Organics	97	55	NWTPH-Dx	8-23-18	8-23-18	N
Lube Oil Range Organics	540	110	NWTPH-Dx	8-23-18	8-23-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	85	50-150				

Client ID:	FB-04-20.0-082118					
Laboratory ID:	08-229-05					
Diesel Range Organics	ND	29	NWTPH-Dx	8-23-18	8-23-18	
Lube Oil Range Organics	ND	58	NWTPH-Dx	8-23-18	8-23-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	96	50-150				

Client ID:	FB-04-30.0-082118					
Laboratory ID:	08-229-07					
Diesel Range Organics	ND	30	NWTPH-Dx	8-23-18	8-23-18	
Lube Oil Range Organics	ND	59	NWTPH-Dx	8-23-18	8-23-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	86	50-150				



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0823S2					
Diesel Range Organics	ND	25	NWTPH-Dx	8-23-18	8-23-18	
Lube Oil Range Organics	ND	50	NWTPH-Dx	8-23-18	8-23-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>94</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-229-05							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				96	63	50-150		



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-04-20.0-082118					
Laboratory ID:	08-229-05					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	8-22-18	8-22-18	
Chloromethane	ND	0.0046	EPA 8260C	8-22-18	8-22-18	
Vinyl Chloride	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
Bromomethane	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
Chloroethane	ND	0.0046	EPA 8260C	8-22-18	8-22-18	
Trichlorofluoromethane	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
1,1-Dichloroethene	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
Iodomethane	ND	0.0046	EPA 8260C	8-22-18	8-22-18	
Methylene Chloride	ND	0.0046	EPA 8260C	8-22-18	8-22-18	
(trans) 1,2-Dichloroethene	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
1,1-Dichloroethane	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
2,2-Dichloropropane	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
(cis) 1,2-Dichloroethene	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
Bromochloromethane	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
Chloroform	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
1,1,1-Trichloroethane	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
Carbon Tetrachloride	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
1,1-Dichloropropene	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
1,2-Dichloroethane	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
Trichloroethene	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
1,2-Dichloropropane	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
Dibromomethane	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
Bromodichloromethane	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
2-Chloroethyl Vinyl Ether	ND	0.0046	EPA 8260C	8-22-18	8-22-18	
(cis) 1,3-Dichloropropene	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
(trans) 1,3-Dichloropropene	ND	0.00093	EPA 8260C	8-22-18	8-22-18	



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-04-20.0-082118					
Laboratory ID:	08-229-05					
1,1,2-Trichloroethane	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
Tetrachloroethene	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
1,3-Dichloropropane	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
Dibromochloromethane	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
1,2-Dibromoethane	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
Chlorobenzene	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
1,1,1,2-Tetrachloroethane	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
Bromoform	ND	0.0046	EPA 8260C	8-22-18	8-22-18	
Bromobenzene	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
1,1,2,2-Tetrachloroethane	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	8-22-18	8-22-18	
2-Chlorotoluene	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
4-Chlorotoluene	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
1,3-Dichlorobenzene	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
1,4-Dichlorobenzene	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
1,2-Dichlorobenzene	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
1,2-Dibromo-3-chloropropane	ND	0.0060	EPA 8260C	8-22-18	8-22-18	
1,2,4-Trichlorobenzene	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
Hexachlorobutadiene	ND	0.0046	EPA 8260C	8-22-18	8-22-18	
1,2,3-Trichlorobenzene	ND	0.00093	EPA 8260C	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>95</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>71-132</i>				



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0822S1					
Dichlorodifluoromethane	ND	0.0014	EPA 8260C	8-22-18	8-22-18	
Chloromethane	ND	0.0050	EPA 8260C	8-22-18	8-22-18	
Vinyl Chloride	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
Bromomethane	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
Chloroethane	ND	0.0050	EPA 8260C	8-22-18	8-22-18	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
Iodomethane	ND	0.0050	EPA 8260C	8-22-18	8-22-18	
Methylene Chloride	ND	0.0050	EPA 8260C	8-22-18	8-22-18	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
Bromochloromethane	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
Chloroform	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
Trichloroethene	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
Dibromomethane	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
Bromodichloromethane	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	8-22-18	8-22-18	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	8-22-18	8-22-18	



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0822S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
Tetrachloroethene	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
Dibromochloromethane	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
Chlorobenzene	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
Bromoform	ND	0.0050	EPA 8260C	8-22-18	8-22-18	
Bromobenzene	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	8-22-18	8-22-18	
2-Chlorotoluene	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
4-Chlorotoluene	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
1,2-Dibromo-3-chloropropane	ND	0.0065	EPA 8260C	8-22-18	8-22-18	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	8-22-18	8-22-18	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>97</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>104</i>	<i>71-132</i>				



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

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

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB0822S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0491	0.0531	0.0500	0.0500	98	106	53-141	8	17	
Benzene	0.0466	0.0535	0.0500	0.0500	93	107	70-130	14	15	
Trichloroethene	0.0469	0.0529	0.0500	0.0500	94	106	74-122	12	16	
Toluene	0.0490	0.0543	0.0500	0.0500	98	109	76-130	10	15	
Chlorobenzene	0.0444	0.0496	0.0500	0.0500	89	99	75-120	11	14	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					96	91	68-139			
<i>Toluene-d8</i>					103	100	79-128			
<i>4-Bromofluorobenzene</i>					103	104	71-132			



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	Potable-082118					
Laboratory ID:	08-229-16					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Chloromethane	ND	1.0	EPA 8260C	8-23-18	8-23-18	
Vinyl Chloride	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Bromomethane	ND	2.0	EPA 8260C	8-23-18	8-23-18	
Chloroethane	ND	1.0	EPA 8260C	8-23-18	8-23-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Acetone	10	5.0	EPA 8260C	8-23-18	8-23-18	
Iodomethane	ND	5.0	EPA 8260C	8-23-18	8-23-18	
Carbon Disulfide	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Methylene Chloride	ND	1.0	EPA 8260C	8-23-18	8-23-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Vinyl Acetate	ND	1.0	EPA 8260C	8-23-18	8-23-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
2-Butanone	ND	5.0	EPA 8260C	8-23-18	8-23-18	
Bromochloromethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Chloroform	16	0.20	EPA 8260C	8-23-18	8-23-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Benzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Trichloroethene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Dibromomethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Bromodichloromethane	1.6	0.20	EPA 8260C	8-23-18	8-23-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	8-23-18	8-23-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	8-23-18	8-23-18	
Toluene	ND	1.0	EPA 8260C	8-23-18	8-23-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	8-23-18	8-23-18	



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	Potable-082118					
Laboratory ID:	08-229-16					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Tetrachloroethene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
2-Hexanone	ND	2.0	EPA 8260C	8-23-18	8-23-18	
Dibromochloromethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Chlorobenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Ethylbenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
m,p-Xylene	ND	0.40	EPA 8260C	8-23-18	8-23-18	
o-Xylene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Styrene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Bromoform	ND	1.0	EPA 8260C	8-23-18	8-23-18	
Isopropylbenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Bromobenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
n-Propylbenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
tert-Butylbenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
sec-Butylbenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
p-Isopropyltoluene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
n-Butylbenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	8-23-18	8-23-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	8-23-18	8-23-18	
Naphthalene	ND	1.0	EPA 8260C	8-23-18	8-23-18	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260C	8-23-18	8-23-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>90</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>85</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>78-125</i>				



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0823W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Chloromethane	ND	1.0	EPA 8260C	8-23-18	8-23-18	
Vinyl Chloride	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Bromomethane	ND	2.0	EPA 8260C	8-23-18	8-23-18	
Chloroethane	ND	1.0	EPA 8260C	8-23-18	8-23-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Acetone	ND	5.0	EPA 8260C	8-23-18	8-23-18	
Iodomethane	ND	5.0	EPA 8260C	8-23-18	8-23-18	
Carbon Disulfide	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Methylene Chloride	ND	1.0	EPA 8260C	8-23-18	8-23-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Vinyl Acetate	ND	1.0	EPA 8260C	8-23-18	8-23-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
2-Butanone	ND	5.0	EPA 8260C	8-23-18	8-23-18	
Bromochloromethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Chloroform	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Benzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Trichloroethene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Dibromomethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Bromodichloromethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	8-23-18	8-23-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	8-23-18	8-23-18	
Toluene	ND	1.0	EPA 8260C	8-23-18	8-23-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	8-23-18	8-23-18	



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0823W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Tetrachloroethene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
2-Hexanone	ND	2.0	EPA 8260C	8-23-18	8-23-18	
Dibromochloromethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Chlorobenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Ethylbenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
m,p-Xylene	ND	0.40	EPA 8260C	8-23-18	8-23-18	
o-Xylene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Styrene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Bromoform	ND	1.0	EPA 8260C	8-23-18	8-23-18	
Isopropylbenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Bromobenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	8-23-18	8-23-18	
n-Propylbenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
tert-Butylbenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
sec-Butylbenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
p-Isopropyltoluene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
n-Butylbenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	8-23-18	8-23-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	8-23-18	8-23-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	8-23-18	8-23-18	
Naphthalene	ND	1.0	EPA 8260C	8-23-18	8-23-18	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260C	8-23-18	8-23-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>89</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>89</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-125</i>				



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

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

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0823W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	10.8	10.2	10.0	10.0	108	102	62-129	6	15	
Benzene	10.6	9.90	10.0	10.0	106	99	77-127	7	15	
Trichloroethene	10.1	9.52	10.0	10.0	101	95	70-120	6	15	
Toluene	10.4	9.86	10.0	10.0	104	99	82-123	5	15	
Chlorobenzene	10.0	9.49	10.0	10.0	100	95	79-120	5	15	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					<i>89</i>	<i>90</i>	<i>75-127</i>			
<i>Toluene-d8</i>					<i>89</i>	<i>90</i>	<i>80-127</i>			
<i>4-Bromofluorobenzene</i>					<i>96</i>	<i>97</i>	<i>78-125</i>			



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-01-5.0-082118					
Laboratory ID:	08-229-08					
n-Nitrosodimethylamine	ND	0.86	EPA 8270D	8-22-18	8-24-18	
Pyridine	ND	8.6	EPA 8270D	8-22-18	8-24-18	
Phenol	ND	0.86	EPA 8270D	8-22-18	8-24-18	
Aniline	ND	4.3	EPA 8270D	8-22-18	8-24-18	
bis(2-Chloroethyl)ether	ND	0.86	EPA 8270D	8-22-18	8-24-18	
2-Chlorophenol	ND	0.86	EPA 8270D	8-22-18	8-24-18	
1,3-Dichlorobenzene	ND	0.86	EPA 8270D	8-22-18	8-24-18	
1,4-Dichlorobenzene	ND	0.86	EPA 8270D	8-22-18	8-24-18	
Benzyl alcohol	ND	4.3	EPA 8270D	8-22-18	8-24-18	
1,2-Dichlorobenzene	ND	0.86	EPA 8270D	8-22-18	8-24-18	
2-Methylphenol (o-Cresol)	ND	0.86	EPA 8270D	8-22-18	8-24-18	
bis(2-Chloroisopropyl)ether	ND	0.86	EPA 8270D	8-22-18	8-24-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.86	EPA 8270D	8-22-18	8-24-18	
n-Nitroso-di-n-propylamine	ND	0.86	EPA 8270D	8-22-18	8-24-18	
Hexachloroethane	ND	0.86	EPA 8270D	8-22-18	8-24-18	
Nitrobenzene	ND	0.86	EPA 8270D	8-22-18	8-24-18	
Isophorone	ND	0.86	EPA 8270D	8-22-18	8-24-18	
2-Nitrophenol	ND	0.86	EPA 8270D	8-22-18	8-24-18	
2,4-Dimethylphenol	ND	0.86	EPA 8270D	8-22-18	8-24-18	
bis(2-Chloroethoxy)methane	ND	0.86	EPA 8270D	8-22-18	8-24-18	
2,4-Dichlorophenol	ND	0.86	EPA 8270D	8-22-18	8-24-18	
1,2,4-Trichlorobenzene	ND	0.86	EPA 8270D	8-22-18	8-24-18	
Naphthalene	0.99	0.86	EPA 8270D	8-22-18	8-24-18	
4-Chloroaniline	ND	4.3	EPA 8270D	8-22-18	8-24-18	
Hexachlorobutadiene	ND	0.86	EPA 8270D	8-22-18	8-24-18	
4-Chloro-3-methylphenol	ND	0.86	EPA 8270D	8-22-18	8-24-18	
2-Methylnaphthalene	1.2	0.86	EPA 8270D	8-22-18	8-24-18	
1-Methylnaphthalene	1.1	0.86	EPA 8270D	8-22-18	8-24-18	
Hexachlorocyclopentadiene	ND	0.86	EPA 8270D	8-22-18	8-24-18	
2,4,6-Trichlorophenol	ND	0.86	EPA 8270D	8-22-18	8-24-18	
2,3-Dichloroaniline	ND	0.86	EPA 8270D	8-22-18	8-24-18	
2,4,5-Trichlorophenol	ND	0.86	EPA 8270D	8-22-18	8-24-18	
2-Chloronaphthalene	ND	0.86	EPA 8270D	8-22-18	8-24-18	
2-Nitroaniline	ND	0.86	EPA 8270D	8-22-18	8-24-18	
1,4-Dinitrobenzene	ND	0.86	EPA 8270D	8-22-18	8-24-18	
Dimethylphthalate	ND	0.86	EPA 8270D	8-22-18	8-24-18	
1,3-Dinitrobenzene	ND	0.86	EPA 8270D	8-22-18	8-24-18	
2,6-Dinitrotoluene	ND	0.86	EPA 8270D	8-22-18	8-24-18	
1,2-Dinitrobenzene	ND	0.86	EPA 8270D	8-22-18	8-24-18	
Acenaphthylene	0.32	0.034	EPA 8270D/SIM	8-22-18	8-24-18	
3-Nitroaniline	ND	0.86	EPA 8270D	8-22-18	8-24-18	



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-01-5.0-082118					
Laboratory ID:	08-229-08					
2,4-Dinitrophenol	ND	4.3	EPA 8270D	8-22-18	8-24-18	
Acenaphthene	0.46	0.034	EPA 8270D/SIM	8-22-18	8-24-18	
4-Nitrophenol	ND	0.86	EPA 8270D	8-22-18	8-24-18	
2,4-Dinitrotoluene	ND	0.86	EPA 8270D	8-22-18	8-24-18	
Dibenzofuran	ND	0.86	EPA 8270D	8-22-18	8-24-18	
2,3,5,6-Tetrachlorophenol	ND	0.86	EPA 8270D	8-22-18	8-24-18	
2,3,4,6-Tetrachlorophenol	ND	0.86	EPA 8270D	8-22-18	8-24-18	
Diethylphthalate	ND	4.3	EPA 8270D	8-22-18	8-24-18	
4-Chlorophenyl-phenylether	ND	0.86	EPA 8270D	8-22-18	8-24-18	
4-Nitroaniline	ND	0.86	EPA 8270D	8-22-18	8-24-18	
Fluorene	0.46	0.034	EPA 8270D/SIM	8-22-18	8-24-18	
4,6-Dinitro-2-methylphenol	ND	4.3	EPA 8270D	8-22-18	8-24-18	
n-Nitrosodiphenylamine	ND	0.86	EPA 8270D	8-22-18	8-24-18	
1,2-Diphenylhydrazine	ND	0.86	EPA 8270D	8-22-18	8-24-18	
4-Bromophenyl-phenylether	ND	0.86	EPA 8270D	8-22-18	8-24-18	
Hexachlorobenzene	ND	0.86	EPA 8270D	8-22-18	8-24-18	
Pentachlorophenol	ND	4.3	EPA 8270D	8-22-18	8-24-18	
Phenanthrene	5.4	0.86	EPA 8270D	8-22-18	8-24-18	
Anthracene	1.0	0.86	EPA 8270D	8-22-18	8-24-18	
Carbazole	ND	0.86	EPA 8270D	8-22-18	8-24-18	
Di-n-butylphthalate	ND	4.3	EPA 8270D	8-22-18	8-24-18	
Fluoranthene	4.8	0.86	EPA 8270D	8-22-18	8-24-18	
Benzidine	ND	8.6	EPA 8270D	8-22-18	8-24-18	
Pyrene	6.8	0.86	EPA 8270D	8-22-18	8-24-18	
Butylbenzylphthalate	ND	4.3	EPA 8270D	8-22-18	8-24-18	
bis-2-Ethylhexyladipate	ND	4.3	EPA 8270D	8-22-18	8-24-18	
3,3'-Dichlorobenzidine	ND	4.3	EPA 8270D	8-22-18	8-24-18	
Benzo[a]anthracene	2.6	0.86	EPA 8270D	8-22-18	8-24-18	
Chrysene	3.1	0.86	EPA 8270D	8-22-18	8-24-18	
bis(2-Ethylhexyl)phthalate	ND	4.3	EPA 8270D	8-22-18	8-24-18	
Di-n-octylphthalate	ND	4.3	EPA 8270D	8-22-18	8-24-18	
Benzo[b]fluoranthene	2.9	0.86	EPA 8270D	8-22-18	8-24-18	
Benzo(j,k)fluoranthene	0.76	0.034	EPA 8270D/SIM	8-22-18	8-24-18	
Benzo[a]pyrene	2.5	0.86	EPA 8270D	8-22-18	8-24-18	
Indeno[1,2,3-cd]pyrene	1.6	0.86	EPA 8270D	8-22-18	8-24-18	
Dibenz[a,h]anthracene	0.45	0.034	EPA 8270D/SIM	8-22-18	8-24-18	
Benzo[g,h,i]perylene	1.9	0.86	EPA 8270D	8-22-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	52	19 - 103				
Phenol-d6	61	30 - 103				
Nitrobenzene-d5	68	27 - 105				
2-Fluorobiphenyl	88	36 - 102				
2,4,6-Tribromophenol	66	33 - 110				
Terphenyl-d14	94	38 - 108				



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

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

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0822S1					
n-Nitrosodimethylamine	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Pyridine	ND	0.33	EPA 8270D	8-22-18	8-22-18	
Phenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Aniline	ND	0.17	EPA 8270D	8-22-18	8-22-18	
bis(2-Chloroethyl)ether	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2-Chlorophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,3-Dichlorobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,4-Dichlorobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Benzyl alcohol	ND	0.17	EPA 8270D	8-22-18	8-22-18	
1,2-Dichlorobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2-Methylphenol (o-Cresol)	ND	0.033	EPA 8270D	8-22-18	8-22-18	
bis(2-Chloroisopropyl)ether	ND	0.033	EPA 8270D	8-22-18	8-22-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.033	EPA 8270D	8-22-18	8-22-18	
n-Nitroso-di-n-propylamine	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Hexachloroethane	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Nitrobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Isophorone	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2-Nitrophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,4-Dimethylphenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
bis(2-Chloroethoxy)methane	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,4-Dichlorophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,2,4-Trichlorobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Naphthalene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
4-Chloroaniline	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Hexachlorobutadiene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
4-Chloro-3-methylphenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Hexachlorocyclopentadiene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,4,6-Trichlorophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,3-Dichloroaniline	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,4,5-Trichlorophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2-Chloronaphthalene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2-Nitroaniline	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,4-Dinitrobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Dimethylphthalate	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,3-Dinitrobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,6-Dinitrotoluene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,2-Dinitrobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
3-Nitroaniline	ND	0.033	EPA 8270D	8-22-18	8-22-18	



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

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

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0822S1					
2,4-Dinitrophenol	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
4-Nitrophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,4-Dinitrotoluene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Dibenzofuran	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,3,5,6-Tetrachlorophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,3,4,6-Tetrachlorophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Diethylphthalate	ND	0.17	EPA 8270D	8-22-18	8-22-18	
4-Chlorophenyl-phenylether	ND	0.033	EPA 8270D	8-22-18	8-22-18	
4-Nitroaniline	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Fluorene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	8-22-18	8-22-18	
n-Nitrosodiphenylamine	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,2-Diphenylhydrazine	ND	0.033	EPA 8270D	8-22-18	8-22-18	
4-Bromophenyl-phenylether	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Hexachlorobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Pentachlorophenol	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Anthracene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Carbazole	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Di-n-butylphthalate	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Benzidine	ND	0.33	EPA 8270D	8-22-18	8-22-18	
Pyrene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Butylbenzylphthalate	ND	0.17	EPA 8270D	8-22-18	8-22-18	
bis(2-Ethylhexyl)adipate	ND	0.17	EPA 8270D	8-22-18	8-22-18	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Chrysene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
bis(2-Ethylhexyl)phthalate	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Di-n-octylphthalate	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Indeno[1,2,3-cd]pyrene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	86	19 - 103				
Phenol-d6	87	30 - 103				
Nitrobenzene-d5	84	27 - 105				
2-Fluorobiphenyl	92	36 - 102				
2,4,6-Tribromophenol	99	33 - 110				
Terphenyl-d14	92	38 - 108				



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

**SEMIVOLATILE ORGANICS EPA 8270D/SIM
 SB/SBD QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
	SB	SBD	SB	SBD	SB	SBD				
SPIKE BLANKS										
Laboratory ID:	SB0822S1									
Phenol	0.988	1.12	1.33	1.33	74	84	45 - 94	13	29	
2-Chlorophenol	1.05	1.21	1.33	1.33	79	91	46 - 94	14	33	
1,4-Dichlorobenzene	0.511	0.581	0.667	0.667	77	87	42 - 91	13	37	
n-Nitroso-di-n-propylamine	0.506	0.568	0.667	0.667	76	85	45 - 100	12	26	
1,2,4-Trichlorobenzene	0.559	0.579	0.667	0.667	84	87	45 - 100	4	32	
4-Chloro-3-methylphenol	1.09	1.13	1.33	1.33	82	85	55 - 97	4	21	
Acenaphthene	0.539	0.564	0.667	0.667	81	85	48 - 91	5	21	
4-Nitrophenol	1.06	1.17	1.33	1.33	80	88	53 - 102	10	20	
2,4-Dinitrotoluene	0.527	0.583	0.667	0.667	79	87	47 - 96	10	19	
Pentachlorophenol	1.34	1.40	1.33	1.33	101	105	35 - 125	4	26	
Pyrene	0.534	0.561	0.667	0.667	80	84	55 - 110	5	17	
<i>Surrogate:</i>										
2-Fluorophenol					72	81	19 - 103			
Phenol-d6					73	80	30 - 103			
Nitrobenzene-d5					72	73	27 - 105			
2-Fluorobiphenyl					79	80	36 - 102			
2,4,6-Tribromophenol					86	85	33 - 110			
Terphenyl-d14					76	78	38 - 108			



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-04-10.0-082118					
Laboratory ID:	08-229-03					
n-Nitrosodimethylamine	ND	0.083	EPA 8270D	8-22-18	8-24-18	
Pyridine	ND	0.83	EPA 8270D	8-22-18	8-24-18	
Phenol	ND	0.083	EPA 8270D	8-22-18	8-24-18	
Aniline	ND	0.42	EPA 8270D	8-22-18	8-24-18	
bis(2-Chloroethyl)ether	ND	0.083	EPA 8270D	8-22-18	8-24-18	
2-Chlorophenol	ND	0.083	EPA 8270D	8-22-18	8-24-18	
1,3-Dichlorobenzene	ND	0.083	EPA 8270D	8-22-18	8-24-18	
1,4-Dichlorobenzene	ND	0.083	EPA 8270D	8-22-18	8-24-18	
Benzyl alcohol	ND	0.42	EPA 8270D	8-22-18	8-24-18	
1,2-Dichlorobenzene	ND	0.083	EPA 8270D	8-22-18	8-24-18	
2-Methylphenol (o-Cresol)	ND	0.083	EPA 8270D	8-22-18	8-24-18	
bis(2-Chloroisopropyl)ether	ND	0.083	EPA 8270D	8-22-18	8-24-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.083	EPA 8270D	8-22-18	8-24-18	
n-Nitroso-di-n-propylamine	ND	0.083	EPA 8270D	8-22-18	8-24-18	
Hexachloroethane	ND	0.083	EPA 8270D	8-22-18	8-24-18	
Nitrobenzene	ND	0.083	EPA 8270D	8-22-18	8-24-18	
Isophorone	ND	0.083	EPA 8270D	8-22-18	8-24-18	
2-Nitrophenol	ND	0.083	EPA 8270D	8-22-18	8-24-18	
2,4-Dimethylphenol	ND	0.083	EPA 8270D	8-22-18	8-24-18	
bis(2-Chloroethoxy)methane	ND	0.083	EPA 8270D	8-22-18	8-24-18	
2,4-Dichlorophenol	ND	0.083	EPA 8270D	8-22-18	8-24-18	
1,2,4-Trichlorobenzene	ND	0.083	EPA 8270D	8-22-18	8-24-18	
Naphthalene	0.12	0.083	EPA 8270D	8-22-18	8-24-18	
4-Chloroaniline	ND	0.42	EPA 8270D	8-22-18	8-24-18	
Hexachlorobutadiene	ND	0.083	EPA 8270D	8-22-18	8-24-18	
4-Chloro-3-methylphenol	ND	0.083	EPA 8270D	8-22-18	8-24-18	
2-Methylnaphthalene	0.099	0.083	EPA 8270D	8-22-18	8-24-18	
1-Methylnaphthalene	0.057	0.017	EPA 8270D/SIM	8-22-18	8-24-18	
Hexachlorocyclopentadiene	ND	0.083	EPA 8270D	8-22-18	8-24-18	
2,4,6-Trichlorophenol	ND	0.083	EPA 8270D	8-22-18	8-24-18	
2,3-Dichloroaniline	ND	0.083	EPA 8270D	8-22-18	8-24-18	
2,4,5-Trichlorophenol	ND	0.083	EPA 8270D	8-22-18	8-24-18	
2-Chloronaphthalene	ND	0.083	EPA 8270D	8-22-18	8-24-18	
2-Nitroaniline	ND	0.083	EPA 8270D	8-22-18	8-24-18	
1,4-Dinitrobenzene	ND	0.083	EPA 8270D	8-22-18	8-24-18	
Dimethylphthalate	ND	0.083	EPA 8270D	8-22-18	8-24-18	
1,3-Dinitrobenzene	ND	0.083	EPA 8270D	8-22-18	8-24-18	
2,6-Dinitrotoluene	ND	0.083	EPA 8270D	8-22-18	8-24-18	
1,2-Dinitrobenzene	ND	0.083	EPA 8270D	8-22-18	8-24-18	
Acenaphthylene	0.045	0.017	EPA 8270D/SIM	8-22-18	8-24-18	
3-Nitroaniline	ND	0.083	EPA 8270D	8-22-18	8-24-18	



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-04-10.0-082118					
Laboratory ID:	08-229-03					
2,4-Dinitrophenol	ND	0.42	EPA 8270D	8-22-18	8-24-18	
Acenaphthene	0.21	0.083	EPA 8270D	8-22-18	8-24-18	
4-Nitrophenol	ND	0.083	EPA 8270D	8-22-18	8-24-18	
2,4-Dinitrotoluene	ND	0.083	EPA 8270D	8-22-18	8-24-18	
Dibenzofuran	0.12	0.083	EPA 8270D	8-22-18	8-24-18	
2,3,5,6-Tetrachlorophenol	ND	0.083	EPA 8270D	8-22-18	8-24-18	
2,3,4,6-Tetrachlorophenol	ND	0.083	EPA 8270D	8-22-18	8-24-18	
Diethylphthalate	ND	0.42	EPA 8270D	8-22-18	8-24-18	
4-Chlorophenyl-phenylether	ND	0.083	EPA 8270D	8-22-18	8-24-18	
4-Nitroaniline	ND	0.083	EPA 8270D	8-22-18	8-24-18	
Fluorene	0.22	0.083	EPA 8270D	8-22-18	8-24-18	
4,6-Dinitro-2-methylphenol	ND	0.42	EPA 8270D	8-22-18	8-24-18	
n-Nitrosodiphenylamine	ND	0.083	EPA 8270D	8-22-18	8-24-18	
1,2-Diphenylhydrazine	ND	0.18	EPA 8270D	8-22-18	8-24-18	U1
4-Bromophenyl-phenylether	ND	0.083	EPA 8270D	8-22-18	8-24-18	
Hexachlorobenzene	ND	0.083	EPA 8270D	8-22-18	8-24-18	
Pentachlorophenol	ND	0.42	EPA 8270D	8-22-18	8-24-18	
Phenanthrene	1.0	0.083	EPA 8270D	8-22-18	8-24-18	
Anthracene	0.29	0.083	EPA 8270D	8-22-18	8-24-18	
Carbazole	ND	0.083	EPA 8270D	8-22-18	8-24-18	
Di-n-butylphthalate	ND	0.42	EPA 8270D	8-22-18	8-24-18	
Fluoranthene	0.97	0.083	EPA 8270D	8-22-18	8-24-18	
Benzidine	ND	0.83	EPA 8270D	8-22-18	8-24-18	
Pyrene	1.1	0.083	EPA 8270D	8-22-18	8-24-18	
Butylbenzylphthalate	ND	0.42	EPA 8270D	8-22-18	8-24-18	
bis-2-Ethylhexyladipate	ND	0.42	EPA 8270D	8-22-18	8-24-18	
3,3'-Dichlorobenzidine	ND	0.42	EPA 8270D	8-22-18	8-24-18	
Benzo[a]anthracene	0.67	0.083	EPA 8270D	8-22-18	8-24-18	
Chrysene	0.95	0.083	EPA 8270D	8-22-18	8-24-18	
bis(2-Ethylhexyl)phthalate	ND	0.42	EPA 8270D	8-22-18	8-24-18	
Di-n-octylphthalate	ND	0.42	EPA 8270D	8-22-18	8-24-18	
Benzo[b]fluoranthene	0.47	0.083	EPA 8270D	8-22-18	8-24-18	
Benzo(j,k)fluoranthene	0.18	0.083	EPA 8270D	8-22-18	8-24-18	
Benzo[a]pyrene	0.36	0.083	EPA 8270D	8-22-18	8-24-18	
Indeno[1,2,3-cd]pyrene	0.19	0.083	EPA 8270D	8-22-18	8-24-18	
Dibenz[a,h]anthracene	0.041	0.017	EPA 8270D/SIM	8-22-18	8-24-18	
Benzo[g,h,i]perylene	0.21	0.083	EPA 8270D	8-22-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>41</i>	<i>19 - 103</i>				
<i>Phenol-d6</i>	<i>48</i>	<i>30 - 103</i>				
<i>Nitrobenzene-d5</i>	<i>45</i>	<i>27 - 105</i>				
<i>2-Fluorobiphenyl</i>	<i>55</i>	<i>36 - 102</i>				
<i>2,4,6-Tribromophenol</i>	<i>64</i>	<i>33 - 110</i>				
<i>Terphenyl-d14</i>	<i>60</i>	<i>38 - 108</i>				



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

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

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0822S1					
n-Nitrosodimethylamine	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Pyridine	ND	0.33	EPA 8270D	8-22-18	8-22-18	
Phenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Aniline	ND	0.17	EPA 8270D	8-22-18	8-22-18	
bis(2-Chloroethyl)ether	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2-Chlorophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,3-Dichlorobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,4-Dichlorobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Benzyl alcohol	ND	0.17	EPA 8270D	8-22-18	8-22-18	
1,2-Dichlorobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2-Methylphenol (o-Cresol)	ND	0.033	EPA 8270D	8-22-18	8-22-18	
bis(2-Chloroisopropyl)ether	ND	0.033	EPA 8270D	8-22-18	8-22-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.033	EPA 8270D	8-22-18	8-22-18	
n-Nitroso-di-n-propylamine	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Hexachloroethane	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Nitrobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Isophorone	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2-Nitrophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,4-Dimethylphenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
bis(2-Chloroethoxy)methane	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,4-Dichlorophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,2,4-Trichlorobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Naphthalene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
4-Chloroaniline	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Hexachlorobutadiene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
4-Chloro-3-methylphenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Hexachlorocyclopentadiene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,4,6-Trichlorophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,3-Dichloroaniline	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,4,5-Trichlorophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2-Chloronaphthalene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2-Nitroaniline	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,4-Dinitrobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Dimethylphthalate	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,3-Dinitrobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,6-Dinitrotoluene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,2-Dinitrobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
3-Nitroaniline	ND	0.033	EPA 8270D	8-22-18	8-22-18	



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

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

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0822S1					
2,4-Dinitrophenol	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
4-Nitrophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,4-Dinitrotoluene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Dibenzofuran	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,3,5,6-Tetrachlorophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
2,3,4,6-Tetrachlorophenol	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Diethylphthalate	ND	0.17	EPA 8270D	8-22-18	8-22-18	
4-Chlorophenyl-phenylether	ND	0.033	EPA 8270D	8-22-18	8-22-18	
4-Nitroaniline	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Fluorene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	8-22-18	8-22-18	
n-Nitrosodiphenylamine	ND	0.033	EPA 8270D	8-22-18	8-22-18	
1,2-Diphenylhydrazine	ND	0.033	EPA 8270D	8-22-18	8-22-18	
4-Bromophenyl-phenylether	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Hexachlorobenzene	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Pentachlorophenol	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Anthracene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Carbazole	ND	0.033	EPA 8270D	8-22-18	8-22-18	
Di-n-butylphthalate	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Benzidine	ND	0.33	EPA 8270D	8-22-18	8-22-18	
Pyrene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Butylbenzylphthalate	ND	0.17	EPA 8270D	8-22-18	8-22-18	
bis(2-Ethylhexyl)adipate	ND	0.17	EPA 8270D	8-22-18	8-22-18	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Chrysene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
bis(2-Ethylhexyl)phthalate	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Di-n-octylphthalate	ND	0.17	EPA 8270D	8-22-18	8-22-18	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Indeno[1,2,3-cd]pyrene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	8-22-18	8-22-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	86	19 - 103				
Phenol-d6	87	30 - 103				
Nitrobenzene-d5	84	27 - 105				
2-Fluorobiphenyl	92	36 - 102				
2,4,6-Tribromophenol	99	33 - 110				
Terphenyl-d14	92	38 - 108				



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

**SEMIVOLATILE ORGANICS EPA 8270D/SIM
 SB/SBD QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0822S1									
	SB	SBD	SB	SBD	SB	SBD				
Phenol	0.988	1.12	1.33	1.33	74	84	45 - 94	13	29	
2-Chlorophenol	1.05	1.21	1.33	1.33	79	91	46 - 94	14	33	
1,4-Dichlorobenzene	0.511	0.581	0.667	0.667	77	87	42 - 91	13	37	
n-Nitroso-di-n-propylamine	0.506	0.568	0.667	0.667	76	85	45 - 100	12	26	
1,2,4-Trichlorobenzene	0.559	0.579	0.667	0.667	84	87	45 - 100	4	32	
4-Chloro-3-methylphenol	1.09	1.13	1.33	1.33	82	85	55 - 97	4	21	
Acenaphthene	0.539	0.564	0.667	0.667	81	85	48 - 91	5	21	
4-Nitrophenol	1.06	1.17	1.33	1.33	80	88	53 - 102	10	20	
2,4-Dinitrotoluene	0.527	0.583	0.667	0.667	79	87	47 - 96	10	19	
Pentachlorophenol	1.34	1.40	1.33	1.33	101	105	35 - 125	4	26	
Pyrene	0.534	0.561	0.667	0.667	80	84	55 - 110	5	17	
<i>Surrogate:</i>										
2-Fluorophenol					72	81	19 - 103			
Phenol-d6					73	80	30 - 103			
Nitrobenzene-d5					72	73	27 - 105			
2-Fluorobiphenyl					79	80	36 - 102			
2,4,6-Tribromophenol					86	85	33 - 110			
Terphenyl-d14					76	78	38 - 108			



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-04-15.0-082118					
Laboratory ID:	08-229-04					
n-Nitrosodimethylamine	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Pyridine	ND	0.41	EPA 8270D	8-29-18	8-29-18	
Phenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Aniline	ND	0.21	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroethyl)ether	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2-Chlorophenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
1,3-Dichlorobenzene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
1,4-Dichlorobenzene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Benzyl alcohol	ND	0.21	EPA 8270D	8-29-18	8-29-18	
1,2-Dichlorobenzene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2-Methylphenol (o-Cresol)	ND	0.041	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroisopropyl)ether	ND	0.041	EPA 8270D	8-29-18	8-29-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.041	EPA 8270D	8-29-18	8-29-18	
n-Nitroso-di-n-propylamine	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Hexachloroethane	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Nitrobenzene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Isophorone	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2-Nitrophenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2,4-Dimethylphenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroethoxy)methane	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2,4-Dichlorophenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
1,2,4-Trichlorobenzene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Naphthalene	0.052	0.041	EPA 8270D	8-29-18	8-29-18	
4-Chloroaniline	ND	0.21	EPA 8270D	8-29-18	8-29-18	
Hexachlorobutadiene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
4-Chloro-3-methylphenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2-Methylnaphthalene	0.092	0.041	EPA 8270D	8-29-18	8-29-18	
1-Methylnaphthalene	0.048	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Hexachlorocyclopentadiene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2,4,6-Trichlorophenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2,3-Dichloroaniline	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2,4,5-Trichlorophenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2-Chloronaphthalene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2-Nitroaniline	ND	0.041	EPA 8270D	8-29-18	8-29-18	
1,4-Dinitrobenzene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Dimethylphthalate	ND	0.041	EPA 8270D	8-29-18	8-29-18	
1,3-Dinitrobenzene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2,6-Dinitrotoluene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
1,2-Dinitrobenzene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Acenaphthylene	ND	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
3-Nitroaniline	ND	0.041	EPA 8270D	8-29-18	8-29-18	



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-04-15.0-082118					
Laboratory ID:	08-229-04					
2,4-Dinitrophenol	ND	0.21	EPA 8270D	8-29-18	8-29-18	
Acenaphthene	0.049	0.041	EPA 8270D	8-29-18	8-29-18	
4-Nitrophenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2,4-Dinitrotoluene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Dibenzofuran	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2,3,5,6-Tetrachlorophenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2,3,4,6-Tetrachlorophenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Diethylphthalate	ND	0.21	EPA 8270D	8-29-18	8-29-18	
4-Chlorophenyl-phenylether	ND	0.041	EPA 8270D	8-29-18	8-29-18	
4-Nitroaniline	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Fluorene	0.043	0.041	EPA 8270D	8-29-18	8-29-18	
4,6-Dinitro-2-methylphenol	ND	0.21	EPA 8270D	8-29-18	8-29-18	
n-Nitrosodiphenylamine	ND	0.041	EPA 8270D	8-29-18	8-29-18	
1,2-Diphenylhydrazine	ND	0.041	EPA 8270D	8-29-18	8-29-18	
4-Bromophenyl-phenylether	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Hexachlorobenzene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Pentachlorophenol	ND	0.21	EPA 8270D	8-29-18	8-29-18	
Phenanthrene	0.16	0.041	EPA 8270D	8-29-18	8-29-18	
Anthracene	0.029	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Carbazole	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Di-n-butylphthalate	ND	0.21	EPA 8270D	8-29-18	8-29-18	
Fluoranthene	0.078	0.041	EPA 8270D	8-29-18	8-29-18	
Benzidine	ND	0.41	EPA 8270D	8-29-18	8-29-18	
Pyrene	0.10	0.041	EPA 8270D	8-29-18	8-29-18	
Butylbenzylphthalate	ND	0.21	EPA 8270D	8-29-18	8-29-18	
bis-2-Ethylhexyladipate	ND	0.21	EPA 8270D	8-29-18	8-29-18	
3,3'-Dichlorobenzidine	ND	0.21	EPA 8270D	8-29-18	8-29-18	
Benzo[a]anthracene	0.027	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Chrysene	0.028	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
bis(2-Ethylhexyl)phthalate	ND	0.21	EPA 8270D	8-29-18	8-29-18	
Di-n-octylphthalate	ND	0.21	EPA 8270D	8-29-18	8-29-18	
Benzo[b]fluoranthene	0.025	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo(j,k)fluoranthene	0.0099	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[a]pyrene	0.027	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Indeno[1,2,3-cd]pyrene	0.017	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Dibenz[a,h]anthracene	ND	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[g,h,i]perylene	0.018	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	70	19 - 103				
Phenol-d6	72	30 - 103				
Nitrobenzene-d5	64	27 - 105				
2-Fluorobiphenyl	70	36 - 102				
2,4,6-Tribromophenol	79	33 - 110				
Terphenyl-d14	68	38 - 108				



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-01-15.0-082118					
Laboratory ID:	08-229-09					
n-Nitrosodimethylamine	ND	0.054	EPA 8270D	8-29-18	8-29-18	
Pyridine	ND	0.54	EPA 8270D	8-29-18	8-29-18	
Phenol	ND	0.054	EPA 8270D	8-29-18	8-29-18	
Aniline	ND	0.27	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroethyl)ether	ND	0.054	EPA 8270D	8-29-18	8-29-18	
2-Chlorophenol	ND	0.054	EPA 8270D	8-29-18	8-29-18	
1,3-Dichlorobenzene	ND	0.054	EPA 8270D	8-29-18	8-29-18	
1,4-Dichlorobenzene	ND	0.054	EPA 8270D	8-29-18	8-29-18	
Benzyl alcohol	ND	0.27	EPA 8270D	8-29-18	8-29-18	
1,2-Dichlorobenzene	ND	0.054	EPA 8270D	8-29-18	8-29-18	
2-Methylphenol (o-Cresol)	ND	0.054	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroisopropyl)ether	ND	0.054	EPA 8270D	8-29-18	8-29-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.054	EPA 8270D	8-29-18	8-29-18	
n-Nitroso-di-n-propylamine	ND	0.054	EPA 8270D	8-29-18	8-29-18	
Hexachloroethane	ND	0.054	EPA 8270D	8-29-18	8-29-18	
Nitrobenzene	ND	0.054	EPA 8270D	8-29-18	8-29-18	
Isophorone	ND	0.054	EPA 8270D	8-29-18	8-29-18	
2-Nitrophenol	ND	0.054	EPA 8270D	8-29-18	8-29-18	
2,4-Dimethylphenol	ND	0.054	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroethoxy)methane	ND	0.054	EPA 8270D	8-29-18	8-29-18	
2,4-Dichlorophenol	ND	0.054	EPA 8270D	8-29-18	8-29-18	
1,2,4-Trichlorobenzene	ND	0.054	EPA 8270D	8-29-18	8-29-18	
Naphthalene	ND	0.011	EPA 8270D/SIM	8-29-18	8-29-18	
4-Chloroaniline	ND	0.27	EPA 8270D	8-29-18	8-29-18	
Hexachlorobutadiene	ND	0.054	EPA 8270D	8-29-18	8-29-18	
4-Chloro-3-methylphenol	ND	0.054	EPA 8270D	8-29-18	8-29-18	
2-Methylnaphthalene	ND	0.011	EPA 8270D/SIM	8-29-18	8-29-18	
1-Methylnaphthalene	ND	0.011	EPA 8270D/SIM	8-29-18	8-29-18	
Hexachlorocyclopentadiene	ND	0.054	EPA 8270D	8-29-18	8-29-18	
2,4,6-Trichlorophenol	ND	0.054	EPA 8270D	8-29-18	8-29-18	
2,3-Dichloroaniline	ND	0.054	EPA 8270D	8-29-18	8-29-18	
2,4,5-Trichlorophenol	ND	0.054	EPA 8270D	8-29-18	8-29-18	
2-Chloronaphthalene	ND	0.054	EPA 8270D	8-29-18	8-29-18	
2-Nitroaniline	ND	0.054	EPA 8270D	8-29-18	8-29-18	
1,4-Dinitrobenzene	ND	0.054	EPA 8270D	8-29-18	8-29-18	
Dimethylphthalate	ND	0.054	EPA 8270D	8-29-18	8-29-18	
1,3-Dinitrobenzene	ND	0.054	EPA 8270D	8-29-18	8-29-18	
2,6-Dinitrotoluene	ND	0.054	EPA 8270D	8-29-18	8-29-18	
1,2-Dinitrobenzene	ND	0.054	EPA 8270D	8-29-18	8-29-18	
Acenaphthylene	ND	0.011	EPA 8270D/SIM	8-29-18	8-29-18	
3-Nitroaniline	ND	0.054	EPA 8270D	8-29-18	8-29-18	



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-01-15.0-082118					
Laboratory ID:	08-229-09					
2,4-Dinitrophenol	ND	0.27	EPA 8270D	8-29-18	8-29-18	
Acenaphthene	ND	0.011	EPA 8270D/SIM	8-29-18	8-29-18	
4-Nitrophenol	ND	0.054	EPA 8270D	8-29-18	8-29-18	
2,4-Dinitrotoluene	ND	0.054	EPA 8270D	8-29-18	8-29-18	
Dibenzofuran	ND	0.054	EPA 8270D	8-29-18	8-29-18	
2,3,5,6-Tetrachlorophenol	ND	0.054	EPA 8270D	8-29-18	8-29-18	
2,3,4,6-Tetrachlorophenol	ND	0.054	EPA 8270D	8-29-18	8-29-18	
Diethylphthalate	ND	0.27	EPA 8270D	8-29-18	8-29-18	
4-Chlorophenyl-phenylether	ND	0.054	EPA 8270D	8-29-18	8-29-18	
4-Nitroaniline	ND	0.054	EPA 8270D	8-29-18	8-29-18	
Fluorene	ND	0.011	EPA 8270D/SIM	8-29-18	8-29-18	
4,6-Dinitro-2-methylphenol	ND	0.27	EPA 8270D	8-29-18	8-29-18	
n-Nitrosodiphenylamine	ND	0.054	EPA 8270D	8-29-18	8-29-18	
1,2-Diphenylhydrazine	ND	0.054	EPA 8270D	8-29-18	8-29-18	
4-Bromophenyl-phenylether	ND	0.054	EPA 8270D	8-29-18	8-29-18	
Hexachlorobenzene	ND	0.054	EPA 8270D	8-29-18	8-29-18	
Pentachlorophenol	ND	0.27	EPA 8270D	8-29-18	8-29-18	
Phenanthrene	ND	0.011	EPA 8270D/SIM	8-29-18	8-29-18	
Anthracene	ND	0.011	EPA 8270D/SIM	8-29-18	8-29-18	
Carbazole	ND	0.054	EPA 8270D	8-29-18	8-29-18	
Di-n-butylphthalate	ND	0.27	EPA 8270D	8-29-18	8-29-18	
Fluoranthene	ND	0.011	EPA 8270D/SIM	8-29-18	8-29-18	
Benzidine	ND	0.54	EPA 8270D	8-29-18	8-29-18	
Pyrene	ND	0.011	EPA 8270D/SIM	8-29-18	8-29-18	
Butylbenzylphthalate	ND	0.27	EPA 8270D	8-29-18	8-29-18	
bis-2-Ethylhexyladipate	ND	0.27	EPA 8270D	8-29-18	8-29-18	
3,3'-Dichlorobenzidine	ND	0.27	EPA 8270D	8-29-18	8-29-18	
Benzo[a]anthracene	ND	0.011	EPA 8270D/SIM	8-29-18	8-29-18	
Chrysene	ND	0.011	EPA 8270D/SIM	8-29-18	8-29-18	
bis(2-Ethylhexyl)phthalate	ND	0.27	EPA 8270D	8-29-18	8-29-18	
Di-n-octylphthalate	ND	0.27	EPA 8270D	8-29-18	8-29-18	
Benzo[b]fluoranthene	ND	0.011	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo(j,k)fluoranthene	ND	0.011	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[a]pyrene	ND	0.011	EPA 8270D/SIM	8-29-18	8-29-18	
Indeno[1,2,3-cd]pyrene	ND	0.011	EPA 8270D/SIM	8-29-18	8-29-18	
Dibenz[a,h]anthracene	ND	0.011	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[g,h,i]perylene	ND	0.011	EPA 8270D/SIM	8-29-18	8-29-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>70</i>	<i>19 - 103</i>				
<i>Phenol-d6</i>	<i>72</i>	<i>30 - 103</i>				
<i>Nitrobenzene-d5</i>	<i>69</i>	<i>27 - 105</i>				
<i>2-Fluorobiphenyl</i>	<i>75</i>	<i>36 - 102</i>				
<i>2,4,6-Tribromophenol</i>	<i>83</i>	<i>33 - 110</i>				
<i>Terphenyl-d14</i>	<i>75</i>	<i>38 - 108</i>				



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

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

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0829S1					
n-Nitrosodimethylamine	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Pyridine	ND	0.33	EPA 8270D	8-29-18	8-29-18	
Phenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Aniline	ND	0.17	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroethyl)ether	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Chlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,3-Dichlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,4-Dichlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Benzyl alcohol	ND	0.17	EPA 8270D	8-29-18	8-29-18	
1,2-Dichlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Methylphenol (o-Cresol)	ND	0.033	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroisopropyl)ether	ND	0.033	EPA 8270D	8-29-18	8-29-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.033	EPA 8270D	8-29-18	8-29-18	
n-Nitroso-di-n-propylamine	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Hexachloroethane	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Nitrobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Isophorone	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Nitrophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4-Dimethylphenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroethoxy)methane	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4-Dichlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,2,4-Trichlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Naphthalene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
4-Chloroaniline	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Hexachlorobutadiene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
4-Chloro-3-methylphenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Hexachlorocyclopentadiene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4,6-Trichlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,3-Dichloroaniline	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4,5-Trichlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Chloronaphthalene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Nitroaniline	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,4-Dinitrobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Dimethylphthalate	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,3-Dinitrobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,6-Dinitrotoluene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,2-Dinitrobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
3-Nitroaniline	ND	0.033	EPA 8270D	8-29-18	8-29-18	



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

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

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0829S1					
2,4-Dinitrophenol	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
4-Nitrophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4-Dinitrotoluene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Dibenzofuran	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,3,5,6-Tetrachlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,3,4,6-Tetrachlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Diethylphthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
4-Chlorophenyl-phenylether	ND	0.033	EPA 8270D	8-29-18	8-29-18	
4-Nitroaniline	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Fluorene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	8-29-18	8-29-18	
n-Nitrosodiphenylamine	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,2-Diphenylhydrazine	ND	0.033	EPA 8270D	8-29-18	8-29-18	
4-Bromophenyl-phenylether	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Hexachlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Pentachlorophenol	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Anthracene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Carbazole	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Di-n-butylphthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Benzidine	ND	0.33	EPA 8270D	8-29-18	8-29-18	
Pyrene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Butylbenzylphthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
bis(2-Ethylhexyl)adipate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Chrysene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
bis(2-Ethylhexyl)phthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Di-n-octylphthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Indeno[1,2,3-cd]pyrene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	79	19 - 103				
Phenol-d6	79	30 - 103				
Nitrobenzene-d5	73	27 - 105				
2-Fluorobiphenyl	75	36 - 102				
2,4,6-Tribromophenol	88	33 - 110				
Terphenyl-d14	81	38 - 108				



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
	MS	MSD	MS	MSD	Result	Recovery	Limits	RPD	Limit		
MATRIX SPIKES											
Laboratory ID:	08-229-04										
	MS	MSD	MS	MSD		MS	MSD				
Phenol	1.15	0.989	1.33	1.33	ND	86	74	37 - 94	15	27	
2-Chlorophenol	1.21	1.03	1.33	1.33	ND	91	77	37 - 95	16	32	
1,4-Dichlorobenzene	0.568	0.493	0.667	0.667	ND	85	74	23 - 97	14	37	
n-Nitroso-di-n-propylamine	0.580	0.501	0.667	0.667	ND	87	75	40 - 91	15	28	
1,2,4-Trichlorobenzene	0.563	0.505	0.667	0.667	ND	84	76	37 - 93	11	30	
4-Chloro-3-methylphenol	1.11	1.03	1.33	1.33	ND	83	77	46 - 96	7	25	
Acenaphthene	0.585	0.526	0.667	0.667	0.0395	82	73	43 - 90	11	25	
4-Nitrophenol	1.15	1.03	1.33	1.33	ND	86	77	31 - 104	11	28	
2,4-Dinitrotoluene	0.575	0.516	0.667	0.667	ND	86	77	31 - 96	11	32	
Pentachlorophenol	1.38	1.22	1.33	1.33	ND	104	92	20 - 123	12	29	
Pyrene	0.582	0.518	0.667	0.667	0.0828	75	65	28 - 114	12	35	
<i>Surrogate:</i>											
2-Fluorophenol						85	71	19 - 103			
Phenol-d6						84	73	30 - 103			
Nitrobenzene-d5						72	65	27 - 105			
2-Fluorobiphenyl						77	70	36 - 102			
2,4,6-Tribromophenol						92	84	33 - 110			
Terphenyl-d14						78	71	38 - 108			



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-04-5.0-082118					
Laboratory ID:	08-229-02					
Arsenic	ND	11	EPA 6010D	8-23-18	8-23-18	
Barium	290	5.5	EPA 6010D	8-23-18	8-23-18	
Cadmium	ND	1.1	EPA 6010D	8-23-18	8-23-18	
Chromium	53	1.1	EPA 6010D	8-23-18	8-23-18	
Lead	56	11	EPA 6010D	8-23-18	8-23-18	
Mercury	ND	0.55	EPA 7471B	8-23-18	8-23-18	
Selenium	ND	11	EPA 6010D	8-23-18	8-23-18	
Silver	ND	2.2	EPA 6010D	8-23-18	8-23-18	

Client ID:	FB-01-15.0-082118					
Laboratory ID:	08-229-09					
Arsenic	ND	16	EPA 6010D	8-23-18	8-23-18	
Barium	110	4.0	EPA 6010D	8-23-18	8-23-18	
Cadmium	ND	0.81	EPA 6010D	8-23-18	8-23-18	
Chromium	60	0.81	EPA 6010D	8-23-18	8-23-18	
Lead	ND	8.1	EPA 6010D	8-23-18	8-23-18	
Mercury	ND	0.40	EPA 7471B	8-23-18	8-23-18	
Selenium	ND	16	EPA 6010D	8-23-18	8-23-18	
Silver	ND	1.6	EPA 6010D	8-23-18	8-23-18	



Date of Report: August 30, 2018
 Samples Submitted: August 22, 2018
 Laboratory Reference: 1808-229
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0823SM1					
Arsenic	ND	5.0	EPA 6010D	8-23-18	8-23-18	
Barium	ND	2.5	EPA 6010D	8-23-18	8-23-18	
Cadmium	ND	0.50	EPA 6010D	8-23-18	8-23-18	
Chromium	ND	0.50	EPA 6010D	8-23-18	8-23-18	
Lead	ND	5.0	EPA 6010D	8-23-18	8-23-18	
Selenium	ND	5.0	EPA 6010D	8-23-18	8-23-18	
Silver	ND	1.0	EPA 6010D	8-23-18	8-23-18	

Laboratory ID:	MB0823S1					
Mercury	ND	0.25	EPA 7471B	8-23-18	8-23-18	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-239-08							
	ORIG	DUP						
Arsenic	ND	ND	NA	NA	NA	NA	20	
Barium	92.2	83.3	NA	NA	NA	10	20	
Cadmium	ND	ND	NA	NA	NA	NA	20	
Chromium	8.30	5.65	NA	NA	NA	38	20	K
Lead	ND	ND	NA	NA	NA	NA	20	
Selenium	ND	ND	NA	NA	NA	NA	20	
Silver	ND	ND	NA	NA	NA	NA	20	

Laboratory ID:	08-239-08								
Mercury	ND	ND	NA	NA	NA	NA	NA	20	

MATRIX SPIKES

Laboratory ID:	08-239-08									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	93.1	95.5	100	100	ND	93	96	75-125	3	20
Barium	188	184	100	100	92.2	96	92	75-125	2	20
Cadmium	46.3	45.8	50.0	50.0	ND	93	92	75-125	1	20
Chromium	102	102	100	100	8.30	94	94	75-125	0	20
Lead	232	233	250	250	ND	93	93	75-125	1	20
Selenium	91.2	92.2	100	100	ND	91	92	75-125	1	20
Silver	21.8	21.9	25.0	25.0	ND	87	88	75-125	1	20

Laboratory ID:	08-239-08									
Mercury	0.555	0.554	0.500	0.500	0.00530	110	110	80-120	0	20



OnSite Environmental, Inc. 14648 NE 95th 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: August 30, 2018
Samples Submitted: August 22, 2018
Laboratory Reference: 1808-229
Project: 397-019

% MOISTURE

Date Analyzed: 8-22&29-18

Client ID	Lab ID	% Moisture
FB-04-5.0-082118	08-229-02	54
FB-04-10.0-082118	08-229-03	60
FB-04-15.0-082118	08-229-04	19
FB-04-20.0-082118	08-229-05	14
FB-04-30.0-082118	08-229-07	15
FB-01-5.0-082118	08-229-08	22
FB-01-15.0-082118	08-229-09	38
FB-01-30.0-082118	08-229-12	13





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





MVA Onsite Environmental Inc.
 Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)
(Check One)

Laboratory Number: **08-229**

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)
(TPH analysis 5 Days)

(other)

Company: **FINALION**
 Project Number: **397-019**
 Project Name: **Block 38 West Property**
 Project Manager: **Jason Ruark**
 Sampled by: **Greg Peters**

Date Sampled: **8/21/18** Time Sampled: **0645** Matrix: **Soil**

Number of Containers

NWTPH-HCID	
NWTPH-Gx/BTEX	X
NWTPH-Gx	
NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	X
Volatiles 8260C	
Halogenated Volatiles 8260C	
EDB EPA 8011 (Waters Only)	
Semivolatiles 8270D/SIM (with low-level PAHs)	X
PAHs 8270D/SIM (low-level)	
PCBs 8082A	
Organochlorine Pesticides 8081B	
Organophosphorus Pesticides 8270D/SIM	
Chlorinated Acid Herbicides 8151A	
Total RCRA Metals	X
Total MTCA Metals	
TCLP Metals	
HEM (oil and grease) 1664A	
ACU/SG	
2 DAY TAT	
3 DAY TAT	
% Moisture	X

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
1	FB-04-30-082118	8/21/18	0650	Soil	5		X		X				X							X			X
2	FB-04-50-082118		0710				X		X				X							X			X
3	FB-04-100-082118		0735				X		X				X							X			X
4	FB-04-150-082118		0745				X		X				X							X			X
5	FB-04-200-082118		0815				X		X				X							X			X
6	FB-04-250-082118		0850				X		X				X							X			X
7	FB-04-300-082118		1420				X		X				X							X			X
8	FB-04-50-082118		1446				X		X				X							X			X
9	FB-01-150-082118						X		X				X							X			X
10	FB-01-200-082118						X		X				X							X			X

Signature

Company

Date

Time

Comments/Special Instructions

Relinquished																							
Received		0821	8/21/18	0730																			
Relinquished																							
Received																							
Relinquished																							
Received																							
Reviewed/Date																							

X - Added 8/22/18. DB (2-3 day TAT)
 (X) Added 8/24/18. DB (1 day TAT)
 O Added 8/27/18. DB (STA)
 ● Added 8/28/18. DB (STA)

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



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

September 4, 2018

Javan Ruark
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1808-271

Dear Javan:

Enclosed are the analytical results and associated quality control data for samples submitted on August 23, 2018.

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



OnSite Environmental, Inc. 14648 NE 95th 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: September 4, 2018
Samples Submitted: August 23, 2018
Laboratory Reference: 1808-271
Project: 397-019

Case Narrative

Samples were collected on August 22, 2018 and received by the laboratory on August 23, 2018. 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.



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-136-10.0-082218					
Laboratory ID:	08-271-02					
Benzene	ND	0.020	EPA 8021B	8-24-18	8-24-18	
Toluene	ND	0.090	EPA 8021B	8-24-18	8-24-18	
Ethyl Benzene	ND	0.090	EPA 8021B	8-24-18	8-24-18	
m,p-Xylene	ND	0.090	EPA 8021B	8-24-18	8-24-18	
o-Xylene	ND	0.090	EPA 8021B	8-24-18	8-24-18	
Gasoline	ND	9.0	NWTPH-Gx	8-24-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	94	57-129				
Client ID:	FMW-136-20.0-082218					
Laboratory ID:	08-271-04					
Benzene	ND	0.020	EPA 8021B	8-24-18	8-24-18	
Toluene	ND	0.064	EPA 8021B	8-24-18	8-24-18	
Ethyl Benzene	ND	0.064	EPA 8021B	8-24-18	8-24-18	
m,p-Xylene	ND	0.064	EPA 8021B	8-24-18	8-24-18	
o-Xylene	ND	0.064	EPA 8021B	8-24-18	8-24-18	
Gasoline	ND	6.4	NWTPH-Gx	8-24-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	93	57-129				
Client ID:	FMW-136-30.0-082218					
Laboratory ID:	08-271-06					
Benzene	ND	0.020	EPA 8021B	8-24-18	8-24-18	
Toluene	ND	0.052	EPA 8021B	8-24-18	8-24-18	
Ethyl Benzene	ND	0.052	EPA 8021B	8-24-18	8-24-18	
m,p-Xylene	ND	0.052	EPA 8021B	8-24-18	8-24-18	
o-Xylene	ND	0.052	EPA 8021B	8-24-18	8-24-18	
Gasoline	ND	5.2	NWTPH-Gx	8-24-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	87	57-129				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0824S1					
Benzene	ND	0.020	EPA 8021B	8-24-18	8-24-18	
Toluene	ND	0.050	EPA 8021B	8-24-18	8-24-18	
Ethyl Benzene	ND	0.050	EPA 8021B	8-24-18	8-24-18	
m,p-Xylene	ND	0.050	EPA 8021B	8-24-18	8-24-18	
o-Xylene	ND	0.050	EPA 8021B	8-24-18	8-24-18	
Gasoline	ND	5.0	NWTPH-Gx	8-24-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	86	57-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-271-02							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				94	95	57-129		

SPIKE BLANKS

Laboratory ID:	SB0824S1							
	SB	SBD	SB	SBD	SB	SBD		
Benzene	0.873	0.924	1.00	1.00	87	92	69-111	6 10
Toluene	0.863	0.912	1.00	1.00	86	91	70-114	6 11
Ethyl Benzene	0.860	0.915	1.00	1.00	86	92	70-115	6 10
m,p-Xylene	0.841	0.897	1.00	1.00	84	90	72-115	6 10
o-Xylene	0.872	0.916	1.00	1.00	87	92	71-115	5 11
<i>Surrogate:</i>								
<i>Fluorobenzene</i>					85	91	57-129	



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-136-10.0-082218					
Laboratory ID:	08-271-02					
Diesel Range Organics	ND	38	NWTPH-Dx	8-24-18	8-24-18	
Lube Oil Range Organics	ND	76	NWTPH-Dx	8-24-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	96	50-150				

Client ID:	FMW-136-20.0-082218					
Laboratory ID:	08-271-04					
Diesel Range Organics	ND	32	NWTPH-Dx	8-24-18	8-27-18	
Lube Oil Range Organics	ND	63	NWTPH-Dx	8-24-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	66	50-150				

Client ID:	FMW-136-30.0-082218					
Laboratory ID:	08-271-06					
Diesel Range Organics	ND	30	NWTPH-Dx	8-24-18	8-24-18	
Lube Oil Range Organics	ND	59	NWTPH-Dx	8-24-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	77	50-150				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0824S1					
Diesel Range Organics	ND	25	NWTPH-Dx	8-24-18	8-24-18	
Lube Oil Range Organics	ND	50	NWTPH-Dx	8-24-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	111	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-245-02							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				56	90	50-150		



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-136-10.0-082218					
Laboratory ID:	08-271-02					
Dichlorodifluoromethane	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
Chloromethane	ND	0.0077	EPA 8260C	8-24-18	8-24-18	
Vinyl Chloride	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
Bromomethane	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
Chloroethane	ND	0.0077	EPA 8260C	8-24-18	8-24-18	
Trichlorofluoromethane	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
1,1-Dichloroethene	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
Iodomethane	ND	0.0077	EPA 8260C	8-24-18	8-24-18	
Methylene Chloride	ND	0.0077	EPA 8260C	8-24-18	8-24-18	
(trans) 1,2-Dichloroethene	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
1,1-Dichloroethane	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
2,2-Dichloropropane	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
(cis) 1,2-Dichloroethene	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
Bromochloromethane	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
Chloroform	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
1,1,1-Trichloroethane	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
Carbon Tetrachloride	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
1,1-Dichloropropene	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
1,2-Dichloroethane	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
Trichloroethene	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
1,2-Dichloropropane	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
Dibromomethane	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
Bromodichloromethane	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
2-Chloroethyl Vinyl Ether	ND	0.0077	EPA 8260C	8-24-18	8-24-18	
(cis) 1,3-Dichloropropene	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
(trans) 1,3-Dichloropropene	ND	0.0015	EPA 8260C	8-24-18	8-24-18	



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-136-10.0-082218					
Laboratory ID:	08-271-02					
1,1,2-Trichloroethane	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
Tetrachloroethene	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
1,3-Dichloropropane	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
Dibromochloromethane	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
1,2-Dibromoethane	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
Chlorobenzene	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
1,1,1,2-Tetrachloroethane	ND	0.0015	EPA 8260C	8-24-18	8-24-18	
Bromoform	ND	0.0077	EPA 8260C	8-24-18	8-24-18	
Bromobenzene	ND	0.093	EPA 8260C	8-24-18	8-24-18	
1,1,2,2-Tetrachloroethane	ND	0.093	EPA 8260C	8-24-18	8-24-18	
1,2,3-Trichloropropane	ND	0.093	EPA 8260C	8-24-18	8-24-18	
2-Chlorotoluene	ND	0.093	EPA 8260C	8-24-18	8-24-18	
4-Chlorotoluene	ND	0.093	EPA 8260C	8-24-18	8-24-18	
1,3-Dichlorobenzene	ND	0.093	EPA 8260C	8-24-18	8-24-18	
1,4-Dichlorobenzene	ND	0.093	EPA 8260C	8-24-18	8-24-18	
1,2-Dichlorobenzene	ND	0.093	EPA 8260C	8-24-18	8-24-18	
1,2-Dibromo-3-chloropropane	ND	0.46	EPA 8260C	8-24-18	8-24-18	
1,2,4-Trichlorobenzene	ND	0.093	EPA 8260C	8-24-18	8-24-18	
Hexachlorobutadiene	ND	0.46	EPA 8260C	8-24-18	8-24-18	
1,2,3-Trichlorobenzene	ND	0.093	EPA 8260C	8-24-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	99	68-139				
<i>Toluene-d8</i>	98	79-128				
<i>4-Bromofluorobenzene</i>	83	71-132				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-136-20.0-082218					
Laboratory ID:	08-271-04					
Dichlorodifluoromethane	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
Chloromethane	ND	0.0047	EPA 8260C	8-24-18	8-24-18	
Vinyl Chloride	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
Bromomethane	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
Chloroethane	ND	0.0047	EPA 8260C	8-24-18	8-24-18	
Trichlorofluoromethane	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
1,1-Dichloroethene	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
Iodomethane	ND	0.0047	EPA 8260C	8-24-18	8-24-18	
Methylene Chloride	ND	0.0047	EPA 8260C	8-24-18	8-24-18	
(trans) 1,2-Dichloroethene	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
1,1-Dichloroethane	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
2,2-Dichloropropane	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
(cis) 1,2-Dichloroethene	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
Bromochloromethane	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
Chloroform	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
1,1,1-Trichloroethane	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
Carbon Tetrachloride	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
1,1-Dichloropropene	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
1,2-Dichloroethane	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
Trichloroethene	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
1,2-Dichloropropane	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
Dibromomethane	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
Bromodichloromethane	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
2-Chloroethyl Vinyl Ether	ND	0.0047	EPA 8260C	8-24-18	8-24-18	
(cis) 1,3-Dichloropropene	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
(trans) 1,3-Dichloropropene	ND	0.00094	EPA 8260C	8-24-18	8-24-18	



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-136-20.0-082218					
Laboratory ID:	08-271-04					
1,1,2-Trichloroethane	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
Tetrachloroethene	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
1,3-Dichloropropane	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
Dibromochloromethane	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
1,2-Dibromoethane	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
Chlorobenzene	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
1,1,1,2-Tetrachloroethane	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
Bromoform	ND	0.0047	EPA 8260C	8-24-18	8-24-18	
Bromobenzene	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
1,1,2,2-Tetrachloroethane	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
1,2,3-Trichloropropane	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
2-Chlorotoluene	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
4-Chlorotoluene	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
1,3-Dichlorobenzene	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
1,4-Dichlorobenzene	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
1,2-Dichlorobenzene	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
1,2-Dibromo-3-chloropropane	ND	0.0047	EPA 8260C	8-24-18	8-24-18	
1,2,4-Trichlorobenzene	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
Hexachlorobutadiene	ND	0.0047	EPA 8260C	8-24-18	8-24-18	
1,2,3-Trichlorobenzene	ND	0.00094	EPA 8260C	8-24-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>97</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>71-132</i>				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0824S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Chloromethane	ND	0.0050	EPA 8260C	8-24-18	8-24-18	
Vinyl Chloride	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Bromomethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Chloroethane	ND	0.0050	EPA 8260C	8-24-18	8-24-18	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Iodomethane	ND	0.0050	EPA 8260C	8-24-18	8-24-18	
Methylene Chloride	ND	0.0050	EPA 8260C	8-24-18	8-24-18	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Bromochloromethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Chloroform	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Trichloroethene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Dibromomethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Bromodichloromethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	8-24-18	8-24-18	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0824S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Tetrachloroethene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Dibromochloromethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Chlorobenzene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Bromoform	ND	0.0050	EPA 8260C	8-24-18	8-24-18	
Bromobenzene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
2-Chlorotoluene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
4-Chlorotoluene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	8-24-18	8-24-18	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	8-24-18	8-24-18	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>98</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>71-132</i>				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

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

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0824S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0480	0.0510	0.0500	0.0500	96	102	53-141	6	17	
Benzene	0.0481	0.0509	0.0500	0.0500	96	102	70-130	6	15	
Trichloroethene	0.0506	0.0520	0.0500	0.0500	101	104	74-122	3	16	
Toluene	0.0513	0.0551	0.0500	0.0500	103	110	76-130	7	15	
Chlorobenzene	0.0488	0.0506	0.0500	0.0500	98	101	75-120	4	14	
<i>Surrogate:</i>										
Dibromofluoromethane					98	94	68-139			
Toluene-d8					101	103	79-128			
4-Bromofluorobenzene					98	98	71-132			



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-136-20.0-082218					
Laboratory ID:	08-271-04					
n-Nitrosodimethylamine	ND	0.042	EPA 8270D	8-27-18	8-30-18	
Pyridine	ND	0.42	EPA 8270D	8-27-18	8-30-18	
Phenol	ND	0.042	EPA 8270D	8-27-18	8-30-18	
Aniline	ND	0.21	EPA 8270D	8-27-18	8-30-18	
bis(2-Chloroethyl)ether	ND	0.042	EPA 8270D	8-27-18	8-30-18	
2-Chlorophenol	ND	0.042	EPA 8270D	8-27-18	8-30-18	
1,3-Dichlorobenzene	ND	0.042	EPA 8270D	8-27-18	8-30-18	
1,4-Dichlorobenzene	ND	0.042	EPA 8270D	8-27-18	8-30-18	
Benzyl alcohol	ND	0.21	EPA 8270D	8-27-18	8-30-18	
1,2-Dichlorobenzene	ND	0.042	EPA 8270D	8-27-18	8-30-18	
2-Methylphenol (o-Cresol)	ND	0.042	EPA 8270D	8-27-18	8-30-18	
bis(2-Chloroisopropyl)ether	ND	0.042	EPA 8270D	8-27-18	8-30-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.042	EPA 8270D	8-27-18	8-30-18	
n-Nitroso-di-n-propylamine	ND	0.042	EPA 8270D	8-27-18	8-30-18	
Hexachloroethane	ND	0.042	EPA 8270D	8-27-18	8-30-18	
Nitrobenzene	ND	0.042	EPA 8270D	8-27-18	8-30-18	
Isophorone	ND	0.042	EPA 8270D	8-27-18	8-30-18	
2-Nitrophenol	ND	0.042	EPA 8270D	8-27-18	8-30-18	
2,4-Dimethylphenol	ND	0.042	EPA 8270D	8-27-18	8-30-18	
bis(2-Chloroethoxy)methane	ND	0.042	EPA 8270D	8-27-18	8-30-18	
2,4-Dichlorophenol	ND	0.042	EPA 8270D	8-27-18	8-30-18	
1,2,4-Trichlorobenzene	ND	0.042	EPA 8270D	8-27-18	8-30-18	
Naphthalene	0.030	0.0084	EPA 8270D/SIM	8-27-18	8-28-18	
4-Chloroaniline	ND	0.21	EPA 8270D	8-27-18	8-30-18	
Hexachlorobutadiene	ND	0.042	EPA 8270D	8-27-18	8-30-18	
4-Chloro-3-methylphenol	ND	0.042	EPA 8270D	8-27-18	8-30-18	
2-Methylnaphthalene	ND	0.0084	EPA 8270D/SIM	8-27-18	8-28-18	
1-Methylnaphthalene	ND	0.0084	EPA 8270D/SIM	8-27-18	8-28-18	
Hexachlorocyclopentadiene	ND	0.042	EPA 8270D	8-27-18	8-30-18	
2,4,6-Trichlorophenol	ND	0.042	EPA 8270D	8-27-18	8-30-18	
2,3-Dichloroaniline	ND	0.042	EPA 8270D	8-27-18	8-30-18	
2,4,5-Trichlorophenol	ND	0.042	EPA 8270D	8-27-18	8-30-18	
2-Chloronaphthalene	ND	0.042	EPA 8270D	8-27-18	8-30-18	
2-Nitroaniline	ND	0.042	EPA 8270D	8-27-18	8-30-18	
1,4-Dinitrobenzene	ND	0.042	EPA 8270D	8-27-18	8-30-18	
Dimethylphthalate	ND	0.042	EPA 8270D	8-27-18	8-30-18	
1,3-Dinitrobenzene	ND	0.042	EPA 8270D	8-27-18	8-30-18	
2,6-Dinitrotoluene	ND	0.042	EPA 8270D	8-27-18	8-30-18	
1,2-Dinitrobenzene	ND	0.042	EPA 8270D	8-27-18	8-30-18	
Acenaphthylene	ND	0.0084	EPA 8270D/SIM	8-27-18	8-28-18	
3-Nitroaniline	ND	0.042	EPA 8270D	8-27-18	8-30-18	



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-136-20.0-082218					
Laboratory ID:	08-271-04					
2,4-Dinitrophenol	ND	0.21	EPA 8270D	8-27-18	8-30-18	
Acenaphthene	ND	0.0084	EPA 8270D/SIM	8-27-18	8-28-18	
4-Nitrophenol	ND	0.042	EPA 8270D	8-27-18	8-30-18	
2,4-Dinitrotoluene	ND	0.042	EPA 8270D	8-27-18	8-30-18	
Dibenzofuran	ND	0.042	EPA 8270D	8-27-18	8-30-18	
2,3,5,6-Tetrachlorophenol	ND	0.042	EPA 8270D	8-27-18	8-30-18	
2,3,4,6-Tetrachlorophenol	ND	0.042	EPA 8270D	8-27-18	8-30-18	
Diethylphthalate	ND	0.21	EPA 8270D	8-27-18	8-30-18	
4-Chlorophenyl-phenylether	ND	0.042	EPA 8270D	8-27-18	8-30-18	
4-Nitroaniline	ND	0.042	EPA 8270D	8-27-18	8-30-18	
Fluorene	ND	0.0084	EPA 8270D/SIM	8-27-18	8-28-18	
4,6-Dinitro-2-methylphenol	ND	0.21	EPA 8270D	8-27-18	8-30-18	
n-Nitrosodiphenylamine	ND	0.042	EPA 8270D	8-27-18	8-30-18	
1,2-Diphenylhydrazine	ND	0.042	EPA 8270D	8-27-18	8-30-18	
4-Bromophenyl-phenylether	ND	0.042	EPA 8270D	8-27-18	8-30-18	
Hexachlorobenzene	ND	0.042	EPA 8270D	8-27-18	8-30-18	
Pentachlorophenol	ND	0.21	EPA 8270D	8-27-18	8-30-18	
Phenanthrene	ND	0.0084	EPA 8270D/SIM	8-27-18	8-28-18	
Anthracene	ND	0.0084	EPA 8270D/SIM	8-27-18	8-28-18	
Carbazole	ND	0.042	EPA 8270D	8-27-18	8-30-18	
Di-n-butylphthalate	ND	0.21	EPA 8270D	8-27-18	8-30-18	
Fluoranthene	ND	0.0084	EPA 8270D/SIM	8-27-18	8-28-18	
Benzidine	ND	0.42	EPA 8270D	8-27-18	8-30-18	
Pyrene	ND	0.0084	EPA 8270D/SIM	8-27-18	8-28-18	
Butylbenzylphthalate	ND	0.21	EPA 8270D	8-27-18	8-30-18	
bis-2-Ethylhexyladipate	ND	0.21	EPA 8270D	8-27-18	8-30-18	
3,3'-Dichlorobenzidine	ND	0.21	EPA 8270D	8-27-18	8-30-18	
Benzo[a]anthracene	ND	0.0084	EPA 8270D/SIM	8-27-18	8-28-18	
Chrysene	ND	0.0084	EPA 8270D/SIM	8-27-18	8-28-18	
bis(2-Ethylhexyl)phthalate	ND	0.21	EPA 8270D	8-27-18	8-30-18	
Di-n-octylphthalate	ND	0.21	EPA 8270D	8-27-18	8-30-18	
Benzo[b]fluoranthene	ND	0.0084	EPA 8270D/SIM	8-27-18	8-28-18	
Benzo(j,k)fluoranthene	ND	0.0084	EPA 8270D/SIM	8-27-18	8-28-18	
Benzo[a]pyrene	ND	0.0084	EPA 8270D/SIM	8-27-18	8-28-18	
Indeno[1,2,3-cd]pyrene	ND	0.0084	EPA 8270D/SIM	8-27-18	8-28-18	
Dibenz[a,h]anthracene	ND	0.0084	EPA 8270D/SIM	8-27-18	8-28-18	
Benzo[g,h,i]perylene	ND	0.0084	EPA 8270D/SIM	8-27-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>67</i>	<i>19 - 103</i>				
<i>Phenol-d6</i>	<i>68</i>	<i>30 - 103</i>				
<i>Nitrobenzene-d5</i>	<i>62</i>	<i>27 - 105</i>				
<i>2-Fluorobiphenyl</i>	<i>69</i>	<i>36 - 102</i>				
<i>2,4,6-Tribromophenol</i>	<i>78</i>	<i>33 - 110</i>				
<i>Terphenyl-d14</i>	<i>72</i>	<i>38 - 108</i>				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

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

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0827S2					
n-Nitrosodimethylamine	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Pyridine	ND	0.33	EPA 8270D	8-27-18	8-28-18	
Phenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Aniline	ND	0.17	EPA 8270D	8-27-18	8-28-18	
bis(2-Chloroethyl)ether	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2-Chlorophenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
1,3-Dichlorobenzene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
1,4-Dichlorobenzene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Benzyl alcohol	ND	0.17	EPA 8270D	8-27-18	8-28-18	
1,2-Dichlorobenzene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2-Methylphenol (o-Cresol)	ND	0.033	EPA 8270D	8-27-18	8-28-18	
bis(2-Chloroisopropyl)ether	ND	0.033	EPA 8270D	8-27-18	8-28-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.033	EPA 8270D	8-27-18	8-28-18	
n-Nitroso-di-n-propylamine	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Hexachloroethane	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Nitrobenzene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Isophorone	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2-Nitrophenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2,4-Dimethylphenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
bis(2-Chloroethoxy)methane	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2,4-Dichlorophenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
1,2,4-Trichlorobenzene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Naphthalene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
4-Chloroaniline	ND	0.17	EPA 8270D	8-27-18	8-28-18	
Hexachlorobutadiene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
4-Chloro-3-methylphenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Hexachlorocyclopentadiene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2,4,6-Trichlorophenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2,3-Dichloroaniline	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2,4,5-Trichlorophenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2-Chloronaphthalene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2-Nitroaniline	ND	0.033	EPA 8270D	8-27-18	8-28-18	
1,4-Dinitrobenzene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Dimethylphthalate	ND	0.033	EPA 8270D	8-27-18	8-28-18	
1,3-Dinitrobenzene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2,6-Dinitrotoluene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
1,2-Dinitrobenzene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
3-Nitroaniline	ND	0.033	EPA 8270D	8-27-18	8-28-18	



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

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

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0827S2					
2,4-Dinitrophenol	ND	0.17	EPA 8270D	8-27-18	8-28-18	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
4-Nitrophenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2,4-Dinitrotoluene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Dibenzofuran	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2,3,5,6-Tetrachlorophenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2,3,4,6-Tetrachlorophenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Diethylphthalate	ND	0.17	EPA 8270D	8-27-18	8-28-18	
4-Chlorophenyl-phenylether	ND	0.033	EPA 8270D	8-27-18	8-28-18	
4-Nitroaniline	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Fluorene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	8-27-18	8-28-18	
n-Nitrosodiphenylamine	ND	0.033	EPA 8270D	8-27-18	8-28-18	
1,2-Diphenylhydrazine	ND	0.033	EPA 8270D	8-27-18	8-28-18	
4-Bromophenyl-phenylether	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Hexachlorobenzene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Pentachlorophenol	ND	0.17	EPA 8270D	8-27-18	8-28-18	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Anthracene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Carbazole	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Di-n-butylphthalate	ND	0.17	EPA 8270D	8-27-18	8-28-18	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Benzidine	ND	0.33	EPA 8270D	8-27-18	8-28-18	
Pyrene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Butylbenzylphthalate	ND	0.17	EPA 8270D	8-27-18	8-28-18	
bis(2-Ethylhexyl)adipate	ND	0.17	EPA 8270D	8-27-18	8-28-18	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	8-27-18	8-28-18	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Chrysene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
bis(2-Ethylhexyl)phthalate	ND	0.17	EPA 8270D	8-27-18	8-28-18	
Di-n-octylphthalate	ND	0.17	EPA 8270D	8-27-18	8-28-18	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Indeno[1,2,3-cd]pyrene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	79	19 - 103				
Phenol-d6	82	30 - 103				
Nitrobenzene-d5	78	27 - 105				
2-Fluorobiphenyl	83	36 - 102				
2,4,6-Tribromophenol	94	33 - 110				
Terphenyl-d14	84	38 - 108				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
	MS	MSD	MS	MSD	Result	Recovery	Limits	RPD	Limit		
MATRIX SPIKES											
Laboratory ID:	08-245-02										
	MS	MSD	MS	MSD		MS	MSD				
Phenol	1.14	1.11	1.33	1.33	ND	86	83	37 - 94	3	27	
2-Chlorophenol	1.15	1.12	1.33	1.33	ND	86	84	37 - 95	3	32	
1,4-Dichlorobenzene	0.550	0.554	0.667	0.667	ND	82	83	23 - 97	1	37	
n-Nitroso-di-n-propylamine	0.562	0.552	0.667	0.667	ND	84	83	40 - 91	2	28	
1,2,4-Trichlorobenzene	0.586	0.564	0.667	0.667	ND	88	85	37 - 93	4	30	
4-Chloro-3-methylphenol	1.15	1.11	1.33	1.33	ND	86	83	46 - 96	4	25	
Acenaphthene	0.581	0.573	0.667	0.667	ND	87	86	43 - 90	1	25	
4-Nitrophenol	1.15	1.18	1.33	1.33	ND	86	89	31 - 104	3	28	
2,4-Dinitrotoluene	0.607	0.576	0.667	0.667	ND	91	86	31 - 96	5	32	
Pentachlorophenol	1.34	1.36	1.33	1.33	ND	101	102	20 - 123	1	29	
Pyrene	0.590	0.590	0.667	0.667	ND	88	88	28 - 114	0	35	
<i>Surrogate:</i>											
2-Fluorophenol						80	81	19 - 103			
Phenol-d6						83	82	30 - 103			
Nitrobenzene-d5						74	73	27 - 105			
2-Fluorobiphenyl						78	79	36 - 102			
2,4,6-Tribromophenol						91	92	33 - 110			
Terphenyl-d14						80	80	38 - 108			



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-136-20.0-082218					
Laboratory ID:	08-271-04					
Arsenic	ND	13	EPA 6010D	8-28-18	8-30-18	
Barium	46	3.2	EPA 6010D	8-28-18	8-30-18	
Cadmium	ND	0.63	EPA 6010D	8-28-18	8-30-18	
Chromium	42	0.63	EPA 6010D	8-28-18	8-30-18	
Lead	ND	6.3	EPA 6010D	8-28-18	8-30-18	
Mercury	ND	0.32	EPA 7471B	8-27-18	8-27-18	
Selenium	ND	13	EPA 6010D	8-28-18	8-30-18	
Silver	ND	1.3	EPA 6010D	8-28-18	8-30-18	

Client ID: FMW-136-30.0-082218

Laboratory ID: 08-271-06

Arsenic	ND	12	EPA 6010D	8-28-18	8-30-18	
Barium	45	3.0	EPA 6010D	8-28-18	8-30-18	
Cadmium	ND	0.59	EPA 6010D	8-28-18	8-30-18	
Chromium	41	0.59	EPA 6010D	8-28-18	8-30-18	
Lead	ND	5.9	EPA 6010D	8-28-18	8-30-18	
Mercury	ND	0.30	EPA 7471B	8-27-18	8-27-18	
Selenium	ND	12	EPA 6010D	8-28-18	8-30-18	
Silver	ND	1.2	EPA 6010D	8-28-18	8-30-18	



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0828SM1						
Arsenic	ND	10	EPA 6010D	8-28-18	8-30-18	
Cadmium	ND	0.50	EPA 6010D	8-28-18	8-30-18	
Chromium	ND	0.50	EPA 6010D	8-28-18	8-30-18	
Lead	ND	5.0	EPA 6010D	8-28-18	8-30-18	
Selenium	ND	10	EPA 6010D	8-28-18	8-30-18	
Silver	ND	1.0	EPA 6010D	8-28-18	8-30-18	
Laboratory ID: MB0827S1						
Mercury	ND	0.25	EPA 7471B	8-27-18	8-27-18	
Laboratory ID: MB0828SM3						
Barium	ND	2.5	EPA 6010D	8-28-18	8-30-18	



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-271
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-245-01							
	ORIG	DUP						
Arsenic	ND	ND	NA	NA	NA	NA	20	
Cadmium	ND	ND	NA	NA	NA	NA	20	
Chromium	35.3	42.0	NA	NA	NA	17	20	
Lead	ND	ND	NA	NA	NA	NA	20	
Selenium	ND	ND	NA	NA	NA	NA	20	
Silver	ND	ND	NA	NA	NA	NA	20	
Laboratory ID:	08-245-05							
Mercury	ND	ND	NA	NA	NA	NA	20	
Laboratory ID:	08-245-01							
	ORIG	DUP						
Barium	69.6	60.3	NA	NA	NA	14	20	
MATRIX SPIKES								
Laboratory ID:	08-245-01							
	MS	MSD	MS	MSD	MS	MSD		
Arsenic	95.8	96.1	100	100	ND	96 96	75-125	0 20
Cadmium	46.4	47.9	50.0	50.0	ND	93 96	75-125	3 20
Chromium	133	141	100	100	35.3	98 106	75-125	6 20
Lead	243	250	250	250	ND	97 100	75-125	3 20
Selenium	93.1	96.9	100	100	ND	93 97	75-125	4 20
Silver	22.4	22.6	25.0	25.0	ND	90 90	75-125	1 20
Laboratory ID:	08-245-05							
Mercury	0.529	0.523	0.500	0.500	0.0116	103 102	80-120	1 20
Laboratory ID:	08-245-01							
	MS	MSD	MS	MSD	MS	MSD		
Barium	186	183	100	100	69.6	116 113	75-125	2 20



Date of Report: September 4, 2018
Samples Submitted: August 23, 2018
Laboratory Reference: 1808-271
Project: 397-019

% MOISTURE

Date Analyzed: 8-24-18

Client ID	Lab ID	% Moisture
FMW-136-10.0-082218	08-271-02	34
FMW-136-20.0-082218	08-271-04	21
FMW-136-30.0-082218	08-271-06	15





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





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

September 4, 2018

Javan Ruark
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1808-272

Dear Javan:

Enclosed are the analytical results and associated quality control data for samples submitted on August 23, 2018.

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 "D. Baumeister", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: September 4, 2018
Samples Submitted: August 23, 2018
Laboratory Reference: 1808-272
Project: 397-019

Case Narrative

Samples were collected on August 22, 2018 and received by the laboratory on August 23, 2018. 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.

NWTPH Gx/BTEX (soil) Analysis

The chromatogram for sample FB-06-2.5-082218 is not similar to a typical gas.

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: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-06-2.5-082218					
Laboratory ID:	08-272-01					
Benzene	ND	0.024	EPA 8021B	8-24-18	8-24-18	
Toluene	ND	0.12	EPA 8021B	8-24-18	8-24-18	
Ethyl Benzene	ND	0.12	EPA 8021B	8-24-18	8-24-18	
m,p-Xylene	ND	0.12	EPA 8021B	8-24-18	8-24-18	
o-Xylene	ND	0.12	EPA 8021B	8-24-18	8-24-18	
Gasoline	17	12	NWTPH-Gx	8-24-18	8-24-18	T
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	96	57-129				
Client ID:	FB-06-20.0-082218					
Laboratory ID:	08-272-04					
Benzene	ND	0.020	EPA 8021B	8-24-18	8-24-18	
Toluene	ND	0.053	EPA 8021B	8-24-18	8-24-18	
Ethyl Benzene	ND	0.053	EPA 8021B	8-24-18	8-24-18	
m,p-Xylene	ND	0.053	EPA 8021B	8-24-18	8-24-18	
o-Xylene	ND	0.053	EPA 8021B	8-24-18	8-24-18	
Gasoline	ND	5.3	NWTPH-Gx	8-24-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	89	57-129				
Client ID:	FB-05-5.0-082218					
Laboratory ID:	08-272-06					
Benzene	ND	0.020	EPA 8021B	8-24-18	8-24-18	
Toluene	ND	0.054	EPA 8021B	8-24-18	8-24-18	
Ethyl Benzene	ND	0.054	EPA 8021B	8-24-18	8-24-18	
m,p-Xylene	ND	0.054	EPA 8021B	8-24-18	8-24-18	
o-Xylene	ND	0.054	EPA 8021B	8-24-18	8-24-18	
Gasoline	ND	5.4	NWTPH-Gx	8-24-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	97	57-129				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-05-20.0-082218					
Laboratory ID:	08-272-09					
Benzene	ND	0.020	EPA 8021B	8-24-18	8-24-18	
Toluene	ND	0.055	EPA 8021B	8-24-18	8-24-18	
Ethyl Benzene	ND	0.055	EPA 8021B	8-24-18	8-24-18	
m,p-Xylene	ND	0.055	EPA 8021B	8-24-18	8-24-18	
o-Xylene	ND	0.055	EPA 8021B	8-24-18	8-24-18	
Gasoline	ND	5.5	NWTPH-Gx	8-24-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	79	57-129				
Client ID:	FB-05-35.0-082218					
Laboratory ID:	08-272-12					
Benzene	ND	0.020	EPA 8021B	8-24-18	8-24-18	
Toluene	ND	0.058	EPA 8021B	8-24-18	8-24-18	
Ethyl Benzene	ND	0.058	EPA 8021B	8-24-18	8-24-18	
m,p-Xylene	ND	0.058	EPA 8021B	8-24-18	8-24-18	
o-Xylene	ND	0.058	EPA 8021B	8-24-18	8-24-18	
Gasoline	ND	5.8	NWTPH-Gx	8-24-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	91	57-129				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0824S1					
Benzene	ND	0.020	EPA 8021B	8-24-18	8-24-18	
Toluene	ND	0.050	EPA 8021B	8-24-18	8-24-18	
Ethyl Benzene	ND	0.050	EPA 8021B	8-24-18	8-24-18	
m,p-Xylene	ND	0.050	EPA 8021B	8-24-18	8-24-18	
o-Xylene	ND	0.050	EPA 8021B	8-24-18	8-24-18	
Gasoline	ND	5.0	NWTPH-Gx	8-24-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	86	57-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-271-02							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				94	95	57-129		

SPIKE BLANKS

Laboratory ID:	SB0824S1							
	SB	SBD	SB	SBD	SB	SBD		
Benzene	0.873	0.924	1.00	1.00	87	92	69-111	6 10
Toluene	0.863	0.912	1.00	1.00	86	91	70-114	6 11
Ethyl Benzene	0.860	0.915	1.00	1.00	86	92	70-115	6 10
m,p-Xylene	0.841	0.897	1.00	1.00	84	90	72-115	6 10
o-Xylene	0.872	0.916	1.00	1.00	87	92	71-115	5 11
<i>Surrogate:</i>								
<i>Fluorobenzene</i>					85	91	57-129	



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-05-082218					
Laboratory ID:	08-272-14					
Benzene	ND	1.0	EPA 8021B	8-27-18	8-27-18	
Toluene	ND	1.0	EPA 8021B	8-27-18	8-27-18	
Ethyl Benzene	ND	1.0	EPA 8021B	8-27-18	8-27-18	
m,p-Xylene	ND	1.0	EPA 8021B	8-27-18	8-27-18	
o-Xylene	ND	1.0	EPA 8021B	8-27-18	8-27-18	
Gasoline	ND	100	NWTPH-Gx	8-27-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	98	66-117				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0827W2					
Benzene	ND	1.0	EPA 8021B	8-27-18	8-27-18	
Toluene	ND	1.0	EPA 8021B	8-27-18	8-27-18	
Ethyl Benzene	ND	1.0	EPA 8021B	8-27-18	8-27-18	
m,p-Xylene	ND	1.0	EPA 8021B	8-27-18	8-27-18	
o-Xylene	ND	1.0	EPA 8021B	8-27-18	8-27-18	
Gasoline	ND	100	NWTPH-Gx	8-27-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	111	66-117				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-276-03							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				101	93	66-117		

MATRIX SPIKES

Laboratory ID:	08-276-03									
	MS	MSD	MS	MSD		MS	MSD			
Benzene	53.6	51.8	50.0	50.0	ND	107	104	82-122	3	11
Toluene	52.2	50.4	50.0	50.0	ND	104	101	83-123	4	12
Ethyl Benzene	52.3	50.6	50.0	50.0	ND	105	101	83-123	3	12
m,p-Xylene	51.7	50.2	50.0	50.0	ND	103	100	83-123	3	12
o-Xylene	52.3	51.0	50.0	50.0	ND	105	102	83-123	3	11
<i>Surrogate:</i>										
<i>Fluorobenzene</i>						103	104	66-117		



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-06-2.5-082218					
Laboratory ID:	08-272-01					
Diesel Range Organics	180	43	NWTPH-Dx	8-27-18	8-27-18	
Lube Oil Range Organics	310	87	NWTPH-Dx	8-27-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	88	50-150				
Client ID:	FB-06-20.0-082218					
Laboratory ID:	08-272-04					
Diesel Range Organics	ND	30	NWTPH-Dx	8-27-18	8-27-18	
Lube Oil Range Organics	ND	61	NWTPH-Dx	8-27-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	117	50-150				
Client ID:	FB-05-5.0-082218					
Laboratory ID:	08-272-06					
Diesel Range Organics	ND	31	NWTPH-Dx	8-27-18	8-27-18	
Lube Oil Range Organics	ND	61	NWTPH-Dx	8-27-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	131	50-150				
Client ID:	FB-05-20.0-082218					
Laboratory ID:	08-272-09					
Diesel Range Organics	ND	31	NWTPH-Dx	8-27-18	8-27-18	
Lube Oil Range Organics	ND	61	NWTPH-Dx	8-27-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	56	50-150				
Client ID:	FB-05-35.0-082218					
Laboratory ID:	08-272-12					
Diesel Range Organics	ND	31	NWTPH-Dx	8-27-18	8-27-18	
Lube Oil Range Organics	ND	62	NWTPH-Dx	8-27-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	90	50-150				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0827S2					
Diesel Range Organics	ND	25	NWTPH-Dx	8-27-18	8-27-18	
Lube Oil Range Organics	ND	50	NWTPH-Dx	8-27-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	93	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-272-01							
	ORIG	DUP						
Diesel Range Organics	101	73.8	NA	NA	NA	NA	31	NA
Lube Oil Range Organics	177	148	NA	NA	NA	NA	18	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				88	102	50-150		



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

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

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-05-082218					
Laboratory ID:	08-272-14					
Diesel Range Organics	ND	0.26	NWTPH-Dx	8-27-18	8-27-18	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	8-27-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	92	50-150				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

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

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0827W1					
Diesel Range Organics	ND	0.25	NWTPH-Dx	8-27-18	8-27-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	8-27-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	80	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-270-01							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range Organics	0.687	0.476	NA	NA	NA	NA	36	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>			88	82	50-150			



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-05-20.0-082218					
Laboratory ID:	08-272-09					
Dichlorodifluoromethane	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
Chloromethane	ND	0.0045	EPA 8260C	8-24-18	8-24-18	
Vinyl Chloride	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
Bromomethane	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
Chloroethane	ND	0.0045	EPA 8260C	8-24-18	8-24-18	
Trichlorofluoromethane	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
1,1-Dichloroethene	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
Iodomethane	ND	0.0045	EPA 8260C	8-24-18	8-24-18	
Methylene Chloride	ND	0.0045	EPA 8260C	8-24-18	8-24-18	
(trans) 1,2-Dichloroethene	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
1,1-Dichloroethane	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
2,2-Dichloropropane	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
(cis) 1,2-Dichloroethene	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
Bromochloromethane	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
Chloroform	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
1,1,1-Trichloroethane	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
Carbon Tetrachloride	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
1,1-Dichloropropene	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
1,2-Dichloroethane	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
Trichloroethene	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
1,2-Dichloropropane	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
Dibromomethane	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
Bromodichloromethane	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
2-Chloroethyl Vinyl Ether	ND	0.0045	EPA 8260C	8-24-18	8-24-18	
(cis) 1,3-Dichloropropene	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
(trans) 1,3-Dichloropropene	ND	0.00090	EPA 8260C	8-24-18	8-24-18	



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-05-20.0-082218					
Laboratory ID:	08-272-09					
1,1,2-Trichloroethane	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
Tetrachloroethene	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
1,3-Dichloropropane	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
Dibromochloromethane	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
1,2-Dibromoethane	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
Chlorobenzene	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
1,1,1,2-Tetrachloroethane	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
Bromoform	ND	0.0045	EPA 8260C	8-24-18	8-24-18	
Bromobenzene	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
1,1,2,2-Tetrachloroethane	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
1,2,3-Trichloropropane	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
2-Chlorotoluene	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
4-Chlorotoluene	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
1,3-Dichlorobenzene	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
1,4-Dichlorobenzene	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
1,2-Dichlorobenzene	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
1,2-Dibromo-3-chloropropane	ND	0.0045	EPA 8260C	8-24-18	8-24-18	
1,2,4-Trichlorobenzene	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
Hexachlorobutadiene	ND	0.0045	EPA 8260C	8-24-18	8-24-18	
1,2,3-Trichlorobenzene	ND	0.00090	EPA 8260C	8-24-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>96</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>71-132</i>				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0824S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Chloromethane	ND	0.0050	EPA 8260C	8-24-18	8-24-18	
Vinyl Chloride	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Bromomethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Chloroethane	ND	0.0050	EPA 8260C	8-24-18	8-24-18	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Iodomethane	ND	0.0050	EPA 8260C	8-24-18	8-24-18	
Methylene Chloride	ND	0.0050	EPA 8260C	8-24-18	8-24-18	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Bromochloromethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Chloroform	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Trichloroethene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Dibromomethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Bromodichloromethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	8-24-18	8-24-18	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:		MB0824S1				
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Tetrachloroethene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Dibromochloromethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Chlorobenzene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Bromoform	ND	0.0050	EPA 8260C	8-24-18	8-24-18	
Bromobenzene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
2-Chlorotoluene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
4-Chlorotoluene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	8-24-18	8-24-18	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	8-24-18	8-24-18	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	8-24-18	8-24-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>98</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>71-132</i>				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

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

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB0824S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0480	0.0510	0.0500	0.0500	96	102	53-141	6	17	
Benzene	0.0481	0.0509	0.0500	0.0500	96	102	70-130	6	15	
Trichloroethene	0.0506	0.0520	0.0500	0.0500	101	104	74-122	3	16	
Toluene	0.0513	0.0551	0.0500	0.0500	103	110	76-130	7	15	
Chlorobenzene	0.0488	0.0506	0.0500	0.0500	98	101	75-120	4	14	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					98	94	68-139			
<i>Toluene-d8</i>					101	103	79-128			
<i>4-Bromofluorobenzene</i>					98	98	71-132			



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-05-082218					
Laboratory ID:	08-272-14					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Chloromethane	ND	1.0	EPA 8260C	8-29-18	8-29-18	
Vinyl Chloride	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Bromomethane	ND	2.0	EPA 8260C	8-29-18	8-29-18	
Chloroethane	ND	1.0	EPA 8260C	8-29-18	8-29-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Iodomethane	ND	5.0	EPA 8260C	8-29-18	8-29-18	
Methylene Chloride	ND	1.0	EPA 8260C	8-29-18	8-29-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Bromochloromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Chloroform	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Trichloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Dibromomethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Bromodichloromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	8-29-18	8-29-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	8-29-18	8-29-18	



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-05-082218					
Laboratory ID:	08-272-14					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Tetrachloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Dibromochloromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Chlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Bromoform	ND	1.0	EPA 8260C	8-29-18	8-29-18	
Bromobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	8-29-18	8-29-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	8-29-18	8-29-18	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260C	8-29-18	8-29-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>90</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>90</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>78-125</i>				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0829W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Chloromethane	ND	1.0	EPA 8260C	8-29-18	8-29-18	
Vinyl Chloride	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Bromomethane	ND	2.0	EPA 8260C	8-29-18	8-29-18	
Chloroethane	ND	1.0	EPA 8260C	8-29-18	8-29-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Iodomethane	ND	5.0	EPA 8260C	8-29-18	8-29-18	
Methylene Chloride	ND	1.0	EPA 8260C	8-29-18	8-29-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Bromochloromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Chloroform	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Trichloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Dibromomethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Bromodichloromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	8-29-18	8-29-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	8-29-18	8-29-18	



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0829W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Tetrachloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Dibromochloromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Chlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Bromoform	ND	1.0	EPA 8260C	8-29-18	8-29-18	
Bromobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	8-29-18	8-29-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	8-29-18	8-29-18	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260C	8-29-18	8-29-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>87</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>88</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>78-125</i>				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

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

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0829W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	10.6	10.0	10.0	10.0	106	100	62-129	6	15	
Benzene	11.1	10.5	10.0	10.0	111	105	77-127	6	15	
Trichloroethene	10.7	9.96	10.0	10.0	107	100	70-120	7	15	
Toluene	11.1	10.5	10.0	10.0	111	105	82-123	6	15	
Chlorobenzene	10.5	9.70	10.0	10.0	105	97	79-120	8	15	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					85	89	75-127			
<i>Toluene-d8</i>					88	89	80-127			
<i>4-Bromofluorobenzene</i>					93	94	78-125			



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-06-2.5-082218					
Laboratory ID:	08-272-01					
n-Nitrosodimethylamine	ND	0.058	EPA 8270D	8-27-18	8-30-18	
Pyridine	ND	0.58	EPA 8270D	8-27-18	8-30-18	
Phenol	ND	0.058	EPA 8270D	8-27-18	8-30-18	
Aniline	ND	0.29	EPA 8270D	8-27-18	8-30-18	
bis(2-Chloroethyl)ether	ND	0.058	EPA 8270D	8-27-18	8-30-18	
2-Chlorophenol	ND	0.058	EPA 8270D	8-27-18	8-30-18	
1,3-Dichlorobenzene	ND	0.058	EPA 8270D	8-27-18	8-30-18	
1,4-Dichlorobenzene	ND	0.058	EPA 8270D	8-27-18	8-30-18	
Benzyl alcohol	ND	0.29	EPA 8270D	8-27-18	8-30-18	
1,2-Dichlorobenzene	ND	0.058	EPA 8270D	8-27-18	8-30-18	
2-Methylphenol (o-Cresol)	ND	0.058	EPA 8270D	8-27-18	8-30-18	
bis(2-Chloroisopropyl)ether	ND	0.058	EPA 8270D	8-27-18	8-30-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.058	EPA 8270D	8-27-18	8-30-18	
n-Nitroso-di-n-propylamine	ND	0.058	EPA 8270D	8-27-18	8-30-18	
Hexachloroethane	ND	0.058	EPA 8270D	8-27-18	8-30-18	
Nitrobenzene	ND	0.058	EPA 8270D	8-27-18	8-30-18	
Isophorone	ND	0.058	EPA 8270D	8-27-18	8-30-18	
2-Nitrophenol	ND	0.058	EPA 8270D	8-27-18	8-30-18	
2,4-Dimethylphenol	ND	0.058	EPA 8270D	8-27-18	8-30-18	
bis(2-Chloroethoxy)methane	ND	0.058	EPA 8270D	8-27-18	8-30-18	
2,4-Dichlorophenol	ND	0.058	EPA 8270D	8-27-18	8-30-18	
1,2,4-Trichlorobenzene	ND	0.058	EPA 8270D	8-27-18	8-30-18	
Naphthalene	0.087	0.058	EPA 8270D	8-27-18	8-30-18	
4-Chloroaniline	ND	0.29	EPA 8270D	8-27-18	8-30-18	
Hexachlorobutadiene	ND	0.058	EPA 8270D	8-27-18	8-30-18	
4-Chloro-3-methylphenol	ND	0.058	EPA 8270D	8-27-18	8-30-18	
2-Methylnaphthalene	0.045	0.012	EPA 8270D/SIM	8-27-18	8-28-18	
1-Methylnaphthalene	0.044	0.012	EPA 8270D/SIM	8-27-18	8-28-18	
Hexachlorocyclopentadiene	ND	0.058	EPA 8270D	8-27-18	8-30-18	
2,4,6-Trichlorophenol	ND	0.058	EPA 8270D	8-27-18	8-30-18	
2,3-Dichloroaniline	ND	0.058	EPA 8270D	8-27-18	8-30-18	
2,4,5-Trichlorophenol	ND	0.058	EPA 8270D	8-27-18	8-30-18	
2-Chloronaphthalene	ND	0.058	EPA 8270D	8-27-18	8-30-18	
2-Nitroaniline	ND	0.058	EPA 8270D	8-27-18	8-30-18	
1,4-Dinitrobenzene	ND	0.058	EPA 8270D	8-27-18	8-30-18	
Dimethylphthalate	ND	0.058	EPA 8270D	8-27-18	8-30-18	
1,3-Dinitrobenzene	ND	0.058	EPA 8270D	8-27-18	8-30-18	
2,6-Dinitrotoluene	ND	0.058	EPA 8270D	8-27-18	8-30-18	
1,2-Dinitrobenzene	ND	0.058	EPA 8270D	8-27-18	8-30-18	
Acenaphthylene	0.042	0.012	EPA 8270D/SIM	8-27-18	8-28-18	
3-Nitroaniline	ND	0.058	EPA 8270D	8-27-18	8-30-18	



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-06-2.5-082218					
Laboratory ID:	08-272-01					
2,4-Dinitrophenol	ND	0.29	EPA 8270D	8-27-18	8-30-18	
Acenaphthene	0.13	0.058	EPA 8270D	8-27-18	8-30-18	
4-Nitrophenol	ND	0.058	EPA 8270D	8-27-18	8-30-18	
2,4-Dinitrotoluene	ND	0.058	EPA 8270D	8-27-18	8-30-18	
Dibenzofuran	ND	0.058	EPA 8270D	8-27-18	8-30-18	
2,3,5,6-Tetrachlorophenol	ND	0.058	EPA 8270D	8-27-18	8-30-18	
2,3,4,6-Tetrachlorophenol	ND	0.058	EPA 8270D	8-27-18	8-30-18	
Diethylphthalate	ND	0.29	EPA 8270D	8-27-18	8-30-18	
4-Chlorophenyl-phenylether	ND	0.058	EPA 8270D	8-27-18	8-30-18	
4-Nitroaniline	ND	0.058	EPA 8270D	8-27-18	8-30-18	
Fluorene	0.094	0.058	EPA 8270D	8-27-18	8-30-18	
4,6-Dinitro-2-methylphenol	ND	0.29	EPA 8270D	8-27-18	8-30-18	
n-Nitrosodiphenylamine	ND	0.058	EPA 8270D	8-27-18	8-30-18	
1,2-Diphenylhydrazine	ND	0.16	EPA 8270D	8-27-18	8-30-18	U1
4-Bromophenyl-phenylether	ND	0.058	EPA 8270D	8-27-18	8-30-18	
Hexachlorobenzene	ND	0.058	EPA 8270D	8-27-18	8-30-18	
Pentachlorophenol	ND	0.29	EPA 8270D	8-27-18	8-30-18	
Phenanthrene	0.89	0.058	EPA 8270D	8-27-18	8-30-18	
Anthracene	0.20	0.058	EPA 8270D	8-27-18	8-30-18	
Carbazole	ND	0.058	EPA 8270D	8-27-18	8-30-18	
Di-n-butylphthalate	ND	0.29	EPA 8270D	8-27-18	8-30-18	
Fluoranthene	0.81	0.058	EPA 8270D	8-27-18	8-30-18	
Benzidine	ND	0.58	EPA 8270D	8-27-18	8-30-18	
Pyrene	1.1	0.058	EPA 8270D	8-27-18	8-30-18	
Butylbenzylphthalate	ND	0.29	EPA 8270D	8-27-18	8-30-18	
bis-2-Ethylhexyladipate	ND	0.29	EPA 8270D	8-27-18	8-30-18	
3,3'-Dichlorobenzidine	ND	0.29	EPA 8270D	8-27-18	8-30-18	
Benzo[a]anthracene	0.47	0.012	EPA 8270D/SIM	8-27-18	8-28-18	
Chrysene	0.50	0.058	EPA 8270D	8-27-18	8-30-18	
bis(2-Ethylhexyl)phthalate	ND	0.29	EPA 8270D	8-27-18	8-30-18	
Di-n-octylphthalate	ND	0.29	EPA 8270D	8-27-18	8-30-18	
Benzo[b]fluoranthene	0.52	0.012	EPA 8270D/SIM	8-27-18	8-28-18	
Benzo(j,k)fluoranthene	0.17	0.012	EPA 8270D/SIM	8-27-18	8-28-18	
Benzo[a]pyrene	0.49	0.012	EPA 8270D/SIM	8-27-18	8-28-18	
Indeno[1,2,3-cd]pyrene	0.34	0.012	EPA 8270D/SIM	8-27-18	8-28-18	
Dibenz[a,h]anthracene	0.054	0.012	EPA 8270D/SIM	8-27-18	8-28-18	
Benzo[g,h,i]perylene	0.35	0.012	EPA 8270D/SIM	8-27-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	65	19 - 103				
Phenol-d6	65	30 - 103				
Nitrobenzene-d5	63	27 - 105				
2-Fluorobiphenyl	76	36 - 102				
2,4,6-Tribromophenol	80	33 - 110				
Terphenyl-d14	83	38 - 108				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-06-20.0-082218					
Laboratory ID:	08-272-04					
n-Nitrosodimethylamine	ND	0.040	EPA 8270D	8-27-18	8-30-18	
Pyridine	ND	0.40	EPA 8270D	8-27-18	8-30-18	
Phenol	ND	0.040	EPA 8270D	8-27-18	8-30-18	
Aniline	ND	0.20	EPA 8270D	8-27-18	8-30-18	
bis(2-Chloroethyl)ether	ND	0.040	EPA 8270D	8-27-18	8-30-18	
2-Chlorophenol	ND	0.040	EPA 8270D	8-27-18	8-30-18	
1,3-Dichlorobenzene	ND	0.040	EPA 8270D	8-27-18	8-30-18	
1,4-Dichlorobenzene	ND	0.040	EPA 8270D	8-27-18	8-30-18	
Benzyl alcohol	ND	0.20	EPA 8270D	8-27-18	8-30-18	
1,2-Dichlorobenzene	ND	0.040	EPA 8270D	8-27-18	8-30-18	
2-Methylphenol (o-Cresol)	ND	0.040	EPA 8270D	8-27-18	8-30-18	
bis(2-Chloroisopropyl)ether	ND	0.040	EPA 8270D	8-27-18	8-30-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.040	EPA 8270D	8-27-18	8-30-18	
n-Nitroso-di-n-propylamine	ND	0.040	EPA 8270D	8-27-18	8-30-18	
Hexachloroethane	ND	0.040	EPA 8270D	8-27-18	8-30-18	
Nitrobenzene	ND	0.040	EPA 8270D	8-27-18	8-30-18	
Isophorone	ND	0.040	EPA 8270D	8-27-18	8-30-18	
2-Nitrophenol	ND	0.040	EPA 8270D	8-27-18	8-30-18	
2,4-Dimethylphenol	ND	0.040	EPA 8270D	8-27-18	8-30-18	
bis(2-Chloroethoxy)methane	ND	0.040	EPA 8270D	8-27-18	8-30-18	
2,4-Dichlorophenol	ND	0.040	EPA 8270D	8-27-18	8-30-18	
1,2,4-Trichlorobenzene	ND	0.040	EPA 8270D	8-27-18	8-30-18	
Naphthalene	0.070	0.040	EPA 8270D	8-27-18	8-30-18	
4-Chloroaniline	ND	0.20	EPA 8270D	8-27-18	8-30-18	
Hexachlorobutadiene	ND	0.040	EPA 8270D	8-27-18	8-30-18	
4-Chloro-3-methylphenol	ND	0.040	EPA 8270D	8-27-18	8-30-18	
2-Methylnaphthalene	ND	0.0081	EPA 8270D/SIM	8-27-18	8-28-18	
1-Methylnaphthalene	ND	0.0081	EPA 8270D/SIM	8-27-18	8-28-18	
Hexachlorocyclopentadiene	ND	0.040	EPA 8270D	8-27-18	8-30-18	
2,4,6-Trichlorophenol	ND	0.040	EPA 8270D	8-27-18	8-30-18	
2,3-Dichloroaniline	ND	0.040	EPA 8270D	8-27-18	8-30-18	
2,4,5-Trichlorophenol	ND	0.040	EPA 8270D	8-27-18	8-30-18	
2-Chloronaphthalene	ND	0.040	EPA 8270D	8-27-18	8-30-18	
2-Nitroaniline	ND	0.040	EPA 8270D	8-27-18	8-30-18	
1,4-Dinitrobenzene	ND	0.040	EPA 8270D	8-27-18	8-30-18	
Dimethylphthalate	ND	0.040	EPA 8270D	8-27-18	8-30-18	
1,3-Dinitrobenzene	ND	0.040	EPA 8270D	8-27-18	8-30-18	
2,6-Dinitrotoluene	ND	0.040	EPA 8270D	8-27-18	8-30-18	
1,2-Dinitrobenzene	ND	0.040	EPA 8270D	8-27-18	8-30-18	
Acenaphthylene	ND	0.0081	EPA 8270D/SIM	8-27-18	8-28-18	
3-Nitroaniline	ND	0.040	EPA 8270D	8-27-18	8-30-18	



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-06-20.0-082218					
Laboratory ID:	08-272-04					
2,4-Dinitrophenol	ND	0.20	EPA 8270D	8-27-18	8-30-18	
Acenaphthene	ND	0.0081	EPA 8270D/SIM	8-27-18	8-28-18	
4-Nitrophenol	ND	0.040	EPA 8270D	8-27-18	8-30-18	
2,4-Dinitrotoluene	ND	0.040	EPA 8270D	8-27-18	8-30-18	
Dibenzofuran	ND	0.040	EPA 8270D	8-27-18	8-30-18	
2,3,5,6-Tetrachlorophenol	ND	0.040	EPA 8270D	8-27-18	8-30-18	
2,3,4,6-Tetrachlorophenol	ND	0.040	EPA 8270D	8-27-18	8-30-18	
Diethylphthalate	ND	0.20	EPA 8270D	8-27-18	8-30-18	
4-Chlorophenyl-phenylether	ND	0.040	EPA 8270D	8-27-18	8-30-18	
4-Nitroaniline	ND	0.040	EPA 8270D	8-27-18	8-30-18	
Fluorene	ND	0.0081	EPA 8270D/SIM	8-27-18	8-28-18	
4,6-Dinitro-2-methylphenol	ND	0.20	EPA 8270D	8-27-18	8-30-18	
n-Nitrosodiphenylamine	ND	0.040	EPA 8270D	8-27-18	8-30-18	
1,2-Diphenylhydrazine	ND	0.040	EPA 8270D	8-27-18	8-30-18	
4-Bromophenyl-phenylether	ND	0.040	EPA 8270D	8-27-18	8-30-18	
Hexachlorobenzene	ND	0.040	EPA 8270D	8-27-18	8-30-18	
Pentachlorophenol	ND	0.20	EPA 8270D	8-27-18	8-30-18	
Phenanthrene	ND	0.0081	EPA 8270D/SIM	8-27-18	8-28-18	
Anthracene	ND	0.0081	EPA 8270D/SIM	8-27-18	8-28-18	
Carbazole	ND	0.040	EPA 8270D	8-27-18	8-30-18	
Di-n-butylphthalate	ND	0.20	EPA 8270D	8-27-18	8-30-18	
Fluoranthene	ND	0.0081	EPA 8270D/SIM	8-27-18	8-28-18	
Benzidine	ND	0.40	EPA 8270D	8-27-18	8-30-18	
Pyrene	ND	0.0081	EPA 8270D/SIM	8-27-18	8-28-18	
Butylbenzylphthalate	ND	0.20	EPA 8270D	8-27-18	8-30-18	
bis-2-Ethylhexyladipate	ND	0.20	EPA 8270D	8-27-18	8-30-18	
3,3'-Dichlorobenzidine	ND	0.20	EPA 8270D	8-27-18	8-30-18	
Benzo[a]anthracene	ND	0.0081	EPA 8270D/SIM	8-27-18	8-28-18	
Chrysene	ND	0.0081	EPA 8270D/SIM	8-27-18	8-28-18	
bis(2-Ethylhexyl)phthalate	ND	0.20	EPA 8270D	8-27-18	8-30-18	
Di-n-octylphthalate	ND	0.20	EPA 8270D	8-27-18	8-30-18	
Benzo[b]fluoranthene	ND	0.0081	EPA 8270D/SIM	8-27-18	8-28-18	
Benzo(j,k)fluoranthene	ND	0.0081	EPA 8270D/SIM	8-27-18	8-28-18	
Benzo[a]pyrene	ND	0.0081	EPA 8270D/SIM	8-27-18	8-28-18	
Indeno[1,2,3-cd]pyrene	ND	0.0081	EPA 8270D/SIM	8-27-18	8-28-18	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270D/SIM	8-27-18	8-28-18	
Benzo[g,h,i]perylene	ND	0.0081	EPA 8270D/SIM	8-27-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>70</i>	<i>19 - 103</i>				
<i>Phenol-d6</i>	<i>71</i>	<i>30 - 103</i>				
<i>Nitrobenzene-d5</i>	<i>64</i>	<i>27 - 105</i>				
<i>2-Fluorobiphenyl</i>	<i>71</i>	<i>36 - 102</i>				
<i>2,4,6-Tribromophenol</i>	<i>80</i>	<i>33 - 110</i>				
<i>Terphenyl-d14</i>	<i>75</i>	<i>38 - 108</i>				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-05-15.0-082218					
Laboratory ID:	08-272-08					
n-Nitrosodimethylamine	ND	0.045	EPA 8270D	8-27-18	8-30-18	
Pyridine	ND	0.45	EPA 8270D	8-27-18	8-30-18	
Phenol	ND	0.045	EPA 8270D	8-27-18	8-30-18	
Aniline	ND	0.22	EPA 8270D	8-27-18	8-30-18	
bis(2-Chloroethyl)ether	ND	0.045	EPA 8270D	8-27-18	8-30-18	
2-Chlorophenol	ND	0.045	EPA 8270D	8-27-18	8-30-18	
1,3-Dichlorobenzene	ND	0.045	EPA 8270D	8-27-18	8-30-18	
1,4-Dichlorobenzene	ND	0.045	EPA 8270D	8-27-18	8-30-18	
Benzyl alcohol	ND	0.22	EPA 8270D	8-27-18	8-30-18	
1,2-Dichlorobenzene	ND	0.045	EPA 8270D	8-27-18	8-30-18	
2-Methylphenol (o-Cresol)	ND	0.045	EPA 8270D	8-27-18	8-30-18	
bis(2-Chloroisopropyl)ether	ND	0.045	EPA 8270D	8-27-18	8-30-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.045	EPA 8270D	8-27-18	8-30-18	
n-Nitroso-di-n-propylamine	ND	0.045	EPA 8270D	8-27-18	8-30-18	
Hexachloroethane	ND	0.045	EPA 8270D	8-27-18	8-30-18	
Nitrobenzene	ND	0.045	EPA 8270D	8-27-18	8-30-18	
Isophorone	ND	0.045	EPA 8270D	8-27-18	8-30-18	
2-Nitrophenol	ND	0.045	EPA 8270D	8-27-18	8-30-18	
2,4-Dimethylphenol	ND	0.045	EPA 8270D	8-27-18	8-30-18	
bis(2-Chloroethoxy)methane	ND	0.045	EPA 8270D	8-27-18	8-30-18	
2,4-Dichlorophenol	ND	0.045	EPA 8270D	8-27-18	8-30-18	
1,2,4-Trichlorobenzene	ND	0.045	EPA 8270D	8-27-18	8-30-18	
Naphthalene	ND	0.0089	EPA 8270D/SIM	8-27-18	8-28-18	
4-Chloroaniline	ND	0.22	EPA 8270D	8-27-18	8-30-18	
Hexachlorobutadiene	ND	0.045	EPA 8270D	8-27-18	8-30-18	
4-Chloro-3-methylphenol	ND	0.045	EPA 8270D	8-27-18	8-30-18	
2-Methylnaphthalene	ND	0.0089	EPA 8270D/SIM	8-27-18	8-28-18	
1-Methylnaphthalene	ND	0.0089	EPA 8270D/SIM	8-27-18	8-28-18	
Hexachlorocyclopentadiene	ND	0.045	EPA 8270D	8-27-18	8-30-18	
2,4,6-Trichlorophenol	ND	0.045	EPA 8270D	8-27-18	8-30-18	
2,3-Dichloroaniline	ND	0.045	EPA 8270D	8-27-18	8-30-18	
2,4,5-Trichlorophenol	ND	0.045	EPA 8270D	8-27-18	8-30-18	
2-Chloronaphthalene	ND	0.045	EPA 8270D	8-27-18	8-30-18	
2-Nitroaniline	ND	0.045	EPA 8270D	8-27-18	8-30-18	
1,4-Dinitrobenzene	ND	0.045	EPA 8270D	8-27-18	8-30-18	
Dimethylphthalate	ND	0.045	EPA 8270D	8-27-18	8-30-18	
1,3-Dinitrobenzene	ND	0.045	EPA 8270D	8-27-18	8-30-18	
2,6-Dinitrotoluene	ND	0.045	EPA 8270D	8-27-18	8-30-18	
1,2-Dinitrobenzene	ND	0.045	EPA 8270D	8-27-18	8-30-18	
Acenaphthylene	ND	0.0089	EPA 8270D/SIM	8-27-18	8-28-18	
3-Nitroaniline	ND	0.045	EPA 8270D	8-27-18	8-30-18	



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-05-15.0-082218					
Laboratory ID:	08-272-08					
2,4-Dinitrophenol	ND	0.22	EPA 8270D	8-27-18	8-30-18	
Acenaphthene	ND	0.0089	EPA 8270D/SIM	8-27-18	8-28-18	
4-Nitrophenol	ND	0.045	EPA 8270D	8-27-18	8-30-18	
2,4-Dinitrotoluene	ND	0.045	EPA 8270D	8-27-18	8-30-18	
Dibenzofuran	ND	0.045	EPA 8270D	8-27-18	8-30-18	
2,3,5,6-Tetrachlorophenol	ND	0.045	EPA 8270D	8-27-18	8-30-18	
2,3,4,6-Tetrachlorophenol	ND	0.045	EPA 8270D	8-27-18	8-30-18	
Diethylphthalate	ND	0.22	EPA 8270D	8-27-18	8-30-18	
4-Chlorophenyl-phenylether	ND	0.045	EPA 8270D	8-27-18	8-30-18	
4-Nitroaniline	ND	0.045	EPA 8270D	8-27-18	8-30-18	
Fluorene	ND	0.0089	EPA 8270D/SIM	8-27-18	8-28-18	
4,6-Dinitro-2-methylphenol	ND	0.22	EPA 8270D	8-27-18	8-30-18	
n-Nitrosodiphenylamine	ND	0.045	EPA 8270D	8-27-18	8-30-18	
1,2-Diphenylhydrazine	ND	0.045	EPA 8270D	8-27-18	8-30-18	
4-Bromophenyl-phenylether	ND	0.045	EPA 8270D	8-27-18	8-30-18	
Hexachlorobenzene	ND	0.045	EPA 8270D	8-27-18	8-30-18	
Pentachlorophenol	ND	0.22	EPA 8270D	8-27-18	8-30-18	
Phenanthrene	ND	0.0089	EPA 8270D/SIM	8-27-18	8-28-18	
Anthracene	ND	0.0089	EPA 8270D/SIM	8-27-18	8-28-18	
Carbazole	ND	0.045	EPA 8270D	8-27-18	8-30-18	
Di-n-butylphthalate	ND	0.22	EPA 8270D	8-27-18	8-30-18	
Fluoranthene	ND	0.0089	EPA 8270D/SIM	8-27-18	8-28-18	
Benzidine	ND	0.45	EPA 8270D	8-27-18	8-30-18	
Pyrene	ND	0.0089	EPA 8270D/SIM	8-27-18	8-28-18	
Butylbenzylphthalate	ND	0.22	EPA 8270D	8-27-18	8-30-18	
bis-2-Ethylhexyladipate	ND	0.22	EPA 8270D	8-27-18	8-30-18	
3,3'-Dichlorobenzidine	ND	0.22	EPA 8270D	8-27-18	8-30-18	
Benzo[a]anthracene	ND	0.0089	EPA 8270D/SIM	8-27-18	8-28-18	
Chrysene	ND	0.0089	EPA 8270D/SIM	8-27-18	8-28-18	
bis(2-Ethylhexyl)phthalate	ND	0.22	EPA 8270D	8-27-18	8-30-18	
Di-n-octylphthalate	ND	0.22	EPA 8270D	8-27-18	8-30-18	
Benzo[b]fluoranthene	ND	0.0089	EPA 8270D/SIM	8-27-18	8-28-18	
Benzo(j,k)fluoranthene	ND	0.0089	EPA 8270D/SIM	8-27-18	8-28-18	
Benzo[a]pyrene	ND	0.0089	EPA 8270D/SIM	8-27-18	8-28-18	
Indeno[1,2,3-cd]pyrene	ND	0.0089	EPA 8270D/SIM	8-27-18	8-28-18	
Dibenz[a,h]anthracene	ND	0.0089	EPA 8270D/SIM	8-27-18	8-28-18	
Benzo[g,h,i]perylene	ND	0.0089	EPA 8270D/SIM	8-27-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>60</i>	<i>19 - 103</i>				
<i>Phenol-d6</i>	<i>61</i>	<i>30 - 103</i>				
<i>Nitrobenzene-d5</i>	<i>57</i>	<i>27 - 105</i>				
<i>2-Fluorobiphenyl</i>	<i>66</i>	<i>36 - 102</i>				
<i>2,4,6-Tribromophenol</i>	<i>78</i>	<i>33 - 110</i>				
<i>Terphenyl-d14</i>	<i>76</i>	<i>38 - 108</i>				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

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

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0827S2					
n-Nitrosodimethylamine	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Pyridine	ND	0.33	EPA 8270D	8-27-18	8-28-18	
Phenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Aniline	ND	0.17	EPA 8270D	8-27-18	8-28-18	
bis(2-Chloroethyl)ether	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2-Chlorophenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
1,3-Dichlorobenzene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
1,4-Dichlorobenzene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Benzyl alcohol	ND	0.17	EPA 8270D	8-27-18	8-28-18	
1,2-Dichlorobenzene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2-Methylphenol (o-Cresol)	ND	0.033	EPA 8270D	8-27-18	8-28-18	
bis(2-Chloroisopropyl)ether	ND	0.033	EPA 8270D	8-27-18	8-28-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.033	EPA 8270D	8-27-18	8-28-18	
n-Nitroso-di-n-propylamine	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Hexachloroethane	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Nitrobenzene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Isophorone	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2-Nitrophenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2,4-Dimethylphenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
bis(2-Chloroethoxy)methane	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2,4-Dichlorophenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
1,2,4-Trichlorobenzene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Naphthalene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
4-Chloroaniline	ND	0.17	EPA 8270D	8-27-18	8-28-18	
Hexachlorobutadiene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
4-Chloro-3-methylphenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Hexachlorocyclopentadiene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2,4,6-Trichlorophenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2,3-Dichloroaniline	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2,4,5-Trichlorophenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2-Chloronaphthalene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2-Nitroaniline	ND	0.033	EPA 8270D	8-27-18	8-28-18	
1,4-Dinitrobenzene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Dimethylphthalate	ND	0.033	EPA 8270D	8-27-18	8-28-18	
1,3-Dinitrobenzene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2,6-Dinitrotoluene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
1,2-Dinitrobenzene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
3-Nitroaniline	ND	0.033	EPA 8270D	8-27-18	8-28-18	



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

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

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0827S2					
2,4-Dinitrophenol	ND	0.17	EPA 8270D	8-27-18	8-28-18	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
4-Nitrophenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2,4-Dinitrotoluene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Dibenzofuran	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2,3,5,6-Tetrachlorophenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
2,3,4,6-Tetrachlorophenol	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Diethylphthalate	ND	0.17	EPA 8270D	8-27-18	8-28-18	
4-Chlorophenyl-phenylether	ND	0.033	EPA 8270D	8-27-18	8-28-18	
4-Nitroaniline	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Fluorene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	8-27-18	8-28-18	
n-Nitrosodiphenylamine	ND	0.033	EPA 8270D	8-27-18	8-28-18	
1,2-Diphenylhydrazine	ND	0.033	EPA 8270D	8-27-18	8-28-18	
4-Bromophenyl-phenylether	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Hexachlorobenzene	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Pentachlorophenol	ND	0.17	EPA 8270D	8-27-18	8-28-18	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Anthracene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Carbazole	ND	0.033	EPA 8270D	8-27-18	8-28-18	
Di-n-butylphthalate	ND	0.17	EPA 8270D	8-27-18	8-28-18	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Benzidine	ND	0.33	EPA 8270D	8-27-18	8-28-18	
Pyrene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Butylbenzylphthalate	ND	0.17	EPA 8270D	8-27-18	8-28-18	
bis(2-Ethylhexyl)adipate	ND	0.17	EPA 8270D	8-27-18	8-28-18	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	8-27-18	8-28-18	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Chrysene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
bis(2-Ethylhexyl)phthalate	ND	0.17	EPA 8270D	8-27-18	8-28-18	
Di-n-octylphthalate	ND	0.17	EPA 8270D	8-27-18	8-28-18	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Indeno[1,2,3-cd]pyrene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	8-27-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	79	19 - 103				
Phenol-d6	82	30 - 103				
Nitrobenzene-d5	78	27 - 105				
2-Fluorobiphenyl	83	36 - 102				
2,4,6-Tribromophenol	94	33 - 110				
Terphenyl-d14	84	38 - 108				



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
	MS	MSD	MS	MSD	Result	Recovery	Recovery	Limits	Limit		
MATRIX SPIKES											
Laboratory ID:	08-245-02										
	MS	MSD	MS	MSD		MS	MSD				
Phenol	1.14	1.11	1.33	1.33	ND	86	83	37 - 94	3	27	
2-Chlorophenol	1.15	1.12	1.33	1.33	ND	86	84	37 - 95	3	32	
1,4-Dichlorobenzene	0.550	0.554	0.667	0.667	ND	82	83	23 - 97	1	37	
n-Nitroso-di-n-propylamine	0.562	0.552	0.667	0.667	ND	84	83	40 - 91	2	28	
1,2,4-Trichlorobenzene	0.586	0.564	0.667	0.667	ND	88	85	37 - 93	4	30	
4-Chloro-3-methylphenol	1.15	1.11	1.33	1.33	ND	86	83	46 - 96	4	25	
Acenaphthene	0.581	0.573	0.667	0.667	ND	87	86	43 - 90	1	25	
4-Nitrophenol	1.15	1.18	1.33	1.33	ND	86	89	31 - 104	3	28	
2,4-Dinitrotoluene	0.607	0.576	0.667	0.667	ND	91	86	31 - 96	5	32	
Pentachlorophenol	1.34	1.36	1.33	1.33	ND	101	102	20 - 123	1	29	
Pyrene	0.590	0.590	0.667	0.667	ND	88	88	28 - 114	0	35	
<i>Surrogate:</i>											
2-Fluorophenol						80	81	19 - 103			
Phenol-d6						83	82	30 - 103			
Nitrobenzene-d5						74	73	27 - 105			
2-Fluorobiphenyl						78	79	36 - 102			
2,4,6-Tribromophenol						91	92	33 - 110			
Terphenyl-d14						80	80	38 - 108			



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-05-35.0-082218					
Laboratory ID:	08-272-12					
Arsenic	ND	12	EPA 6010D	8-28-18	8-30-18	
Barium	58	3.1	EPA 6010D	8-28-18	8-30-18	
Cadmium	ND	0.62	EPA 6010D	8-28-18	8-30-18	
Chromium	38	0.62	EPA 6010D	8-28-18	8-30-18	
Lead	ND	6.2	EPA 6010D	8-28-18	8-30-18	
Mercury	ND	0.31	EPA 7471B	8-27-18	8-27-18	
Selenium	ND	12	EPA 6010D	8-28-18	8-30-18	
Silver	ND	1.2	EPA 6010D	8-28-18	8-30-18	



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
<hr/>						
Laboratory ID:	MB0828SM1					
Arsenic	ND	10	EPA 6010D	8-28-18	8-30-18	
Cadmium	ND	0.50	EPA 6010D	8-28-18	8-30-18	
Chromium	ND	0.50	EPA 6010D	8-28-18	8-30-18	
Lead	ND	5.0	EPA 6010D	8-28-18	8-30-18	
Selenium	ND	10	EPA 6010D	8-28-18	8-30-18	
Silver	ND	1.0	EPA 6010D	8-28-18	8-30-18	
<hr/>						
Laboratory ID:	MB0827S1					
Mercury	ND	0.25	EPA 7471B	8-27-18	8-27-18	
<hr/>						
Laboratory ID:	MB0828SM3					
Barium	ND	2.5	EPA 6010D	8-28-18	8-30-18	
<hr/>						



Date of Report: September 4, 2018
 Samples Submitted: August 23, 2018
 Laboratory Reference: 1808-272
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-245-01							
	ORIG	DUP						
Arsenic	ND	ND	NA	NA	NA	NA	20	
Cadmium	ND	ND	NA	NA	NA	NA	20	
Chromium	35.3	42.0	NA	NA	NA	17	20	
Lead	ND	ND	NA	NA	NA	NA	20	
Selenium	ND	ND	NA	NA	NA	NA	20	
Silver	ND	ND	NA	NA	NA	NA	20	

Laboratory ID:	08-245-05							
Mercury	ND	ND	NA	NA	NA	NA	20	

Laboratory ID:	08-245-01							
	ORIG	DUP						
Barium	69.6	60.3	NA	NA	NA	14	20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES								
Laboratory ID:	08-245-01							
	MS	MSD	MS	MSD	MS	MSD		
Arsenic	95.8	96.1	100	100	ND	96 96	75-125	0 20
Cadmium	46.4	47.9	50.0	50.0	ND	93 96	75-125	3 20
Chromium	133	141	100	100	35.3	98 106	75-125	6 20
Lead	243	250	250	250	ND	97 100	75-125	3 20
Selenium	93.1	96.9	100	100	ND	93 97	75-125	4 20
Silver	22.4	22.6	25.0	25.0	ND	90 90	75-125	1 20

Laboratory ID:	08-245-05							
Mercury	0.529	0.523	0.500	0.500	0.0116	103 102	80-120	1 20

Laboratory ID:	08-245-01							
	MS	MSD	MS	MSD	MS	MSD		
Barium	186	183	100	100	69.6	116 113	75-125	2 20



Date of Report: September 4, 2018
Samples Submitted: August 23, 2018
Laboratory Reference: 1808-272
Project: 397-019

% MOISTURE

Date Analyzed: 8-24&27-18

Client ID	Lab ID	% Moisture
FB-06-2.5-082218	08-272-01	42
FB-06-20.0-082218	08-272-04	18
FB-05-5.0-082218	08-272-06	18
FB-05-15.0-082218	08-272-08	25
FB-05-20.0-082218	08-272-09	18
FB-05-35.0-082218	08-272-12	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 gas.
 - 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





MVA Onsite Environmental Inc.

Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request (in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)
(TPH analysis 5 Days)

_____ (other)

Laboratory Number:

08-272

Company: _____

Project Number: _____

Project Name: _____

Project Manager: _____

Sampled by: _____

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix
11	FG-05-30.0-082218	8/22/18	1120	Soil S
12	FG-05-35.0-082218		1130	Soil S
13	FG-05-40.0-082218		1140	Soil S
14	FG-05-082218		0950	Water 12

Number of Containers

Container	11	12	13	14
NWTPH-HCID				
NWTPH-Gx/BTEX	X			
NWTPH-Gx				
NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	X			
Volatiles 8260C				
Halogenated Volatiles 8260C	X			
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 RCRA Metals		X		
Total MTCA Metals				
TCLP Metals				
HEM (oil and grease) 1664A				
% Moisture		X		

Signature	Company	Date	Time	Comments/Special Instructions
<i>[Signature]</i>	Forweller	8/22/18	1558	<i>See page 1.</i>
<i>[Signature]</i>	OSE	8/23/18	1417	

Relinquished

Received

Relinquished

Received

Relinquished

Received

Reviewed/Date

Reviewed/Date

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

September 6, 2018

Javan Ruark
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1808-277

Dear Javan:

Enclosed are the analytical results and associated quality control data for samples submitted on August 24, 2018.

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



OnSite Environmental, Inc. 14648 NE 95th 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: September 6, 2018
Samples Submitted: August 24, 2018
Laboratory Reference: 1808-277
Project: 397-019

Case Narrative

Samples were collected on August 23, 2018 and received by the laboratory on August 24, 2018. 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.

NWTPH Gx/BTEX Analysis

The MTCA Method A cleanup level of 0.030 ppm for Benzene is not achievable for sample FMW-134-5.0-082318 due to the low dry weight of the sample.

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: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-134-5.0-082318					
Laboratory ID:	08-277-01					
Benzene	ND	0.059	EPA 8021B	8-27-18	8-27-18	
Toluene	ND	0.30	EPA 8021B	8-27-18	8-27-18	
Ethyl Benzene	ND	0.30	EPA 8021B	8-27-18	8-27-18	
m,p-Xylene	ND	0.30	EPA 8021B	8-27-18	8-27-18	
o-Xylene	ND	0.30	EPA 8021B	8-27-18	8-27-18	
Gasoline	ND	30	NWTPH-Gx	8-27-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	80	57-129				

Client ID:	FMW-134-15.0-082318					
Laboratory ID:	08-277-03					
Benzene	ND	0.023	EPA 8021B	8-27-18	8-27-18	
Toluene	ND	0.12	EPA 8021B	8-27-18	8-27-18	
Ethyl Benzene	ND	0.12	EPA 8021B	8-27-18	8-27-18	
m,p-Xylene	ND	0.12	EPA 8021B	8-27-18	8-27-18	
o-Xylene	ND	0.12	EPA 8021B	8-27-18	8-27-18	
Gasoline	ND	12	NWTPH-Gx	8-27-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	87	57-129				

Client ID:	FB-03-10.0-082318					
Laboratory ID:	08-277-06					
Benzene	ND	0.020	EPA 8021B	8-27-18	8-27-18	
Toluene	ND	0.065	EPA 8021B	8-27-18	8-27-18	
Ethyl Benzene	ND	0.065	EPA 8021B	8-27-18	8-27-18	
m,p-Xylene	ND	0.065	EPA 8021B	8-27-18	8-27-18	
o-Xylene	ND	0.065	EPA 8021B	8-27-18	8-27-18	
Gasoline	ND	6.5	NWTPH-Gx	8-27-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	101	57-129				



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-03-15.0-082318					
Laboratory ID:	08-277-07					
Benzene	ND	0.020	EPA 8021B	8-27-18	8-27-18	
Toluene	ND	0.065	EPA 8021B	8-27-18	8-27-18	
Ethyl Benzene	ND	0.065	EPA 8021B	8-27-18	8-27-18	
m,p-Xylene	ND	0.065	EPA 8021B	8-27-18	8-27-18	
o-Xylene	ND	0.065	EPA 8021B	8-27-18	8-27-18	
Gasoline	ND	6.5	NWTPH-Gx	8-27-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	87	57-129				
Client ID:	FB-03-25.0-082318					
Laboratory ID:	08-277-08					
Benzene	ND	0.020	EPA 8021B	8-27-18	8-27-18	
Toluene	ND	0.055	EPA 8021B	8-27-18	8-27-18	
Ethyl Benzene	ND	0.055	EPA 8021B	8-27-18	8-27-18	
m,p-Xylene	ND	0.055	EPA 8021B	8-27-18	8-27-18	
o-Xylene	ND	0.055	EPA 8021B	8-27-18	8-27-18	
Gasoline	ND	5.5	NWTPH-Gx	8-27-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	87	57-129				



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0827S2					
Benzene	ND	0.020	EPA 8021B	8-27-18	8-27-18	
Toluene	ND	0.050	EPA 8021B	8-27-18	8-27-18	
Ethyl Benzene	ND	0.050	EPA 8021B	8-27-18	8-27-18	
m,p-Xylene	ND	0.050	EPA 8021B	8-27-18	8-27-18	
o-Xylene	ND	0.050	EPA 8021B	8-27-18	8-27-18	
Gasoline	ND	5.0	NWTPH-Gx	8-27-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	90	57-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-276-04							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				99	94	57-129		

SPIKE BLANKS

Laboratory ID:	SB0827S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	0.923	0.893	1.00	1.00	92	89	69-111	3	10
Toluene	0.915	0.880	1.00	1.00	92	88	70-114	4	11
Ethyl Benzene	0.918	0.886	1.00	1.00	92	89	70-115	4	10
m,p-Xylene	0.907	0.877	1.00	1.00	91	88	72-115	3	10
o-Xylene	0.917	0.882	1.00	1.00	92	88	71-115	4	11
<i>Surrogate:</i>									
<i>Fluorobenzene</i>					89	86	57-129		



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-03-082318					
Laboratory ID:	08-277-12					
Benzene	ND	1.0	EPA 8021B	8-28-18	8-28-18	
Toluene	ND	1.0	EPA 8021B	8-28-18	8-28-18	
Ethyl Benzene	ND	1.0	EPA 8021B	8-28-18	8-28-18	
m,p-Xylene	ND	1.0	EPA 8021B	8-28-18	8-28-18	
o-Xylene	ND	1.0	EPA 8021B	8-28-18	8-28-18	
Gasoline	ND	100	NWTPH-Gx	8-28-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	111	66-117				



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0828W1					
Benzene	ND	1.0	EPA 8021B	8-28-18	8-28-18	
Toluene	ND	1.0	EPA 8021B	8-28-18	8-28-18	
Ethyl Benzene	ND	1.0	EPA 8021B	8-28-18	8-28-18	
m,p-Xylene	ND	1.0	EPA 8021B	8-28-18	8-28-18	
o-Xylene	ND	1.0	EPA 8021B	8-28-18	8-28-18	
Gasoline	ND	100	NWTPH-Gx	8-28-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	112	66-117				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-277-12							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				111	113	66-117		

MATRIX SPIKES

Laboratory ID:	08-277-12									
	MS	MSD	MS	MSD		MS	MSD			
Benzene	50.9	52.1	50.0	50.0	ND	102	104	82-122	2	11
Toluene	50.2	51.2	50.0	50.0	ND	100	102	83-123	2	12
Ethyl Benzene	50.6	51.9	50.0	50.0	ND	101	104	83-123	3	12
m,p-Xylene	50.1	51.2	50.0	50.0	ND	100	102	83-123	2	12
o-Xylene	50.7	51.8	50.0	50.0	ND	101	104	83-123	2	11
<i>Surrogate:</i>										
<i>Fluorobenzene</i>						100	100	66-117		



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-134-5.0-082318					
Laboratory ID:	08-277-01					
Diesel Range Organics	260	83	NWTPH-Dx	8-28-18	8-28-18	
Lube Oil Range Organics	1900	170	NWTPH-Dx	8-28-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	83	50-150				

Client ID:	FMW-134-15.0-082318					
Laboratory ID:	08-277-03					
Diesel Range Organics	ND	31	NWTPH-Dx	8-28-18	8-28-18	
Lube Oil Range Organics	ND	61	NWTPH-Dx	8-28-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	124	50-150				

Client ID:	FB-03-10.0-082318					
Laboratory ID:	08-277-06					
Diesel Range Organics	ND	32	NWTPH-Dx	8-28-18	8-28-18	
Lube Oil Range Organics	ND	65	NWTPH-Dx	8-28-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	75	50-150				

Client ID:	FB-03-15.0-082318					
Laboratory ID:	08-277-07					
Diesel Range Organics	ND	32	NWTPH-Dx	8-28-18	8-28-18	
Lube Oil Range Organics	ND	65	NWTPH-Dx	8-28-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	92	50-150				

Client ID:	FB-03-25.0-082318					
Laboratory ID:	08-277-08					
Diesel Range Organics	ND	29	NWTPH-Dx	8-28-18	8-28-18	
Lube Oil Range Organics	ND	59	NWTPH-Dx	8-28-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	77	50-150				



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0828S1					
Diesel Range Organics	ND	25	NWTPH-Dx	8-28-18	8-28-18	
Lube Oil Range Organics	ND	50	NWTPH-Dx	8-28-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	111	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-277-03							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				124	113	50-150		



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

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

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-03-082318					
Laboratory ID:	08-277-12					
Diesel Range Organics	0.66	0.25	NWTPH-Dx	8-28-18	8-30-18	
Lube Oil Range Organics	0.49	0.41	NWTPH-Dx	8-28-18	8-30-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	91	50-150				



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

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

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0828W1					
Diesel Range Organics	ND	0.25	NWTPH-Dx	8-28-18	8-28-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	8-28-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	118	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0828W1							
	ORIG	DUP						
Diesel Fuel #2	0.920	0.849	NA	NA	NA	NA	8	NA
Lube Oil	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				103	106	50-150		



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

VOLATILES EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-03-082318					
Laboratory ID:	08-277-12					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Chloromethane	ND	1.0	EPA 8260C	8-29-18	8-29-18	
Vinyl Chloride	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Bromomethane	ND	2.0	EPA 8260C	8-29-18	8-29-18	
Chloroethane	ND	1.0	EPA 8260C	8-29-18	8-29-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Acetone	7.4	5.0	EPA 8260C	8-29-18	8-29-18	
Iodomethane	ND	5.0	EPA 8260C	8-29-18	8-29-18	
Carbon Disulfide	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Methylene Chloride	ND	1.0	EPA 8260C	8-29-18	8-29-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Vinyl Acetate	ND	1.0	EPA 8260C	8-29-18	8-29-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
2-Butanone	ND	5.0	EPA 8260C	8-29-18	8-29-18	
Bromochloromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Chloroform	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Benzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Trichloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Dibromomethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Bromodichloromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	8-29-18	8-29-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	8-29-18	8-29-18	
Toluene	ND	1.0	EPA 8260C	8-29-18	8-29-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	8-29-18	8-29-18	



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

VOLATILES EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-03-082318					
Laboratory ID:	08-277-12					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Tetrachloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
2-Hexanone	ND	2.0	EPA 8260C	8-29-18	8-29-18	
Dibromochloromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Chlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Ethylbenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
m,p-Xylene	ND	0.40	EPA 8260C	8-29-18	8-29-18	
o-Xylene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Styrene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Bromoform	ND	1.0	EPA 8260C	8-29-18	8-29-18	
Isopropylbenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Bromobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
n-Propylbenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
tert-Butylbenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
sec-Butylbenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
p-Isopropyltoluene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
n-Butylbenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	8-29-18	8-29-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	8-29-18	8-29-18	
Naphthalene	ND	1.3	EPA 8260C	8-29-18	8-29-18	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260C	8-29-18	8-29-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>96</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>106</i>	<i>78-125</i>				



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0829W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Chloromethane	ND	1.0	EPA 8260C	8-29-18	8-29-18	
Vinyl Chloride	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Bromomethane	ND	2.0	EPA 8260C	8-29-18	8-29-18	
Chloroethane	ND	1.0	EPA 8260C	8-29-18	8-29-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Acetone	ND	5.0	EPA 8260C	8-29-18	8-29-18	
Iodomethane	ND	5.0	EPA 8260C	8-29-18	8-29-18	
Carbon Disulfide	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Methylene Chloride	ND	1.0	EPA 8260C	8-29-18	8-29-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Vinyl Acetate	ND	1.0	EPA 8260C	8-29-18	8-29-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
2-Butanone	ND	5.0	EPA 8260C	8-29-18	8-29-18	
Bromochloromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Chloroform	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Benzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Trichloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Dibromomethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Bromodichloromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	8-29-18	8-29-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	8-29-18	8-29-18	
Toluene	ND	1.0	EPA 8260C	8-29-18	8-29-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	8-29-18	8-29-18	



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

VOLATILES EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:		MB0829W1				
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Tetrachloroethene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
2-Hexanone	ND	2.0	EPA 8260C	8-29-18	8-29-18	
Dibromochloromethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Chlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Ethylbenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
m,p-Xylene	ND	0.40	EPA 8260C	8-29-18	8-29-18	
o-Xylene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Styrene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Bromoform	ND	1.0	EPA 8260C	8-29-18	8-29-18	
Isopropylbenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Bromobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	8-29-18	8-29-18	
n-Propylbenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
tert-Butylbenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
sec-Butylbenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
p-Isopropyltoluene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
n-Butylbenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	8-29-18	8-29-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	8-29-18	8-29-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	8-29-18	8-29-18	
Naphthalene	ND	1.3	EPA 8260C	8-29-18	8-29-18	
1,2,3-Trichlorobenzene	ND	0.26	EPA 8260C	8-29-18	8-29-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>87</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>88</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>78-125</i>				



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

**VOLATILES EPA 8260C
 SB/SBD QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0829W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	10.6	10.0	10.0	10.0	106	100	62-129	6	15	
Benzene	11.1	10.5	10.0	10.0	111	105	77-127	6	15	
Trichloroethene	10.7	9.96	10.0	10.0	107	100	70-120	7	15	
Toluene	11.1	10.5	10.0	10.0	111	105	82-123	6	15	
Chlorobenzene	10.5	9.70	10.0	10.0	105	97	79-120	8	15	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					<i>85</i>	<i>89</i>	<i>75-127</i>			
<i>Toluene-d8</i>					<i>88</i>	<i>89</i>	<i>80-127</i>			
<i>4-Bromofluorobenzene</i>					<i>93</i>	<i>94</i>	<i>78-125</i>			



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-134-15.0-082318					
Laboratory ID:	08-277-03					
n-Nitrosodimethylamine	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Pyridine	ND	0.41	EPA 8270D	8-29-18	8-29-18	
Phenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Aniline	ND	0.20	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroethyl)ether	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2-Chlorophenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
1,3-Dichlorobenzene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
1,4-Dichlorobenzene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Benzyl alcohol	ND	0.20	EPA 8270D	8-29-18	8-29-18	
1,2-Dichlorobenzene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2-Methylphenol (o-Cresol)	ND	0.041	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroisopropyl)ether	ND	0.041	EPA 8270D	8-29-18	8-29-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.041	EPA 8270D	8-29-18	8-29-18	
n-Nitroso-di-n-propylamine	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Hexachloroethane	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Nitrobenzene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Isophorone	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2-Nitrophenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2,4-Dimethylphenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroethoxy)methane	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2,4-Dichlorophenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
1,2,4-Trichlorobenzene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Naphthalene	0.14	0.041	EPA 8270D	8-29-18	8-29-18	
4-Chloroaniline	ND	0.20	EPA 8270D	8-29-18	8-29-18	
Hexachlorobutadiene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
4-Chloro-3-methylphenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2-Methylnaphthalene	0.028	0.0081	EPA 8270D/SIM	8-29-18	8-29-18	
1-Methylnaphthalene	0.012	0.0081	EPA 8270D/SIM	8-29-18	8-29-18	
Hexachlorocyclopentadiene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2,4,6-Trichlorophenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2,3-Dichloroaniline	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2,4,5-Trichlorophenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2-Chloronaphthalene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2-Nitroaniline	ND	0.041	EPA 8270D	8-29-18	8-29-18	
1,4-Dinitrobenzene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Dimethylphthalate	ND	0.041	EPA 8270D	8-29-18	8-29-18	
1,3-Dinitrobenzene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2,6-Dinitrotoluene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
1,2-Dinitrobenzene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Acenaphthylene	ND	0.0081	EPA 8270D/SIM	8-29-18	8-29-18	
3-Nitroaniline	ND	0.041	EPA 8270D	8-29-18	8-29-18	



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-134-15.0-082318					
Laboratory ID:	08-277-03					
2,4-Dinitrophenol	ND	0.20	EPA 8270D	8-29-18	8-29-18	
Acenaphthene	0.014	0.0081	EPA 8270D/SIM	8-29-18	8-29-18	
4-Nitrophenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2,4-Dinitrotoluene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Dibenzofuran	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2,3,5,6-Tetrachlorophenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
2,3,4,6-Tetrachlorophenol	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Diethylphthalate	ND	0.20	EPA 8270D	8-29-18	8-29-18	
4-Chlorophenyl-phenylether	ND	0.041	EPA 8270D	8-29-18	8-29-18	
4-Nitroaniline	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Fluorene	0.016	0.0081	EPA 8270D/SIM	8-29-18	8-29-18	
4,6-Dinitro-2-methylphenol	ND	0.20	EPA 8270D	8-29-18	8-29-18	
n-Nitrosodiphenylamine	ND	0.041	EPA 8270D	8-29-18	8-29-18	
1,2-Diphenylhydrazine	ND	0.041	EPA 8270D	8-29-18	8-29-18	
4-Bromophenyl-phenylether	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Hexachlorobenzene	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Pentachlorophenol	ND	0.20	EPA 8270D	8-29-18	8-29-18	
Phenanthrene	0.021	0.0081	EPA 8270D/SIM	8-29-18	8-29-18	
Anthracene	ND	0.0081	EPA 8270D/SIM	8-29-18	8-29-18	
Carbazole	ND	0.041	EPA 8270D	8-29-18	8-29-18	
Di-n-butylphthalate	ND	0.20	EPA 8270D	8-29-18	8-29-18	
Fluoranthene	ND	0.0081	EPA 8270D/SIM	8-29-18	8-29-18	
Benzidine	ND	0.41	EPA 8270D	8-29-18	8-29-18	
Pyrene	ND	0.0081	EPA 8270D/SIM	8-29-18	8-29-18	
Butylbenzylphthalate	ND	0.20	EPA 8270D	8-29-18	8-29-18	
bis-2-Ethylhexyladipate	ND	0.20	EPA 8270D	8-29-18	8-29-18	
3,3'-Dichlorobenzidine	ND	0.20	EPA 8270D	8-29-18	8-29-18	
Benzo[a]anthracene	ND	0.0081	EPA 8270D/SIM	8-29-18	8-29-18	
Chrysene	ND	0.0081	EPA 8270D/SIM	8-29-18	8-29-18	
bis(2-Ethylhexyl)phthalate	ND	0.20	EPA 8270D	8-29-18	8-29-18	
Di-n-octylphthalate	ND	0.20	EPA 8270D	8-29-18	8-29-18	
Benzo[b]fluoranthene	ND	0.0081	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo(j,k)fluoranthene	ND	0.0081	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[a]pyrene	ND	0.0081	EPA 8270D/SIM	8-29-18	8-29-18	
Indeno[1,2,3-cd]pyrene	ND	0.0081	EPA 8270D/SIM	8-29-18	8-29-18	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[g,h,i]perylene	ND	0.0081	EPA 8270D/SIM	8-29-18	8-29-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>71</i>	<i>19 - 103</i>				
<i>Phenol-d6</i>	<i>71</i>	<i>30 - 103</i>				
<i>Nitrobenzene-d5</i>	<i>65</i>	<i>27 - 105</i>				
<i>2-Fluorobiphenyl</i>	<i>70</i>	<i>36 - 102</i>				
<i>2,4,6-Tribromophenol</i>	<i>79</i>	<i>33 - 110</i>				
<i>Terphenyl-d14</i>	<i>69</i>	<i>38 - 108</i>				



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-03-10.0-082318					
Laboratory ID:	08-277-06					
n-Nitrosodimethylamine	ND	0.043	EPA 8270D	8-29-18	8-29-18	
Pyridine	ND	0.43	EPA 8270D	8-29-18	8-29-18	
Phenol	ND	0.043	EPA 8270D	8-29-18	8-29-18	
Aniline	ND	0.22	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroethyl)ether	ND	0.043	EPA 8270D	8-29-18	8-29-18	
2-Chlorophenol	ND	0.043	EPA 8270D	8-29-18	8-29-18	
1,3-Dichlorobenzene	ND	0.043	EPA 8270D	8-29-18	8-29-18	
1,4-Dichlorobenzene	ND	0.043	EPA 8270D	8-29-18	8-29-18	
Benzyl alcohol	ND	0.22	EPA 8270D	8-29-18	8-29-18	
1,2-Dichlorobenzene	ND	0.043	EPA 8270D	8-29-18	8-29-18	
2-Methylphenol (o-Cresol)	ND	0.043	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroisopropyl)ether	ND	0.043	EPA 8270D	8-29-18	8-29-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.043	EPA 8270D	8-29-18	8-29-18	
n-Nitroso-di-n-propylamine	ND	0.043	EPA 8270D	8-29-18	8-29-18	
Hexachloroethane	ND	0.043	EPA 8270D	8-29-18	8-29-18	
Nitrobenzene	ND	0.043	EPA 8270D	8-29-18	8-29-18	
Isophorone	ND	0.043	EPA 8270D	8-29-18	8-29-18	
2-Nitrophenol	ND	0.043	EPA 8270D	8-29-18	8-29-18	
2,4-Dimethylphenol	ND	0.043	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroethoxy)methane	ND	0.043	EPA 8270D	8-29-18	8-29-18	
2,4-Dichlorophenol	ND	0.043	EPA 8270D	8-29-18	8-29-18	
1,2,4-Trichlorobenzene	ND	0.043	EPA 8270D	8-29-18	8-29-18	
Naphthalene	ND	0.0086	EPA 8270D/SIM	8-29-18	8-29-18	
4-Chloroaniline	ND	0.22	EPA 8270D	8-29-18	8-29-18	
Hexachlorobutadiene	ND	0.043	EPA 8270D	8-29-18	8-29-18	
4-Chloro-3-methylphenol	ND	0.043	EPA 8270D	8-29-18	8-29-18	
2-Methylnaphthalene	ND	0.0086	EPA 8270D/SIM	8-29-18	8-29-18	
1-Methylnaphthalene	ND	0.0086	EPA 8270D/SIM	8-29-18	8-29-18	
Hexachlorocyclopentadiene	ND	0.043	EPA 8270D	8-29-18	8-29-18	
2,4,6-Trichlorophenol	ND	0.043	EPA 8270D	8-29-18	8-29-18	
2,3-Dichloroaniline	ND	0.043	EPA 8270D	8-29-18	8-29-18	
2,4,5-Trichlorophenol	ND	0.043	EPA 8270D	8-29-18	8-29-18	
2-Chloronaphthalene	ND	0.043	EPA 8270D	8-29-18	8-29-18	
2-Nitroaniline	ND	0.043	EPA 8270D	8-29-18	8-29-18	
1,4-Dinitrobenzene	ND	0.043	EPA 8270D	8-29-18	8-29-18	
Dimethylphthalate	ND	0.043	EPA 8270D	8-29-18	8-29-18	
1,3-Dinitrobenzene	ND	0.043	EPA 8270D	8-29-18	8-29-18	
2,6-Dinitrotoluene	ND	0.043	EPA 8270D	8-29-18	8-29-18	
1,2-Dinitrobenzene	ND	0.043	EPA 8270D	8-29-18	8-29-18	
Acenaphthylene	ND	0.0086	EPA 8270D/SIM	8-29-18	8-29-18	
3-Nitroaniline	ND	0.043	EPA 8270D	8-29-18	8-29-18	



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-03-10.0-082318					
Laboratory ID:	08-277-06					
2,4-Dinitrophenol	ND	0.22	EPA 8270D	8-29-18	8-29-18	
Acenaphthene	ND	0.0086	EPA 8270D/SIM	8-29-18	8-29-18	
4-Nitrophenol	ND	0.043	EPA 8270D	8-29-18	8-29-18	
2,4-Dinitrotoluene	ND	0.043	EPA 8270D	8-29-18	8-29-18	
Dibenzofuran	ND	0.043	EPA 8270D	8-29-18	8-29-18	
2,3,5,6-Tetrachlorophenol	ND	0.043	EPA 8270D	8-29-18	8-29-18	
2,3,4,6-Tetrachlorophenol	ND	0.043	EPA 8270D	8-29-18	8-29-18	
Diethylphthalate	ND	0.22	EPA 8270D	8-29-18	8-29-18	
4-Chlorophenyl-phenylether	ND	0.043	EPA 8270D	8-29-18	8-29-18	
4-Nitroaniline	ND	0.043	EPA 8270D	8-29-18	8-29-18	
Fluorene	ND	0.0086	EPA 8270D/SIM	8-29-18	8-29-18	
4,6-Dinitro-2-methylphenol	ND	0.22	EPA 8270D	8-29-18	8-29-18	
n-Nitrosodiphenylamine	ND	0.043	EPA 8270D	8-29-18	8-29-18	
1,2-Diphenylhydrazine	ND	0.043	EPA 8270D	8-29-18	8-29-18	
4-Bromophenyl-phenylether	ND	0.043	EPA 8270D	8-29-18	8-29-18	
Hexachlorobenzene	ND	0.043	EPA 8270D	8-29-18	8-29-18	
Pentachlorophenol	ND	0.22	EPA 8270D	8-29-18	8-29-18	
Phenanthrene	0.015	0.0086	EPA 8270D/SIM	8-29-18	8-29-18	
Anthracene	ND	0.0086	EPA 8270D/SIM	8-29-18	8-29-18	
Carbazole	ND	0.043	EPA 8270D	8-29-18	8-29-18	
Di-n-butylphthalate	ND	0.22	EPA 8270D	8-29-18	8-29-18	
Fluoranthene	0.011	0.0086	EPA 8270D/SIM	8-29-18	8-29-18	
Benzidine	ND	0.43	EPA 8270D	8-29-18	8-29-18	
Pyrene	0.012	0.0086	EPA 8270D/SIM	8-29-18	8-29-18	
Butylbenzylphthalate	ND	0.22	EPA 8270D	8-29-18	8-29-18	
bis-2-Ethylhexyladipate	ND	0.22	EPA 8270D	8-29-18	8-29-18	
3,3'-Dichlorobenzidine	ND	0.22	EPA 8270D	8-29-18	8-29-18	
Benzo[a]anthracene	ND	0.0086	EPA 8270D/SIM	8-29-18	8-29-18	
Chrysene	ND	0.0086	EPA 8270D/SIM	8-29-18	8-29-18	
bis(2-Ethylhexyl)phthalate	ND	0.22	EPA 8270D	8-29-18	8-29-18	
Di-n-octylphthalate	ND	0.22	EPA 8270D	8-29-18	8-29-18	
Benzo[b]fluoranthene	ND	0.0086	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo(j,k)fluoranthene	ND	0.0086	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[a]pyrene	ND	0.0086	EPA 8270D/SIM	8-29-18	8-29-18	
Indeno[1,2,3-cd]pyrene	ND	0.0086	EPA 8270D/SIM	8-29-18	8-29-18	
Dibenz[a,h]anthracene	ND	0.0086	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[g,h,i]perylene	ND	0.0086	EPA 8270D/SIM	8-29-18	8-29-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>60</i>	<i>19 - 103</i>				
<i>Phenol-d6</i>	<i>61</i>	<i>30 - 103</i>				
<i>Nitrobenzene-d5</i>	<i>52</i>	<i>27 - 105</i>				
<i>2-Fluorobiphenyl</i>	<i>54</i>	<i>36 - 102</i>				
<i>2,4,6-Tribromophenol</i>	<i>56</i>	<i>33 - 110</i>				
<i>Terphenyl-d14</i>	<i>52</i>	<i>38 - 108</i>				



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-03-35.0-082318					
Laboratory ID:	08-277-10					
n-Nitrosodimethylamine	ND	0.040	EPA 8270D	8-29-18	8-29-18	
Pyridine	ND	0.40	EPA 8270D	8-29-18	8-29-18	
Phenol	ND	0.040	EPA 8270D	8-29-18	8-29-18	
Aniline	ND	0.20	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroethyl)ether	ND	0.040	EPA 8270D	8-29-18	8-29-18	
2-Chlorophenol	ND	0.040	EPA 8270D	8-29-18	8-29-18	
1,3-Dichlorobenzene	ND	0.040	EPA 8270D	8-29-18	8-29-18	
1,4-Dichlorobenzene	ND	0.040	EPA 8270D	8-29-18	8-29-18	
Benzyl alcohol	ND	0.20	EPA 8270D	8-29-18	8-29-18	
1,2-Dichlorobenzene	ND	0.040	EPA 8270D	8-29-18	8-29-18	
2-Methylphenol (o-Cresol)	ND	0.040	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroisopropyl)ether	ND	0.040	EPA 8270D	8-29-18	8-29-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.040	EPA 8270D	8-29-18	8-29-18	
n-Nitroso-di-n-propylamine	ND	0.040	EPA 8270D	8-29-18	8-29-18	
Hexachloroethane	ND	0.040	EPA 8270D	8-29-18	8-29-18	
Nitrobenzene	ND	0.040	EPA 8270D	8-29-18	8-29-18	
Isophorone	ND	0.040	EPA 8270D	8-29-18	8-29-18	
2-Nitrophenol	ND	0.040	EPA 8270D	8-29-18	8-29-18	
2,4-Dimethylphenol	ND	0.040	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroethoxy)methane	ND	0.040	EPA 8270D	8-29-18	8-29-18	
2,4-Dichlorophenol	ND	0.040	EPA 8270D	8-29-18	8-29-18	
1,2,4-Trichlorobenzene	ND	0.040	EPA 8270D	8-29-18	8-29-18	
Naphthalene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
4-Chloroaniline	ND	0.20	EPA 8270D	8-29-18	8-29-18	
Hexachlorobutadiene	ND	0.040	EPA 8270D	8-29-18	8-29-18	
4-Chloro-3-methylphenol	ND	0.040	EPA 8270D	8-29-18	8-29-18	
2-Methylnaphthalene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
1-Methylnaphthalene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Hexachlorocyclopentadiene	ND	0.040	EPA 8270D	8-29-18	8-29-18	
2,4,6-Trichlorophenol	ND	0.040	EPA 8270D	8-29-18	8-29-18	
2,3-Dichloroaniline	ND	0.040	EPA 8270D	8-29-18	8-29-18	
2,4,5-Trichlorophenol	ND	0.040	EPA 8270D	8-29-18	8-29-18	
2-Chloronaphthalene	ND	0.040	EPA 8270D	8-29-18	8-29-18	
2-Nitroaniline	ND	0.040	EPA 8270D	8-29-18	8-29-18	
1,4-Dinitrobenzene	ND	0.040	EPA 8270D	8-29-18	8-29-18	
Dimethylphthalate	ND	0.040	EPA 8270D	8-29-18	8-29-18	
1,3-Dinitrobenzene	ND	0.040	EPA 8270D	8-29-18	8-29-18	
2,6-Dinitrotoluene	ND	0.040	EPA 8270D	8-29-18	8-29-18	
1,2-Dinitrobenzene	ND	0.040	EPA 8270D	8-29-18	8-29-18	
Acenaphthylene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
3-Nitroaniline	ND	0.040	EPA 8270D	8-29-18	8-29-18	



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-03-35.0-082318					
Laboratory ID:	08-277-10					
2,4-Dinitrophenol	ND	0.20	EPA 8270D	8-29-18	8-29-18	
Acenaphthene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
4-Nitrophenol	ND	0.040	EPA 8270D	8-29-18	8-29-18	
2,4-Dinitrotoluene	ND	0.040	EPA 8270D	8-29-18	8-29-18	
Dibenzofuran	ND	0.040	EPA 8270D	8-29-18	8-29-18	
2,3,5,6-Tetrachlorophenol	ND	0.040	EPA 8270D	8-29-18	8-29-18	
2,3,4,6-Tetrachlorophenol	ND	0.040	EPA 8270D	8-29-18	8-29-18	
Diethylphthalate	ND	0.20	EPA 8270D	8-29-18	8-29-18	
4-Chlorophenyl-phenylether	ND	0.040	EPA 8270D	8-29-18	8-29-18	
4-Nitroaniline	ND	0.040	EPA 8270D	8-29-18	8-29-18	
Fluorene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
4,6-Dinitro-2-methylphenol	ND	0.20	EPA 8270D	8-29-18	8-29-18	
n-Nitrosodiphenylamine	ND	0.040	EPA 8270D	8-29-18	8-29-18	
1,2-Diphenylhydrazine	ND	0.040	EPA 8270D	8-29-18	8-29-18	
4-Bromophenyl-phenylether	ND	0.040	EPA 8270D	8-29-18	8-29-18	
Hexachlorobenzene	ND	0.040	EPA 8270D	8-29-18	8-29-18	
Pentachlorophenol	ND	0.20	EPA 8270D	8-29-18	8-29-18	
Phenanthrene	0.017	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Anthracene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Carbazole	ND	0.040	EPA 8270D	8-29-18	8-29-18	
Di-n-butylphthalate	ND	0.20	EPA 8270D	8-29-18	8-29-18	
Fluoranthene	0.015	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Benzidine	ND	0.40	EPA 8270D	8-29-18	8-29-18	
Pyrene	0.017	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Butylbenzylphthalate	ND	0.20	EPA 8270D	8-29-18	8-29-18	
bis-2-Ethylhexyladipate	ND	0.20	EPA 8270D	8-29-18	8-29-18	
3,3'-Dichlorobenzidine	ND	0.20	EPA 8270D	8-29-18	8-29-18	
Benzo[a]anthracene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Chrysene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
bis(2-Ethylhexyl)phthalate	ND	0.20	EPA 8270D	8-29-18	8-29-18	
Di-n-octylphthalate	ND	0.20	EPA 8270D	8-29-18	8-29-18	
Benzo[b]fluoranthene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo(j,k)fluoranthene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[a]pyrene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Indeno[1,2,3-cd]pyrene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Dibenz[a,h]anthracene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[g,h,i]perylene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>75</i>	<i>19 - 103</i>				
<i>Phenol-d6</i>	<i>78</i>	<i>30 - 103</i>				
<i>Nitrobenzene-d5</i>	<i>69</i>	<i>27 - 105</i>				
<i>2-Fluorobiphenyl</i>	<i>73</i>	<i>36 - 102</i>				
<i>2,4,6-Tribromophenol</i>	<i>84</i>	<i>33 - 110</i>				
<i>Terphenyl-d14</i>	<i>75</i>	<i>38 - 108</i>				



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

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

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0829S1					
n-Nitrosodimethylamine	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Pyridine	ND	0.33	EPA 8270D	8-29-18	8-29-18	
Phenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Aniline	ND	0.17	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroethyl)ether	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Chlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,3-Dichlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,4-Dichlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Benzyl alcohol	ND	0.17	EPA 8270D	8-29-18	8-29-18	
1,2-Dichlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Methylphenol (o-Cresol)	ND	0.033	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroisopropyl)ether	ND	0.033	EPA 8270D	8-29-18	8-29-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.033	EPA 8270D	8-29-18	8-29-18	
n-Nitroso-di-n-propylamine	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Hexachloroethane	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Nitrobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Isophorone	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Nitrophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4-Dimethylphenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroethoxy)methane	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4-Dichlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,2,4-Trichlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Naphthalene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
4-Chloroaniline	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Hexachlorobutadiene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
4-Chloro-3-methylphenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Hexachlorocyclopentadiene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4,6-Trichlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,3-Dichloroaniline	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4,5-Trichlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Chloronaphthalene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Nitroaniline	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,4-Dinitrobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Dimethylphthalate	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,3-Dinitrobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,6-Dinitrotoluene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,2-Dinitrobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
3-Nitroaniline	ND	0.033	EPA 8270D	8-29-18	8-29-18	



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

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

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0829S1					
2,4-Dinitrophenol	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
4-Nitrophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4-Dinitrotoluene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Dibenzofuran	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,3,5,6-Tetrachlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,3,4,6-Tetrachlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Diethylphthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
4-Chlorophenyl-phenylether	ND	0.033	EPA 8270D	8-29-18	8-29-18	
4-Nitroaniline	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Fluorene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	8-29-18	8-29-18	
n-Nitrosodiphenylamine	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,2-Diphenylhydrazine	ND	0.033	EPA 8270D	8-29-18	8-29-18	
4-Bromophenyl-phenylether	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Hexachlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Pentachlorophenol	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Anthracene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Carbazole	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Di-n-butylphthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Benzidine	ND	0.33	EPA 8270D	8-29-18	8-29-18	
Pyrene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Butylbenzylphthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
bis(2-Ethylhexyl)adipate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Chrysene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
bis(2-Ethylhexyl)phthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Di-n-octylphthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Indeno[1,2,3-cd]pyrene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	79	19 - 103				
Phenol-d6	79	30 - 103				
Nitrobenzene-d5	73	27 - 105				
2-Fluorobiphenyl	75	36 - 102				
2,4,6-Tribromophenol	88	33 - 110				
Terphenyl-d14	81	38 - 108				



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
	MS	MSD	MS	MSD	Result	Recovery	Limits	RPD	Limit		
MATRIX SPIKES											
Laboratory ID:	08-229-04										
	MS	MSD	MS	MSD		MS	MSD				
Phenol	1.15	0.989	1.33	1.33	ND	86	74	37 - 94	15	27	
2-Chlorophenol	1.21	1.03	1.33	1.33	ND	91	77	37 - 95	16	32	
1,4-Dichlorobenzene	0.568	0.493	0.667	0.667	ND	85	74	23 - 97	14	37	
n-Nitroso-di-n-propylamine	0.580	0.501	0.667	0.667	ND	87	75	40 - 91	15	28	
1,2,4-Trichlorobenzene	0.563	0.505	0.667	0.667	ND	84	76	37 - 93	11	30	
4-Chloro-3-methylphenol	1.11	1.03	1.33	1.33	ND	83	77	46 - 96	7	25	
Acenaphthene	0.585	0.526	0.667	0.667	0.0395	82	73	43 - 90	11	25	
4-Nitrophenol	1.15	1.03	1.33	1.33	ND	86	77	31 - 104	11	28	
2,4-Dinitrotoluene	0.575	0.516	0.667	0.667	ND	86	77	31 - 96	11	32	
Pentachlorophenol	1.38	1.22	1.33	1.33	ND	104	92	20 - 123	12	29	
Pyrene	0.582	0.518	0.667	0.667	0.0828	75	65	28 - 114	12	35	
<i>Surrogate:</i>											
2-Fluorophenol						85	71	19 - 103			
Phenol-d6						84	73	30 - 103			
Nitrobenzene-d5						72	65	27 - 105			
2-Fluorobiphenyl						77	70	36 - 102			
2,4,6-Tribromophenol						92	84	33 - 110			
Terphenyl-d14						78	71	38 - 108			



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-134-5.0-082318					
Laboratory ID:	08-277-01					
Arsenic	ND	17	EPA 6010D	8-29-18	8-31-18	
Barium	110	8.3	EPA 6010D	8-29-18	8-31-18	
Cadmium	ND	1.7	EPA 6010D	8-29-18	8-31-18	
Chromium	19	1.7	EPA 6010D	8-29-18	8-31-18	
Lead	ND	17	EPA 6010D	8-29-18	8-31-18	
Mercury	ND	0.83	EPA 7471B	8-29-18	8-29-18	
Selenium	ND	17	EPA 6010D	8-29-18	8-31-18	
Silver	ND	3.3	EPA 6010D	8-29-18	8-31-18	

Client ID: FMW-134-15.0-082318

Laboratory ID: 08-277-03

Arsenic	ND	12	EPA 6010D	8-29-18	8-31-18	
Barium	48	3.0	EPA 6010D	8-29-18	8-31-18	
Cadmium	ND	0.61	EPA 6010D	8-29-18	8-31-18	
Chromium	42	0.61	EPA 6010D	8-29-18	8-31-18	
Lead	ND	6.1	EPA 6010D	8-29-18	8-31-18	
Mercury	ND	0.30	EPA 7471B	8-29-18	8-29-18	
Selenium	ND	12	EPA 6010D	8-29-18	8-31-18	
Silver	ND	1.2	EPA 6010D	8-29-18	8-31-18	

Client ID: FB-03-10.0-082318

Laboratory ID: 08-277-06

Arsenic	ND	13	EPA 6010D	8-29-18	8-31-18	
Barium	230	3.2	EPA 6010D	8-29-18	8-31-18	
Cadmium	ND	0.65	EPA 6010D	8-29-18	8-31-18	
Chromium	100	0.65	EPA 6010D	8-29-18	8-31-18	
Lead	8.9	6.5	EPA 6010D	8-29-18	8-31-18	
Mercury	ND	0.32	EPA 7471B	8-29-18	8-29-18	
Selenium	ND	13	EPA 6010D	8-29-18	8-31-18	
Silver	ND	1.3	EPA 6010D	8-29-18	8-31-18	



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-03-35.0-082318					
Laboratory ID:	08-277-10					
Arsenic	ND	12	EPA 6010D	8-29-18	8-31-18	
Barium	44	3.0	EPA 6010D	8-29-18	8-31-18	
Cadmium	ND	0.60	EPA 6010D	8-29-18	8-31-18	
Chromium	42	0.60	EPA 6010D	8-29-18	8-31-18	
Lead	ND	6.0	EPA 6010D	8-29-18	8-31-18	
Mercury	ND	0.30	EPA 7471B	8-29-18	8-29-18	
Selenium	ND	12	EPA 6010D	8-29-18	8-31-18	
Silver	ND	1.2	EPA 6010D	8-29-18	8-31-18	



Date of Report: September 6, 2018
 Samples Submitted: August 24, 2018
 Laboratory Reference: 1808-277
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0829SM1					
Arsenic	ND	5.0	EPA 6010D	8-29-18	8-31-18	
Barium	ND	2.5	EPA 6010D	8-29-18	8-31-18	
Cadmium	ND	0.50	EPA 6010D	8-29-18	8-31-18	
Chromium	ND	0.50	EPA 6010D	8-29-18	8-31-18	
Lead	ND	5.0	EPA 6010D	8-29-18	8-31-18	
Selenium	ND	5.0	EPA 6010D	8-29-18	8-31-18	
Silver	ND	1.0	EPA 6010D	8-29-18	8-31-18	

Laboratory ID:	MB0829S1					
Mercury	ND	0.25	EPA 7471B	8-29-18	8-29-18	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-277-03							
	ORIG	DUP						
Arsenic	ND	ND	NA	NA	NA	NA	20	
Barium	39.8	42.3	NA	NA	NA	6	20	
Cadmium	ND	ND	NA	NA	NA	NA	20	
Chromium	34.5	36.2	NA	NA	NA	5	20	
Lead	ND	ND	NA	NA	NA	NA	20	
Selenium	ND	ND	NA	NA	NA	NA	20	
Silver	ND	ND	NA	NA	NA	NA	20	

Laboratory ID:	08-277-03							
Mercury	ND	ND	NA	NA	NA	NA	20	

MATRIX SPIKES

Laboratory ID:	08-277-03									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	98.9	98.4	100	100	ND	99	98	75-125	0	20
Barium	148	148	100	100	39.8	109	109	75-125	0	20
Cadmium	49.4	48.5	50.0	50.0	ND	99	97	75-125	2	20
Chromium	137	136	100	100	34.5	102	102	75-125	0	20
Lead	242	239	250	250	ND	97	96	75-125	1	20
Selenium	100	101	100	100	ND	100	101	75-125	0	20
Silver	22.9	22.7	25.0	25.0	ND	92	91	75-125	1	20

Laboratory ID:	08-277-03									
Mercury	0.534	0.537	0.500	0.500	0.0115	105	105	80-120	1	20



OnSite Environmental, Inc. 14648 NE 95th 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: September 6, 2018
Samples Submitted: August 24, 2018
Laboratory Reference: 1808-277
Project: 397-019

% MOISTURE

Date Analyzed: 8-27&28-18

Client ID	Lab ID	% Moisture
FMW-134-5.0-082318	08-277-01	70
FMW-134-15.0-082318	08-277-03	18
FB-03-10.0-082318	08-277-06	23
FB-03-15.0-082318	08-277-07	23
FB-03-25.0-082318	08-277-08	15
FB-03-35.0-082318	08-277-10	16





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





MVA Onsite Environmental Inc.
 Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Terraround Request
 (In working days)

(Check One)

- Same Day 1 Day
 2 Days 3 Days
 Standard (7 Days)
 (TPH analysis 5 Days)
 _____ (other)

Company: _____
 Project Number: _____
 Project Name: _____
 Project Manager: _____
 Sampled by: _____

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
11	FG-03-410.0-082318	8/23/18	1540	Soil	5
12	FG-03-082318	8/23/18	1400	Water	8
13	FMW-134-2.5-082318	8/23/18	0700	Soil	5

Number of Containers	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
5			X															
8			X															
5			X															

Signature	Company	Date	Time	Comments/Special Instructions
	ORR	8/24/18	1100	See Page 1.

Relinquished _____
 Received _____
 Relinquished _____
 Received _____
 Relinquished _____
 Received _____
 Relinquished _____
 Received _____
 Reviewed/Date _____

Reviewed/Date _____

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

September 5, 2018

Javan Ruark
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1808-292

Dear Javan:

Enclosed are the analytical results and associated quality control data for samples submitted on August 25, 2018.

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



OnSite Environmental, Inc. 14648 NE 95th 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: September 5, 2018
Samples Submitted: August 25, 2018
Laboratory Reference: 1808-292
Project: 397-019

Case Narrative

Samples were collected on August 24, 2018 and received by the laboratory on August 25, 2018. 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.

NWTPH Gx/BTEX Analysis

The MTCA Method A cleanup level of 0.030 ppm for Benzene is not achievable for sample FMW-135-15.0-082418 due to the low dry weight of the sample.

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: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-292
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-135-15.0-082418					
Laboratory ID:	08-292-02					
Benzene	ND	0.055	EPA 8021B	8-27-18	8-28-18	
Toluene	ND	0.28	EPA 8021B	8-27-18	8-28-18	
Ethyl Benzene	ND	0.28	EPA 8021B	8-27-18	8-28-18	
m,p-Xylene	ND	0.28	EPA 8021B	8-27-18	8-28-18	
o-Xylene	ND	0.28	EPA 8021B	8-27-18	8-28-18	
Gasoline	ND	28	NWTPH-Gx	8-27-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>109</i>	<i>57-129</i>				

Client ID:	FMW-135-35.0-082418					
Laboratory ID:	08-292-06					
Benzene	ND	0.020	EPA 8021B	8-27-18	8-28-18	
Toluene	ND	0.058	EPA 8021B	8-27-18	8-28-18	
Ethyl Benzene	ND	0.058	EPA 8021B	8-27-18	8-28-18	
m,p-Xylene	ND	0.058	EPA 8021B	8-27-18	8-28-18	
o-Xylene	ND	0.058	EPA 8021B	8-27-18	8-28-18	
Gasoline	ND	5.8	NWTPH-Gx	8-27-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>80</i>	<i>57-129</i>				



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-292
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0827S1					
Benzene	ND	0.020	EPA 8021B	8-27-18	8-27-18	
Toluene	ND	0.050	EPA 8021B	8-27-18	8-27-18	
Ethyl Benzene	ND	0.050	EPA 8021B	8-27-18	8-27-18	
m,p-Xylene	ND	0.050	EPA 8021B	8-27-18	8-27-18	
o-Xylene	ND	0.050	EPA 8021B	8-27-18	8-27-18	
Gasoline	ND	5.0	NWTPH-Gx	8-27-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	90	57-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-276-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				104	103	57-129		

SPIKE BLANKS

Laboratory ID:	SB0827S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	0.923	0.893	1.00	1.00	92	89	69-111	3	10
Toluene	0.915	0.880	1.00	1.00	92	88	70-114	4	11
Ethyl Benzene	0.918	0.886	1.00	1.00	92	89	70-115	4	10
m,p-Xylene	0.907	0.877	1.00	1.00	91	88	72-115	3	10
o-Xylene	0.917	0.882	1.00	1.00	92	88	71-115	4	11
<i>Surrogate:</i>									
<i>Fluorobenzene</i>					89	86	57-129		



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-292
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-135-15.0-082418					
Laboratory ID:	08-292-02					
Diesel Range Organics	130	83	NWTPH-Dx	8-28-18	8-28-18	
Lube Oil Range Organics	680	170	NWTPH-Dx	8-28-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	78	50-150				

Client ID:	FMW-135-35.0-082418					
Laboratory ID:	08-292-06					
Diesel Range Organics	ND	31	NWTPH-Dx	8-28-18	8-28-18	
Lube Oil Range Organics	ND	62	NWTPH-Dx	8-28-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	99	50-150				



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-292
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0828S1					
Diesel Range Organics	ND	25	NWTPH-Dx	8-28-18	8-28-18	
Lube Oil Range Organics	ND	50	NWTPH-Dx	8-28-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>111</i>	<i>50-150</i>				

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-277-03							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				124	113	50-150		



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-292
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-135-50.0-082418					
Laboratory ID:	08-292-09					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	8-28-18	8-29-18	
Chloromethane	ND	0.0037	EPA 8260C	8-28-18	8-29-18	
Vinyl Chloride	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
Bromomethane	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
Chloroethane	ND	0.0037	EPA 8260C	8-28-18	8-29-18	
Trichlorofluoromethane	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
1,1-Dichloroethene	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
Iodomethane	ND	0.0053	EPA 8260C	8-28-18	8-29-18	
Methylene Chloride	ND	0.0037	EPA 8260C	8-28-18	8-29-18	
(trans) 1,2-Dichloroethene	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
1,1-Dichloroethane	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
2,2-Dichloropropane	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
(cis) 1,2-Dichloroethene	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
Bromochloromethane	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
Chloroform	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
1,1,1-Trichloroethane	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
Carbon Tetrachloride	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
1,1-Dichloropropene	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
1,2-Dichloroethane	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
Trichloroethene	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
1,2-Dichloropropane	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
Dibromomethane	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
Bromodichloromethane	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
2-Chloroethyl Vinyl Ether	ND	0.0037	EPA 8260C	8-28-18	8-29-18	
(cis) 1,3-Dichloropropene	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
(trans) 1,3-Dichloropropene	ND	0.00074	EPA 8260C	8-28-18	8-29-18	



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-292
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-135-50.0-082418					
Laboratory ID:	08-292-09					
1,1,2-Trichloroethane	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
Tetrachloroethene	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
1,3-Dichloropropane	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
Dibromochloromethane	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
1,2-Dibromoethane	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
Chlorobenzene	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
1,1,1,2-Tetrachloroethane	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
Bromoform	ND	0.0037	EPA 8260C	8-28-18	8-29-18	
Bromobenzene	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
1,1,2,2-Tetrachloroethane	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
1,2,3-Trichloropropane	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
2-Chlorotoluene	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
4-Chlorotoluene	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
1,3-Dichlorobenzene	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
1,4-Dichlorobenzene	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
1,2-Dichlorobenzene	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
1,2-Dibromo-3-chloropropane	ND	0.0037	EPA 8260C	8-28-18	8-29-18	
1,2,4-Trichlorobenzene	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
Hexachlorobutadiene	ND	0.0037	EPA 8260C	8-28-18	8-29-18	
1,2,3-Trichlorobenzene	ND	0.00074	EPA 8260C	8-28-18	8-29-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>95</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>71-132</i>				



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-292
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0828S2					
Dichlorodifluoromethane	ND	0.0015	EPA 8260C	8-28-18	8-28-18	
Chloromethane	ND	0.0050	EPA 8260C	8-28-18	8-28-18	
Vinyl Chloride	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
Bromomethane	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
Chloroethane	ND	0.0050	EPA 8260C	8-28-18	8-28-18	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
Iodomethane	ND	0.0065	EPA 8260C	8-28-18	8-28-18	
Methylene Chloride	ND	0.0050	EPA 8260C	8-28-18	8-28-18	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
Bromochloromethane	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
Chloroform	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
Trichloroethene	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
Dibromomethane	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
Bromodichloromethane	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
2-Chloroethyl Vinyl Ether	ND	0.0074	EPA 8260C	8-28-18	8-28-18	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	8-28-18	8-28-18	



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-292
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:		MB0828S2				
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
Tetrachloroethene	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
Dibromochloromethane	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
Chlorobenzene	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
Bromoform	ND	0.0050	EPA 8260C	8-28-18	8-28-18	
Bromobenzene	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
2-Chlorotoluene	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
4-Chlorotoluene	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	8-28-18	8-28-18	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	8-28-18	8-28-18	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	8-28-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>68-139</i>				
<i>Toluene-d8</i>	<i>106</i>	<i>79-128</i>				
<i>4-Bromofluorobenzene</i>	<i>108</i>	<i>71-132</i>				



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-292
 Project: 397-019

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

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0828S2									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0608	0.0586	0.0500	0.0500	122	117	53-141	4	17	
Benzene	0.0636	0.0600	0.0500	0.0500	127	120	70-130	6	15	
Trichloroethene	0.0588	0.0580	0.0500	0.0500	118	116	74-122	1	16	
Toluene	0.0628	0.0621	0.0500	0.0500	126	124	76-130	1	15	
Chlorobenzene	0.0559	0.0532	0.0500	0.0500	112	106	75-120	5	14	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					99	99	68-139			
<i>Toluene-d8</i>					108	107	79-128			
<i>4-Bromofluorobenzene</i>					108	109	71-132			



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-292
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-135-15.0-082418					
Laboratory ID:	08-292-02					
n-Nitrosodimethylamine	ND	0.11	EPA 8270D	8-29-18	8-30-18	
Pyridine	ND	1.1	EPA 8270D	8-29-18	8-30-18	
Phenol	ND	0.11	EPA 8270D	8-29-18	8-30-18	
Aniline	ND	0.56	EPA 8270D	8-29-18	8-30-18	
bis(2-Chloroethyl)ether	ND	0.11	EPA 8270D	8-29-18	8-30-18	
2-Chlorophenol	ND	0.11	EPA 8270D	8-29-18	8-30-18	
1,3-Dichlorobenzene	ND	0.11	EPA 8270D	8-29-18	8-30-18	
1,4-Dichlorobenzene	ND	0.11	EPA 8270D	8-29-18	8-30-18	
Benzyl alcohol	ND	0.56	EPA 8270D	8-29-18	8-30-18	
1,2-Dichlorobenzene	ND	0.11	EPA 8270D	8-29-18	8-30-18	
2-Methylphenol (o-Cresol)	ND	0.11	EPA 8270D	8-29-18	8-30-18	
bis(2-Chloroisopropyl)ether	ND	0.11	EPA 8270D	8-29-18	8-30-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.11	EPA 8270D	8-29-18	8-30-18	
n-Nitroso-di-n-propylamine	ND	0.11	EPA 8270D	8-29-18	8-30-18	
Hexachloroethane	ND	0.11	EPA 8270D	8-29-18	8-30-18	
Nitrobenzene	ND	0.11	EPA 8270D	8-29-18	8-30-18	
Isophorone	ND	0.11	EPA 8270D	8-29-18	8-30-18	
2-Nitrophenol	ND	0.11	EPA 8270D	8-29-18	8-30-18	
2,4-Dimethylphenol	ND	0.11	EPA 8270D	8-29-18	8-30-18	
bis(2-Chloroethoxy)methane	ND	0.11	EPA 8270D	8-29-18	8-30-18	
2,4-Dichlorophenol	ND	0.11	EPA 8270D	8-29-18	8-30-18	
1,2,4-Trichlorobenzene	ND	0.11	EPA 8270D	8-29-18	8-30-18	
Naphthalene	0.029	0.022	EPA 8270D/SIM	8-29-18	8-31-18	
4-Chloroaniline	ND	0.56	EPA 8270D	8-29-18	8-30-18	
Hexachlorobutadiene	ND	0.11	EPA 8270D	8-29-18	8-30-18	
4-Chloro-3-methylphenol	ND	0.11	EPA 8270D	8-29-18	8-30-18	
2-Methylnaphthalene	ND	0.022	EPA 8270D/SIM	8-29-18	8-31-18	
1-Methylnaphthalene	ND	0.022	EPA 8270D/SIM	8-29-18	8-31-18	
Hexachlorocyclopentadiene	ND	0.11	EPA 8270D	8-29-18	8-30-18	
2,4,6-Trichlorophenol	ND	0.11	EPA 8270D	8-29-18	8-30-18	
2,3-Dichloroaniline	ND	0.11	EPA 8270D	8-29-18	8-30-18	
2,4,5-Trichlorophenol	ND	0.11	EPA 8270D	8-29-18	8-30-18	
2-Chloronaphthalene	ND	0.11	EPA 8270D	8-29-18	8-30-18	
2-Nitroaniline	ND	0.11	EPA 8270D	8-29-18	8-30-18	
1,4-Dinitrobenzene	ND	0.11	EPA 8270D	8-29-18	8-30-18	
Dimethylphthalate	ND	0.11	EPA 8270D	8-29-18	8-30-18	
1,3-Dinitrobenzene	ND	0.11	EPA 8270D	8-29-18	8-30-18	
2,6-Dinitrotoluene	ND	0.11	EPA 8270D	8-29-18	8-30-18	
1,2-Dinitrobenzene	ND	0.11	EPA 8270D	8-29-18	8-30-18	
Acenaphthylene	ND	0.022	EPA 8270D/SIM	8-29-18	8-31-18	
3-Nitroaniline	ND	0.11	EPA 8270D	8-29-18	8-30-18	



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-292
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-135-15.0-082418					
Laboratory ID:	08-292-02					
2,4-Dinitrophenol	ND	0.56	EPA 8270D	8-29-18	8-30-18	
Acenaphthene	0.039	0.022	EPA 8270D/SIM	8-29-18	8-31-18	
4-Nitrophenol	ND	0.11	EPA 8270D	8-29-18	8-30-18	
2,4-Dinitrotoluene	ND	0.11	EPA 8270D	8-29-18	8-30-18	
Dibenzofuran	ND	0.11	EPA 8270D	8-29-18	8-30-18	
2,3,5,6-Tetrachlorophenol	ND	0.11	EPA 8270D	8-29-18	8-30-18	
2,3,4,6-Tetrachlorophenol	ND	0.11	EPA 8270D	8-29-18	8-30-18	
Diethylphthalate	ND	0.56	EPA 8270D	8-29-18	8-30-18	
4-Chlorophenyl-phenylether	ND	0.11	EPA 8270D	8-29-18	8-30-18	
4-Nitroaniline	ND	0.11	EPA 8270D	8-29-18	8-30-18	
Fluorene	ND	0.022	EPA 8270D/SIM	8-29-18	8-31-18	
4,6-Dinitro-2-methylphenol	ND	0.56	EPA 8270D	8-29-18	8-30-18	
n-Nitrosodiphenylamine	ND	0.11	EPA 8270D	8-29-18	8-30-18	
1,2-Diphenylhydrazine	ND	0.11	EPA 8270D	8-29-18	8-30-18	
4-Bromophenyl-phenylether	ND	0.11	EPA 8270D	8-29-18	8-30-18	
Hexachlorobenzene	ND	0.11	EPA 8270D	8-29-18	8-30-18	
Pentachlorophenol	ND	0.56	EPA 8270D	8-29-18	8-30-18	
Phenanthrene	0.068	0.022	EPA 8270D/SIM	8-29-18	8-31-18	
Anthracene	ND	0.022	EPA 8270D/SIM	8-29-18	8-31-18	
Carbazole	ND	0.11	EPA 8270D	8-29-18	8-30-18	
Di-n-butylphthalate	ND	0.56	EPA 8270D	8-29-18	8-30-18	
Fluoranthene	0.042	0.022	EPA 8270D/SIM	8-29-18	8-31-18	
Benzidine	ND	1.1	EPA 8270D	8-29-18	8-30-18	
Pyrene	0.073	0.022	EPA 8270D/SIM	8-29-18	8-31-18	
Butylbenzylphthalate	ND	0.56	EPA 8270D	8-29-18	8-30-18	
bis-2-Ethylhexyladipate	ND	0.56	EPA 8270D	8-29-18	8-30-18	
3,3'-Dichlorobenzidine	ND	0.56	EPA 8270D	8-29-18	8-30-18	
Benzo[a]anthracene	ND	0.022	EPA 8270D/SIM	8-29-18	8-31-18	
Chrysene	ND	0.022	EPA 8270D/SIM	8-29-18	8-31-18	
bis(2-Ethylhexyl)phthalate	ND	0.56	EPA 8270D	8-29-18	8-30-18	
Di-n-octylphthalate	ND	0.56	EPA 8270D	8-29-18	8-30-18	
Benzo[b]fluoranthene	ND	0.022	EPA 8270D/SIM	8-29-18	8-31-18	
Benzo(j,k)fluoranthene	ND	0.022	EPA 8270D/SIM	8-29-18	8-31-18	
Benzo[a]pyrene	ND	0.022	EPA 8270D/SIM	8-29-18	8-31-18	
Indeno[1,2,3-cd]pyrene	ND	0.022	EPA 8270D/SIM	8-29-18	8-31-18	
Dibenz[a,h]anthracene	ND	0.022	EPA 8270D/SIM	8-29-18	8-31-18	
Benzo[g,h,i]perylene	ND	0.022	EPA 8270D/SIM	8-29-18	8-31-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>58</i>	<i>19 - 103</i>				
<i>Phenol-d6</i>	<i>60</i>	<i>30 - 103</i>				
<i>Nitrobenzene-d5</i>	<i>59</i>	<i>27 - 105</i>				
<i>2-Fluorobiphenyl</i>	<i>65</i>	<i>36 - 102</i>				
<i>2,4,6-Tribromophenol</i>	<i>76</i>	<i>33 - 110</i>				
<i>Terphenyl-d14</i>	<i>71</i>	<i>38 - 108</i>				



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-292
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-135-30.0-082418					
Laboratory ID:	08-292-05					
n-Nitrosodimethylamine	ND	0.041	EPA 8270D	8-29-18	8-30-18	
Pyridine	ND	0.41	EPA 8270D	8-29-18	8-30-18	
Phenol	ND	0.041	EPA 8270D	8-29-18	8-30-18	
Aniline	ND	0.21	EPA 8270D	8-29-18	8-30-18	
bis(2-Chloroethyl)ether	ND	0.041	EPA 8270D	8-29-18	8-30-18	
2-Chlorophenol	ND	0.041	EPA 8270D	8-29-18	8-30-18	
1,3-Dichlorobenzene	ND	0.041	EPA 8270D	8-29-18	8-30-18	
1,4-Dichlorobenzene	ND	0.041	EPA 8270D	8-29-18	8-30-18	
Benzyl alcohol	ND	0.21	EPA 8270D	8-29-18	8-30-18	
1,2-Dichlorobenzene	ND	0.041	EPA 8270D	8-29-18	8-30-18	
2-Methylphenol (o-Cresol)	ND	0.041	EPA 8270D	8-29-18	8-30-18	
bis(2-Chloroisopropyl)ether	ND	0.041	EPA 8270D	8-29-18	8-30-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.041	EPA 8270D	8-29-18	8-30-18	
n-Nitroso-di-n-propylamine	ND	0.041	EPA 8270D	8-29-18	8-30-18	
Hexachloroethane	ND	0.041	EPA 8270D	8-29-18	8-30-18	
Nitrobenzene	ND	0.041	EPA 8270D	8-29-18	8-30-18	
Isophorone	ND	0.041	EPA 8270D	8-29-18	8-30-18	
2-Nitrophenol	ND	0.041	EPA 8270D	8-29-18	8-30-18	
2,4-Dimethylphenol	ND	0.041	EPA 8270D	8-29-18	8-30-18	
bis(2-Chloroethoxy)methane	ND	0.041	EPA 8270D	8-29-18	8-30-18	
2,4-Dichlorophenol	ND	0.041	EPA 8270D	8-29-18	8-30-18	
1,2,4-Trichlorobenzene	ND	0.041	EPA 8270D	8-29-18	8-30-18	
Naphthalene	0.12	0.041	EPA 8270D	8-29-18	8-30-18	
4-Chloroaniline	ND	0.21	EPA 8270D	8-29-18	8-30-18	
Hexachlorobutadiene	ND	0.041	EPA 8270D	8-29-18	8-30-18	
4-Chloro-3-methylphenol	ND	0.041	EPA 8270D	8-29-18	8-30-18	
2-Methylnaphthalene	ND	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
1-Methylnaphthalene	0.012	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Hexachlorocyclopentadiene	ND	0.041	EPA 8270D	8-29-18	8-30-18	
2,4,6-Trichlorophenol	ND	0.041	EPA 8270D	8-29-18	8-30-18	
2,3-Dichloroaniline	ND	0.041	EPA 8270D	8-29-18	8-30-18	
2,4,5-Trichlorophenol	ND	0.041	EPA 8270D	8-29-18	8-30-18	
2-Chloronaphthalene	ND	0.041	EPA 8270D	8-29-18	8-30-18	
2-Nitroaniline	ND	0.041	EPA 8270D	8-29-18	8-30-18	
1,4-Dinitrobenzene	ND	0.041	EPA 8270D	8-29-18	8-30-18	
Dimethylphthalate	ND	0.041	EPA 8270D	8-29-18	8-30-18	
1,3-Dinitrobenzene	ND	0.041	EPA 8270D	8-29-18	8-30-18	
2,6-Dinitrotoluene	ND	0.041	EPA 8270D	8-29-18	8-30-18	
1,2-Dinitrobenzene	ND	0.041	EPA 8270D	8-29-18	8-30-18	
Acenaphthylene	ND	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
3-Nitroaniline	ND	0.041	EPA 8270D	8-29-18	8-30-18	



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-292
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-135-30.0-082418					
Laboratory ID:	08-292-05					
2,4-Dinitrophenol	ND	0.21	EPA 8270D	8-29-18	8-30-18	
Acenaphthene	ND	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
4-Nitrophenol	ND	0.041	EPA 8270D	8-29-18	8-30-18	
2,4-Dinitrotoluene	ND	0.041	EPA 8270D	8-29-18	8-30-18	
Dibenzofuran	ND	0.041	EPA 8270D	8-29-18	8-30-18	
2,3,5,6-Tetrachlorophenol	ND	0.041	EPA 8270D	8-29-18	8-30-18	
2,3,4,6-Tetrachlorophenol	ND	0.041	EPA 8270D	8-29-18	8-30-18	
Diethylphthalate	ND	0.21	EPA 8270D	8-29-18	8-30-18	
4-Chlorophenyl-phenylether	ND	0.041	EPA 8270D	8-29-18	8-30-18	
4-Nitroaniline	ND	0.041	EPA 8270D	8-29-18	8-30-18	
Fluorene	ND	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
4,6-Dinitro-2-methylphenol	ND	0.21	EPA 8270D	8-29-18	8-30-18	
n-Nitrosodiphenylamine	ND	0.041	EPA 8270D	8-29-18	8-30-18	
1,2-Diphenylhydrazine	ND	0.041	EPA 8270D	8-29-18	8-30-18	
4-Bromophenyl-phenylether	ND	0.041	EPA 8270D	8-29-18	8-30-18	
Hexachlorobenzene	ND	0.041	EPA 8270D	8-29-18	8-30-18	
Pentachlorophenol	ND	0.21	EPA 8270D	8-29-18	8-30-18	
Phenanthrene	ND	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Anthracene	ND	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Carbazole	ND	0.041	EPA 8270D	8-29-18	8-30-18	
Di-n-butylphthalate	ND	0.21	EPA 8270D	8-29-18	8-30-18	
Fluoranthene	ND	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Benzidine	ND	0.41	EPA 8270D	8-29-18	8-30-18	
Pyrene	ND	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Butylbenzylphthalate	ND	0.21	EPA 8270D	8-29-18	8-30-18	
bis-2-Ethylhexyladipate	ND	0.21	EPA 8270D	8-29-18	8-30-18	
3,3'-Dichlorobenzidine	ND	0.21	EPA 8270D	8-29-18	8-30-18	
Benzo[a]anthracene	ND	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Chrysene	ND	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
bis(2-Ethylhexyl)phthalate	ND	0.21	EPA 8270D	8-29-18	8-30-18	
Di-n-octylphthalate	ND	0.21	EPA 8270D	8-29-18	8-30-18	
Benzo[b]fluoranthene	ND	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo(j,k)fluoranthene	ND	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[a]pyrene	ND	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Indeno[1,2,3-cd]pyrene	ND	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Dibenz[a,h]anthracene	ND	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[g,h,i]perylene	ND	0.0082	EPA 8270D/SIM	8-29-18	8-29-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>73</i>	<i>19 - 103</i>				
<i>Phenol-d6</i>	<i>72</i>	<i>30 - 103</i>				
<i>Nitrobenzene-d5</i>	<i>64</i>	<i>27 - 105</i>				
<i>2-Fluorobiphenyl</i>	<i>71</i>	<i>36 - 102</i>				
<i>2,4,6-Tribromophenol</i>	<i>80</i>	<i>33 - 110</i>				
<i>Terphenyl-d14</i>	<i>78</i>	<i>38 - 108</i>				



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-292
 Project: 397-019

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

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0829S1					
n-Nitrosodimethylamine	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Pyridine	ND	0.33	EPA 8270D	8-29-18	8-29-18	
Phenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Aniline	ND	0.17	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroethyl)ether	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Chlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,3-Dichlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,4-Dichlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Benzyl alcohol	ND	0.17	EPA 8270D	8-29-18	8-29-18	
1,2-Dichlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Methylphenol (o-Cresol)	ND	0.033	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroisopropyl)ether	ND	0.033	EPA 8270D	8-29-18	8-29-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.033	EPA 8270D	8-29-18	8-29-18	
n-Nitroso-di-n-propylamine	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Hexachloroethane	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Nitrobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Isophorone	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Nitrophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4-Dimethylphenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroethoxy)methane	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4-Dichlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,2,4-Trichlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Naphthalene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
4-Chloroaniline	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Hexachlorobutadiene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
4-Chloro-3-methylphenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Hexachlorocyclopentadiene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4,6-Trichlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,3-Dichloroaniline	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4,5-Trichlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Chloronaphthalene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Nitroaniline	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,4-Dinitrobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Dimethylphthalate	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,3-Dinitrobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,6-Dinitrotoluene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,2-Dinitrobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
3-Nitroaniline	ND	0.033	EPA 8270D	8-29-18	8-29-18	



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-292
 Project: 397-019

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

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0829S1					
2,4-Dinitrophenol	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
4-Nitrophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4-Dinitrotoluene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Dibenzofuran	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,3,5,6-Tetrachlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,3,4,6-Tetrachlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Diethylphthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
4-Chlorophenyl-phenylether	ND	0.033	EPA 8270D	8-29-18	8-29-18	
4-Nitroaniline	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Fluorene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	8-29-18	8-29-18	
n-Nitrosodiphenylamine	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,2-Diphenylhydrazine	ND	0.033	EPA 8270D	8-29-18	8-29-18	
4-Bromophenyl-phenylether	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Hexachlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Pentachlorophenol	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Anthracene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Carbazole	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Di-n-butylphthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Benzidine	ND	0.33	EPA 8270D	8-29-18	8-29-18	
Pyrene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Butylbenzylphthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
bis(2-Ethylhexyl)adipate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Chrysene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
bis(2-Ethylhexyl)phthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Di-n-octylphthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Indeno[1,2,3-cd]pyrene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	79	19 - 103				
Phenol-d6	79	30 - 103				
Nitrobenzene-d5	73	27 - 105				
2-Fluorobiphenyl	75	36 - 102				
2,4,6-Tribromophenol	88	33 - 110				
Terphenyl-d14	81	38 - 108				



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-292
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
	MS	MSD	MS	MSD	Result	Recovery	Limits	RPD	Limit		
MATRIX SPIKES											
Laboratory ID:	08-229-04										
	MS	MSD	MS	MSD		MS	MSD				
Phenol	1.15	0.989	1.33	1.33	ND	86	74	37 - 94	15	27	
2-Chlorophenol	1.21	1.03	1.33	1.33	ND	91	77	37 - 95	16	32	
1,4-Dichlorobenzene	0.568	0.493	0.667	0.667	ND	85	74	23 - 97	14	37	
n-Nitroso-di-n-propylamine	0.580	0.501	0.667	0.667	ND	87	75	40 - 91	15	28	
1,2,4-Trichlorobenzene	0.563	0.505	0.667	0.667	ND	84	76	37 - 93	11	30	
4-Chloro-3-methylphenol	1.11	1.03	1.33	1.33	ND	83	77	46 - 96	7	25	
Acenaphthene	0.585	0.526	0.667	0.667	0.0395	82	73	43 - 90	11	25	
4-Nitrophenol	1.15	1.03	1.33	1.33	ND	86	77	31 - 104	11	28	
2,4-Dinitrotoluene	0.575	0.516	0.667	0.667	ND	86	77	31 - 96	11	32	
Pentachlorophenol	1.38	1.22	1.33	1.33	ND	104	92	20 - 123	12	29	
Pyrene	0.582	0.518	0.667	0.667	0.0828	75	65	28 - 114	12	35	
<i>Surrogate:</i>											
2-Fluorophenol						85	71	19 - 103			
Phenol-d6						84	73	30 - 103			
Nitrobenzene-d5						72	65	27 - 105			
2-Fluorobiphenyl						77	70	36 - 102			
2,4,6-Tribromophenol						92	84	33 - 110			
Terphenyl-d14						78	71	38 - 108			



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-292
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-135-5.0-082418					
Laboratory ID:	08-292-01					
Arsenic	ND	12	EPA 6010D	8-28-18	8-31-18	
Barium	120	3.1	EPA 6010D	8-28-18	8-31-18	
Cadmium	ND	0.61	EPA 6010D	8-28-18	8-31-18	
Chromium	48	0.61	EPA 6010D	8-28-18	8-31-18	
Lead	16	6.1	EPA 6010D	8-28-18	8-31-18	
Mercury	ND	0.31	EPA 7471B	8-29-18	8-29-18	
Selenium	ND	12	EPA 6010D	8-28-18	8-31-18	
Silver	ND	1.2	EPA 6010D	8-28-18	8-31-18	

Client ID: FMW-135-25.0-082418

Laboratory ID: 08-292-04

Arsenic	ND	14	EPA 6010D	8-28-18	8-31-18	
Barium	120	3.5	EPA 6010D	8-28-18	8-31-18	
Cadmium	ND	0.69	EPA 6010D	8-28-18	8-31-18	
Chromium	60	0.69	EPA 6010D	8-28-18	8-31-18	
Lead	ND	6.9	EPA 6010D	8-28-18	8-31-18	
Mercury	ND	0.35	EPA 7471B	8-29-18	8-29-18	
Selenium	ND	14	EPA 6010D	8-28-18	8-31-18	
Silver	ND	1.4	EPA 6010D	8-28-18	8-31-18	

Client ID: FMW-135-30.0-082418

Laboratory ID: 08-292-05

Arsenic	ND	12	EPA 6010D	8-28-18	8-31-18	
Barium	66	3.1	EPA 6010D	8-28-18	8-31-18	
Cadmium	ND	0.62	EPA 6010D	8-28-18	8-31-18	
Chromium	44	0.62	EPA 6010D	8-28-18	8-31-18	
Lead	ND	6.2	EPA 6010D	8-28-18	8-31-18	
Mercury	ND	0.31	EPA 7471B	8-29-18	8-29-18	
Selenium	ND	12	EPA 6010D	8-28-18	8-31-18	
Silver	ND	1.2	EPA 6010D	8-28-18	8-31-18	



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-292
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0828SM2					
Arsenic	ND	10	EPA 6010D	8-28-18	8-29-18	
Barium	ND	2.5	EPA 6010D	8-28-18	8-29-18	
Cadmium	ND	0.50	EPA 6010D	8-28-18	8-29-18	
Chromium	ND	0.50	EPA 6010D	8-28-18	8-28-18	
Lead	ND	5.0	EPA 6010D	8-28-18	8-29-18	
Selenium	ND	10	EPA 6010D	8-28-18	8-29-18	
Silver	ND	1.0	EPA 6010D	8-28-18	8-29-18	

Laboratory ID:	MB0829S1					
Mercury	ND	0.25	EPA 7471B	8-29-18	8-29-18	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-265-16							
	ORIG	DUP						
Arsenic	ND	ND	NA	NA	NA	NA	20	
Barium	22.1	19.5	NA	NA	NA	13	20	
Cadmium	25.2	23.2	NA	NA	NA	8	20	
Chromium	8.95	7.40	NA	NA	NA	19	20	
Lead	ND	ND	NA	NA	NA	NA	20	
Selenium	ND	ND	NA	NA	NA	NA	20	
Silver	ND	ND	NA	NA	NA	NA	20	

Laboratory ID:	08-277-03							
Mercury	ND	ND	NA	NA	NA	NA	20	

MATRIX SPIKES

Laboratory ID:	08-265-16									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	111	112	100	100	ND	111	112	75-125	1	20
Barium	141	139	100	100	22.1	119	117	75-125	1	20
Cadmium	75.1	75.9	50.0	50.0	25.2	100	101	75-125	1	20
Chromium	109	108	100	100	8.95	100	99	75-125	1	20
Lead	237	239	250	250	ND	95	95	75-125	1	20
Selenium	104	101	100	100	ND	104	101	75-125	2	20
Silver	25.6	25.4	25.0	25.0	ND	102	102	75-125	1	20

Laboratory ID:	08-277-03									
Mercury	0.534	0.537	0.500	0.500	0.0115	105	105	80-120	1	20



OnSite Environmental, Inc. 14648 NE 95th 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: September 5, 2018
Samples Submitted: August 25, 2018
Laboratory Reference: 1808-292
Project: 397-019

% MOISTURE

Date Analyzed: 8-27&28-18

Client ID	Lab ID	% Moisture
FMW-135-5.0-082418	08-292-01	18
FMW-135-15.0-082418	08-292-02	70
FMW-135-25.0-082418	08-292-04	28
FMW-135-30.0-082418	08-292-05	19
FMW-135-35.0-082418	08-292-06	19
FMW-135-50.0-082418	08-292-09	16





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





Mw Onsite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-9881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)
(Check One)

Laboratory Number:

08-292

Company: **Fovallan**

Project Number: **397-019**

Project Name: **Block 38 West Property**

Project Manager: **Savon Puente**

Sampled by: **Greg Peters**

Lab ID

Date Sampled: **8/24/18** Time Sampled: **0735** Matrix: **Soil S**

Standard (7 Days) (TPH analysis 5 Days) Same Day 1 Day 2 Days 3 Days (other) _____

Number of Containers	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
1																		X
2		X		X				X										X
3																		X
4																		X
5								X										X
6				X			X											X
7																		X
8																		X
9						X												X

Sample Identification	Signature	Company	Date	Time	Comments/Special Instructions
1 Fmw-135-50-082418		Fovallan	8/24/18	0840	Please Contact Project manager for Analyses and turnaround time confirmation. X-Added 8/27/18. DB (STA)
2 Fmw-135-150-082418		onsite Env	8/24/18	0840	
3 Fmw-135-200-082418					
4 Fmw-135-250-082418					
5 Fmw-135-300-082418					
6 Fmw-135-350-082418					
7 Fmw-135-400-082418					
8 Fmw-135-450-082418					
9 Fmw-135-500-082418					

Received	Relinquished	Received	Relinquished	Reviewed/Date

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

September 5, 2018

Javan Ruark
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1808-293

Dear Javan:

Enclosed are the analytical results and associated quality control data for samples submitted on August 25, 2018.

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 "D. Baumeister", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: September 5, 2018
Samples Submitted: August 25, 2018
Laboratory Reference: 1808-293
Project: 397-019

Case Narrative

Samples were collected on August 24, 2018 and received by the laboratory on August 25, 2018. 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.

Semivolatiles EPA 8270D/SIM Analysis

Sample FMW-133-20.0-082418 had one surrogate recovery out of control limits. This is within allowance of our standard operating procedure as long as the recovery is above 10%.

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: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-293
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-132-5.0-082418					
Laboratory ID:	08-293-02					
Benzene	ND	0.020	EPA 8021B	8-27-18	8-28-18	
Toluene	ND	0.084	EPA 8021B	8-27-18	8-28-18	
Ethyl Benzene	ND	0.084	EPA 8021B	8-27-18	8-28-18	
m,p-Xylene	ND	0.084	EPA 8021B	8-27-18	8-28-18	
o-Xylene	ND	0.084	EPA 8021B	8-27-18	8-28-18	
Gasoline	ND	8.4	NWTPH-Gx	8-27-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>77</i>	<i>57-129</i>				

Client ID:	FMW-133-10.0-082418					
Laboratory ID:	08-293-03					
Benzene	ND	0.057	EPA 8021B	8-27-18	8-28-18	
Toluene	ND	0.28	EPA 8021B	8-27-18	8-28-18	
Ethyl Benzene	ND	0.28	EPA 8021B	8-27-18	8-28-18	
m,p-Xylene	ND	0.28	EPA 8021B	8-27-18	8-28-18	
o-Xylene	ND	0.28	EPA 8021B	8-27-18	8-28-18	
Gasoline	ND	28	NWTPH-Gx	8-27-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>80</i>	<i>57-129</i>				



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-293
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0827S1					
Benzene	ND	0.020	EPA 8021B	8-27-18	8-27-18	
Toluene	ND	0.050	EPA 8021B	8-27-18	8-27-18	
Ethyl Benzene	ND	0.050	EPA 8021B	8-27-18	8-27-18	
m,p-Xylene	ND	0.050	EPA 8021B	8-27-18	8-27-18	
o-Xylene	ND	0.050	EPA 8021B	8-27-18	8-27-18	
Gasoline	ND	5.0	NWTPH-Gx	8-27-18	8-27-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	90	57-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-276-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				104	103	57-129		

SPIKE BLANKS

Laboratory ID:	SB0827S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	0.923	0.893	1.00	1.00	92	89	69-111	3	10
Toluene	0.915	0.880	1.00	1.00	92	88	70-114	4	11
Ethyl Benzene	0.918	0.886	1.00	1.00	92	89	70-115	4	10
m,p-Xylene	0.907	0.877	1.00	1.00	91	88	72-115	3	10
o-Xylene	0.917	0.882	1.00	1.00	92	88	71-115	4	11
<i>Surrogate:</i>									
<i>Fluorobenzene</i>					89	86	57-129		



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-293
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-132-5.0-082418					
Laboratory ID:	08-293-02					
Diesel Range Organics	730	180	NWTPH-Dx	8-28-18	8-30-18	
Lube Oil Range Organics	2600	360	NWTPH-Dx	8-28-18	8-30-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	97	50-150				

Client ID:	FMW-133-10.0-082418					
Laboratory ID:	08-293-03					
Diesel Range Organics	ND	83	NWTPH-Dx	8-28-18	8-28-18	
Lube Oil Range Organics	470	170	NWTPH-Dx	8-28-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	104	50-150				



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-293
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0828S1					
Diesel Range Organics	ND	25	NWTPH-Dx	8-28-18	8-28-18	
Lube Oil Range Organics	ND	50	NWTPH-Dx	8-28-18	8-28-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>111</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-277-03							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				124	113	50-150		



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-293
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-132-5.0-082418					
Laboratory ID:	08-293-02					
n-Nitrosodimethylamine	ND	0.48	EPA 8270D	8-29-18	8-31-18	
Pyridine	ND	4.8	EPA 8270D	8-29-18	8-31-18	
Phenol	ND	0.48	EPA 8270D	8-29-18	8-31-18	
Aniline	ND	2.4	EPA 8270D	8-29-18	8-31-18	
bis(2-Chloroethyl)ether	ND	0.48	EPA 8270D	8-29-18	8-31-18	
2-Chlorophenol	ND	0.48	EPA 8270D	8-29-18	8-31-18	
1,3-Dichlorobenzene	ND	0.48	EPA 8270D	8-29-18	8-31-18	
1,4-Dichlorobenzene	ND	0.48	EPA 8270D	8-29-18	8-31-18	
Benzyl alcohol	ND	2.4	EPA 8270D	8-29-18	8-31-18	
1,2-Dichlorobenzene	ND	0.48	EPA 8270D	8-29-18	8-31-18	
2-Methylphenol (o-Cresol)	ND	0.48	EPA 8270D	8-29-18	8-31-18	
bis(2-Chloroisopropyl)ether	ND	0.48	EPA 8270D	8-29-18	8-31-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.48	EPA 8270D	8-29-18	8-31-18	
n-Nitroso-di-n-propylamine	ND	0.48	EPA 8270D	8-29-18	8-31-18	
Hexachloroethane	ND	0.48	EPA 8270D	8-29-18	8-31-18	
Nitrobenzene	ND	0.48	EPA 8270D	8-29-18	8-31-18	
Isophorone	ND	0.48	EPA 8270D	8-29-18	8-31-18	
2-Nitrophenol	ND	0.48	EPA 8270D	8-29-18	8-31-18	
2,4-Dimethylphenol	ND	0.48	EPA 8270D	8-29-18	8-31-18	
bis(2-Chloroethoxy)methane	ND	0.48	EPA 8270D	8-29-18	8-31-18	
2,4-Dichlorophenol	ND	0.48	EPA 8270D	8-29-18	8-31-18	
1,2,4-Trichlorobenzene	ND	0.48	EPA 8270D	8-29-18	8-31-18	
Naphthalene	2.0	0.48	EPA 8270D	8-29-18	8-31-18	
4-Chloroaniline	ND	2.4	EPA 8270D	8-29-18	8-31-18	
Hexachlorobutadiene	ND	0.48	EPA 8270D	8-29-18	8-31-18	
4-Chloro-3-methylphenol	ND	0.48	EPA 8270D	8-29-18	8-31-18	
2-Methylnaphthalene	2.6	0.48	EPA 8270D	8-29-18	8-31-18	
1-Methylnaphthalene	2.0	0.48	EPA 8270D	8-29-18	8-31-18	
Hexachlorocyclopentadiene	ND	0.48	EPA 8270D	8-29-18	8-31-18	
2,4,6-Trichlorophenol	ND	0.48	EPA 8270D	8-29-18	8-31-18	
2,3-Dichloroaniline	ND	0.48	EPA 8270D	8-29-18	8-31-18	
2,4,5-Trichlorophenol	ND	0.48	EPA 8270D	8-29-18	8-31-18	
2-Chloronaphthalene	ND	0.48	EPA 8270D	8-29-18	8-31-18	
2-Nitroaniline	ND	0.48	EPA 8270D	8-29-18	8-31-18	
1,4-Dinitrobenzene	ND	0.48	EPA 8270D	8-29-18	8-31-18	
Dimethylphthalate	ND	0.48	EPA 8270D	8-29-18	8-31-18	
1,3-Dinitrobenzene	ND	0.48	EPA 8270D	8-29-18	8-31-18	
2,6-Dinitrotoluene	ND	0.48	EPA 8270D	8-29-18	8-31-18	
1,2-Dinitrobenzene	ND	0.48	EPA 8270D	8-29-18	8-31-18	
Acenaphthylene	0.10	0.0095	EPA 8270D/SIM	8-29-18	8-29-18	
3-Nitroaniline	ND	0.48	EPA 8270D	8-29-18	8-31-18	



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-293
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-132-5.0-082418					
Laboratory ID:	08-293-02					
2,4-Dinitrophenol	ND	2.4	EPA 8270D	8-29-18	8-31-18	
Acenaphthene	1.5	0.48	EPA 8270D	8-29-18	8-31-18	
4-Nitrophenol	ND	0.48	EPA 8270D	8-29-18	8-31-18	
2,4-Dinitrotoluene	ND	0.48	EPA 8270D	8-29-18	8-31-18	
Dibenzofuran	0.70	0.48	EPA 8270D	8-29-18	8-31-18	
2,3,5,6-Tetrachlorophenol	ND	0.48	EPA 8270D	8-29-18	8-31-18	
2,3,4,6-Tetrachlorophenol	ND	0.48	EPA 8270D	8-29-18	8-31-18	
Diethylphthalate	ND	2.4	EPA 8270D	8-29-18	8-31-18	
4-Chlorophenyl-phenylether	ND	0.48	EPA 8270D	8-29-18	8-31-18	
4-Nitroaniline	ND	0.48	EPA 8270D	8-29-18	8-31-18	
Fluorene	0.84	0.48	EPA 8270D	8-29-18	8-31-18	
4,6-Dinitro-2-methylphenol	ND	2.4	EPA 8270D	8-29-18	8-31-18	
n-Nitrosodiphenylamine	ND	0.48	EPA 8270D	8-29-18	8-31-18	
1,2-Diphenylhydrazine	ND	0.48	EPA 8270D	8-29-18	8-31-18	
4-Bromophenyl-phenylether	ND	0.48	EPA 8270D	8-29-18	8-31-18	
Hexachlorobenzene	ND	0.48	EPA 8270D	8-29-18	8-31-18	
Pentachlorophenol	ND	2.4	EPA 8270D	8-29-18	8-31-18	
Phenanthrene	18	0.48	EPA 8270D	8-29-18	8-31-18	
Anthracene	3.3	0.48	EPA 8270D	8-29-18	8-31-18	
Carbazole	1.1	0.48	EPA 8270D	8-29-18	8-31-18	
Di-n-butylphthalate	ND	2.4	EPA 8270D	8-29-18	8-31-18	
Fluoranthene	15	0.48	EPA 8270D	8-29-18	8-31-18	
Benzidine	ND	4.8	EPA 8270D	8-29-18	8-31-18	
Pyrene	27	0.48	EPA 8270D	8-29-18	8-31-18	
Butylbenzylphthalate	ND	2.4	EPA 8270D	8-29-18	8-31-18	
bis-2-Ethylhexyladipate	ND	2.4	EPA 8270D	8-29-18	8-31-18	
3,3'-Dichlorobenzidine	ND	2.4	EPA 8270D	8-29-18	8-31-18	
Benzo[a]anthracene	11	0.48	EPA 8270D	8-29-18	8-31-18	
Chrysene	13	0.48	EPA 8270D	8-29-18	8-31-18	
bis(2-Ethylhexyl)phthalate	ND	2.4	EPA 8270D	8-29-18	8-31-18	
Di-n-octylphthalate	ND	2.4	EPA 8270D	8-29-18	8-31-18	
Benzo[b]fluoranthene	10	0.48	EPA 8270D	8-29-18	8-31-18	
Benzo(j,k)fluoranthene	2.9	0.48	EPA 8270D	8-29-18	8-31-18	
Benzo[a]pyrene	9.4	0.48	EPA 8270D	8-29-18	8-31-18	
Indeno[1,2,3-cd]pyrene	4.1	0.48	EPA 8270D	8-29-18	8-31-18	
Dibenz[a,h]anthracene	1.4	0.48	EPA 8270D	8-29-18	8-31-18	
Benzo[g,h,i]perylene	4.4	0.48	EPA 8270D	8-29-18	8-31-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>54</i>	<i>19 - 103</i>				
<i>Phenol-d6</i>	<i>53</i>	<i>30 - 103</i>				
<i>Nitrobenzene-d5</i>	<i>67</i>	<i>27 - 105</i>				
<i>2-Fluorobiphenyl</i>	<i>77</i>	<i>36 - 102</i>				
<i>2,4,6-Tribromophenol</i>	<i>72</i>	<i>33 - 110</i>				
<i>Terphenyl-d14</i>	<i>75</i>	<i>38 - 108</i>				



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-293
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-133-10.0-082418					
Laboratory ID:	08-293-03					
n-Nitrosodimethylamine	ND	0.28	EPA 8270D	8-29-18	8-30-18	
Pyridine	ND	2.8	EPA 8270D	8-29-18	8-30-18	
Phenol	ND	0.28	EPA 8270D	8-29-18	8-30-18	
Aniline	ND	1.4	EPA 8270D	8-29-18	8-30-18	
bis(2-Chloroethyl)ether	ND	0.28	EPA 8270D	8-29-18	8-30-18	
2-Chlorophenol	ND	0.28	EPA 8270D	8-29-18	8-30-18	
1,3-Dichlorobenzene	ND	0.28	EPA 8270D	8-29-18	8-30-18	
1,4-Dichlorobenzene	ND	0.28	EPA 8270D	8-29-18	8-30-18	
Benzyl alcohol	ND	1.4	EPA 8270D	8-29-18	8-30-18	
1,2-Dichlorobenzene	ND	0.28	EPA 8270D	8-29-18	8-30-18	
2-Methylphenol (o-Cresol)	ND	0.28	EPA 8270D	8-29-18	8-30-18	
bis(2-Chloroisopropyl)ether	ND	0.28	EPA 8270D	8-29-18	8-30-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.28	EPA 8270D	8-29-18	8-30-18	
n-Nitroso-di-n-propylamine	ND	0.28	EPA 8270D	8-29-18	8-30-18	
Hexachloroethane	ND	0.28	EPA 8270D	8-29-18	8-30-18	
Nitrobenzene	ND	0.28	EPA 8270D	8-29-18	8-30-18	
Isophorone	ND	0.28	EPA 8270D	8-29-18	8-30-18	
2-Nitrophenol	ND	0.28	EPA 8270D	8-29-18	8-30-18	
2,4-Dimethylphenol	ND	0.28	EPA 8270D	8-29-18	8-30-18	
bis(2-Chloroethoxy)methane	ND	0.28	EPA 8270D	8-29-18	8-30-18	
2,4-Dichlorophenol	ND	0.28	EPA 8270D	8-29-18	8-30-18	
1,2,4-Trichlorobenzene	ND	0.28	EPA 8270D	8-29-18	8-30-18	
Naphthalene	ND	0.055	EPA 8270D/SIM	8-29-18	8-29-18	
4-Chloroaniline	ND	1.4	EPA 8270D	8-29-18	8-30-18	
Hexachlorobutadiene	ND	0.28	EPA 8270D	8-29-18	8-30-18	
4-Chloro-3-methylphenol	ND	0.28	EPA 8270D	8-29-18	8-30-18	
2-Methylnaphthalene	ND	0.055	EPA 8270D/SIM	8-29-18	8-29-18	
1-Methylnaphthalene	ND	0.055	EPA 8270D/SIM	8-29-18	8-29-18	
Hexachlorocyclopentadiene	ND	0.28	EPA 8270D	8-29-18	8-30-18	
2,4,6-Trichlorophenol	ND	0.28	EPA 8270D	8-29-18	8-30-18	
2,3-Dichloroaniline	ND	0.28	EPA 8270D	8-29-18	8-30-18	
2,4,5-Trichlorophenol	ND	0.28	EPA 8270D	8-29-18	8-30-18	
2-Chloronaphthalene	ND	0.28	EPA 8270D	8-29-18	8-30-18	
2-Nitroaniline	ND	0.28	EPA 8270D	8-29-18	8-30-18	
1,4-Dinitrobenzene	ND	0.28	EPA 8270D	8-29-18	8-30-18	
Dimethylphthalate	ND	0.28	EPA 8270D	8-29-18	8-30-18	
1,3-Dinitrobenzene	ND	0.28	EPA 8270D	8-29-18	8-30-18	
2,6-Dinitrotoluene	ND	0.28	EPA 8270D	8-29-18	8-30-18	
1,2-Dinitrobenzene	ND	0.28	EPA 8270D	8-29-18	8-30-18	
Acenaphthylene	ND	0.055	EPA 8270D/SIM	8-29-18	8-29-18	
3-Nitroaniline	ND	0.28	EPA 8270D	8-29-18	8-30-18	



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-293
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-133-10.0-082418					
Laboratory ID:	08-293-03					
2,4-Dinitrophenol	ND	1.4	EPA 8270D	8-29-18	8-30-18	
Acenaphthene	ND	0.055	EPA 8270D/SIM	8-29-18	8-29-18	
4-Nitrophenol	ND	0.28	EPA 8270D	8-29-18	8-30-18	
2,4-Dinitrotoluene	ND	0.28	EPA 8270D	8-29-18	8-30-18	
Dibenzofuran	ND	0.28	EPA 8270D	8-29-18	8-30-18	
2,3,5,6-Tetrachlorophenol	ND	0.28	EPA 8270D	8-29-18	8-30-18	
2,3,4,6-Tetrachlorophenol	ND	0.28	EPA 8270D	8-29-18	8-30-18	
Diethylphthalate	ND	1.4	EPA 8270D	8-29-18	8-30-18	
4-Chlorophenyl-phenylether	ND	0.28	EPA 8270D	8-29-18	8-30-18	
4-Nitroaniline	ND	0.28	EPA 8270D	8-29-18	8-30-18	
Fluorene	ND	0.055	EPA 8270D/SIM	8-29-18	8-29-18	
4,6-Dinitro-2-methylphenol	ND	1.4	EPA 8270D	8-29-18	8-30-18	
n-Nitrosodiphenylamine	ND	0.28	EPA 8270D	8-29-18	8-30-18	
1,2-Diphenylhydrazine	ND	0.28	EPA 8270D	8-29-18	8-30-18	
4-Bromophenyl-phenylether	ND	0.28	EPA 8270D	8-29-18	8-30-18	
Hexachlorobenzene	ND	0.28	EPA 8270D	8-29-18	8-30-18	
Pentachlorophenol	ND	1.4	EPA 8270D	8-29-18	8-30-18	
Phenanthrene	ND	0.055	EPA 8270D/SIM	8-29-18	8-29-18	
Anthracene	ND	0.055	EPA 8270D/SIM	8-29-18	8-29-18	
Carbazole	ND	0.28	EPA 8270D	8-29-18	8-30-18	
Di-n-butylphthalate	ND	1.4	EPA 8270D	8-29-18	8-30-18	
Fluoranthene	ND	0.055	EPA 8270D/SIM	8-29-18	8-29-18	
Benzidine	ND	2.8	EPA 8270D	8-29-18	8-30-18	
Pyrene	ND	0.055	EPA 8270D/SIM	8-29-18	8-29-18	
Butylbenzylphthalate	ND	1.4	EPA 8270D	8-29-18	8-30-18	
bis-2-Ethylhexyladipate	ND	1.4	EPA 8270D	8-29-18	8-30-18	
3,3'-Dichlorobenzidine	ND	1.4	EPA 8270D	8-29-18	8-30-18	
Benzo[a]anthracene	ND	0.055	EPA 8270D/SIM	8-29-18	8-29-18	
Chrysene	ND	0.055	EPA 8270D/SIM	8-29-18	8-29-18	
bis(2-Ethylhexyl)phthalate	ND	1.4	EPA 8270D	8-29-18	8-30-18	
Di-n-octylphthalate	ND	1.4	EPA 8270D	8-29-18	8-30-18	
Benzo[b]fluoranthene	ND	0.055	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo(j,k)fluoranthene	ND	0.055	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[a]pyrene	ND	0.055	EPA 8270D/SIM	8-29-18	8-29-18	
Indeno[1,2,3-cd]pyrene	ND	0.055	EPA 8270D/SIM	8-29-18	8-29-18	
Dibenz[a,h]anthracene	ND	0.055	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[g,h,i]perylene	ND	0.055	EPA 8270D/SIM	8-29-18	8-29-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>57</i>	<i>19 - 103</i>				
<i>Phenol-d6</i>	<i>61</i>	<i>30 - 103</i>				
<i>Nitrobenzene-d5</i>	<i>52</i>	<i>27 - 105</i>				
<i>2-Fluorobiphenyl</i>	<i>59</i>	<i>36 - 102</i>				
<i>2,4,6-Tribromophenol</i>	<i>73</i>	<i>33 - 110</i>				
<i>Terphenyl-d14</i>	<i>65</i>	<i>38 - 108</i>				



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-293
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-133-20.0-082418					
Laboratory ID:	08-293-05					
n-Nitrosodimethylamine	ND	0.040	EPA 8270D	8-29-18	8-30-18	
Pyridine	ND	0.40	EPA 8270D	8-29-18	8-30-18	
Phenol	ND	0.040	EPA 8270D	8-29-18	8-30-18	
Aniline	ND	0.20	EPA 8270D	8-29-18	8-30-18	
bis(2-Chloroethyl)ether	ND	0.040	EPA 8270D	8-29-18	8-30-18	
2-Chlorophenol	ND	0.040	EPA 8270D	8-29-18	8-30-18	
1,3-Dichlorobenzene	ND	0.040	EPA 8270D	8-29-18	8-30-18	
1,4-Dichlorobenzene	ND	0.040	EPA 8270D	8-29-18	8-30-18	
Benzyl alcohol	ND	0.20	EPA 8270D	8-29-18	8-30-18	
1,2-Dichlorobenzene	ND	0.040	EPA 8270D	8-29-18	8-30-18	
2-Methylphenol (o-Cresol)	ND	0.040	EPA 8270D	8-29-18	8-30-18	
bis(2-Chloroisopropyl)ether	ND	0.040	EPA 8270D	8-29-18	8-30-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.040	EPA 8270D	8-29-18	8-30-18	
n-Nitroso-di-n-propylamine	ND	0.040	EPA 8270D	8-29-18	8-30-18	
Hexachloroethane	ND	0.040	EPA 8270D	8-29-18	8-30-18	
Nitrobenzene	ND	0.040	EPA 8270D	8-29-18	8-30-18	
Isophorone	ND	0.040	EPA 8270D	8-29-18	8-30-18	
2-Nitrophenol	ND	0.040	EPA 8270D	8-29-18	8-30-18	
2,4-Dimethylphenol	0.091	0.040	EPA 8270D	8-29-18	8-30-18	
bis(2-Chloroethoxy)methane	ND	0.040	EPA 8270D	8-29-18	8-30-18	
2,4-Dichlorophenol	ND	0.040	EPA 8270D	8-29-18	8-30-18	
1,2,4-Trichlorobenzene	ND	0.040	EPA 8270D	8-29-18	8-30-18	
Naphthalene	0.25	0.040	EPA 8270D	8-29-18	8-30-18	
4-Chloroaniline	ND	0.20	EPA 8270D	8-29-18	8-30-18	
Hexachlorobutadiene	ND	0.040	EPA 8270D	8-29-18	8-30-18	
4-Chloro-3-methylphenol	ND	0.040	EPA 8270D	8-29-18	8-30-18	
2-Methylnaphthalene	0.042	0.040	EPA 8270D	8-29-18	8-30-18	
1-Methylnaphthalene	0.035	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Hexachlorocyclopentadiene	ND	0.040	EPA 8270D	8-29-18	8-30-18	
2,4,6-Trichlorophenol	ND	0.040	EPA 8270D	8-29-18	8-30-18	
2,3-Dichloroaniline	ND	0.040	EPA 8270D	8-29-18	8-30-18	
2,4,5-Trichlorophenol	ND	0.040	EPA 8270D	8-29-18	8-30-18	
2-Chloronaphthalene	ND	0.040	EPA 8270D	8-29-18	8-30-18	
2-Nitroaniline	ND	0.040	EPA 8270D	8-29-18	8-30-18	
1,4-Dinitrobenzene	ND	0.040	EPA 8270D	8-29-18	8-30-18	
Dimethylphthalate	ND	0.040	EPA 8270D	8-29-18	8-30-18	
1,3-Dinitrobenzene	ND	0.040	EPA 8270D	8-29-18	8-30-18	
2,6-Dinitrotoluene	ND	0.040	EPA 8270D	8-29-18	8-30-18	
1,2-Dinitrobenzene	ND	0.040	EPA 8270D	8-29-18	8-30-18	
Acenaphthylene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
3-Nitroaniline	ND	0.040	EPA 8270D	8-29-18	8-30-18	



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-293
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-133-20.0-082418					
Laboratory ID:	08-293-05					
2,4-Dinitrophenol	ND	0.20	EPA 8270D	8-29-18	8-30-18	
Acenaphthene	0.021	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
4-Nitrophenol	ND	0.040	EPA 8270D	8-29-18	8-30-18	
2,4-Dinitrotoluene	ND	0.040	EPA 8270D	8-29-18	8-30-18	
Dibenzofuran	ND	0.040	EPA 8270D	8-29-18	8-30-18	
2,3,5,6-Tetrachlorophenol	ND	0.040	EPA 8270D	8-29-18	8-30-18	
2,3,4,6-Tetrachlorophenol	ND	0.040	EPA 8270D	8-29-18	8-30-18	
Diethylphthalate	ND	0.20	EPA 8270D	8-29-18	8-30-18	
4-Chlorophenyl-phenylether	ND	0.040	EPA 8270D	8-29-18	8-30-18	
4-Nitroaniline	ND	0.040	EPA 8270D	8-29-18	8-30-18	
Fluorene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
4,6-Dinitro-2-methylphenol	ND	0.20	EPA 8270D	8-29-18	8-30-18	
n-Nitrosodiphenylamine	ND	0.040	EPA 8270D	8-29-18	8-30-18	
1,2-Diphenylhydrazine	ND	0.040	EPA 8270D	8-29-18	8-30-18	
4-Bromophenyl-phenylether	ND	0.040	EPA 8270D	8-29-18	8-30-18	
Hexachlorobenzene	ND	0.040	EPA 8270D	8-29-18	8-30-18	
Pentachlorophenol	ND	0.20	EPA 8270D	8-29-18	8-30-18	
Phenanthrene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Anthracene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Carbazole	ND	0.040	EPA 8270D	8-29-18	8-30-18	
Di-n-butylphthalate	ND	0.20	EPA 8270D	8-29-18	8-30-18	
Fluoranthene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Benzidine	ND	0.40	EPA 8270D	8-29-18	8-30-18	
Pyrene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Butylbenzylphthalate	ND	0.20	EPA 8270D	8-29-18	8-30-18	
bis-2-Ethylhexyladipate	ND	0.20	EPA 8270D	8-29-18	8-30-18	
3,3'-Dichlorobenzidine	ND	0.20	EPA 8270D	8-29-18	8-30-18	
Benzo[a]anthracene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Chrysene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
bis(2-Ethylhexyl)phthalate	ND	0.20	EPA 8270D	8-29-18	8-30-18	
Di-n-octylphthalate	ND	0.20	EPA 8270D	8-29-18	8-30-18	
Benzo[b]fluoranthene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo(j,k)fluoranthene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[a]pyrene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Indeno[1,2,3-cd]pyrene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Dibenz[a,h]anthracene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[g,h,i]perylene	ND	0.0080	EPA 8270D/SIM	8-29-18	8-29-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorophenol</i>	<i>51</i>	<i>19 - 103</i>				
<i>Phenol-d6</i>	<i>70</i>	<i>30 - 103</i>				
<i>Nitrobenzene-d5</i>	<i>66</i>	<i>27 - 105</i>				
<i>2-Fluorobiphenyl</i>	<i>72</i>	<i>36 - 102</i>				
<i>2,4,6-Tribromophenol</i>	<i>27</i>	<i>33 - 110</i>				
<i>Terphenyl-d14</i>	<i>74</i>	<i>38 - 108</i>				

Q



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-293
 Project: 397-019

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

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0829S1					
n-Nitrosodimethylamine	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Pyridine	ND	0.33	EPA 8270D	8-29-18	8-29-18	
Phenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Aniline	ND	0.17	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroethyl)ether	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Chlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,3-Dichlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,4-Dichlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Benzyl alcohol	ND	0.17	EPA 8270D	8-29-18	8-29-18	
1,2-Dichlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Methylphenol (o-Cresol)	ND	0.033	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroisopropyl)ether	ND	0.033	EPA 8270D	8-29-18	8-29-18	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.033	EPA 8270D	8-29-18	8-29-18	
n-Nitroso-di-n-propylamine	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Hexachloroethane	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Nitrobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Isophorone	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Nitrophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4-Dimethylphenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
bis(2-Chloroethoxy)methane	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4-Dichlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,2,4-Trichlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Naphthalene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
4-Chloroaniline	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Hexachlorobutadiene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
4-Chloro-3-methylphenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Hexachlorocyclopentadiene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4,6-Trichlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,3-Dichloroaniline	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4,5-Trichlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Chloronaphthalene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2-Nitroaniline	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,4-Dinitrobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Dimethylphthalate	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,3-Dinitrobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,6-Dinitrotoluene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,2-Dinitrobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
3-Nitroaniline	ND	0.033	EPA 8270D	8-29-18	8-29-18	



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-293
 Project: 397-019

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

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0829S1					
2,4-Dinitrophenol	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
4-Nitrophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,4-Dinitrotoluene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Dibenzofuran	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,3,5,6-Tetrachlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
2,3,4,6-Tetrachlorophenol	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Diethylphthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
4-Chlorophenyl-phenylether	ND	0.033	EPA 8270D	8-29-18	8-29-18	
4-Nitroaniline	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Fluorene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	8-29-18	8-29-18	
n-Nitrosodiphenylamine	ND	0.033	EPA 8270D	8-29-18	8-29-18	
1,2-Diphenylhydrazine	ND	0.033	EPA 8270D	8-29-18	8-29-18	
4-Bromophenyl-phenylether	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Hexachlorobenzene	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Pentachlorophenol	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Anthracene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Carbazole	ND	0.033	EPA 8270D	8-29-18	8-29-18	
Di-n-butylphthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Benzidine	ND	0.33	EPA 8270D	8-29-18	8-29-18	
Pyrene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Butylbenzylphthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
bis(2-Ethylhexyl)adipate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Chrysene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
bis(2-Ethylhexyl)phthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Di-n-octylphthalate	ND	0.17	EPA 8270D	8-29-18	8-29-18	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Indeno[1,2,3-cd]pyrene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	8-29-18	8-29-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	79	19 - 103				
Phenol-d6	79	30 - 103				
Nitrobenzene-d5	73	27 - 105				
2-Fluorobiphenyl	75	36 - 102				
2,4,6-Tribromophenol	88	33 - 110				
Terphenyl-d14	81	38 - 108				



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-293
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
	MS	MSD	MS	MSD	Result	Recovery	Limits	RPD	Limit		
MATRIX SPIKES											
Laboratory ID:	08-229-04										
	MS	MSD	MS	MSD		MS	MSD				
Phenol	1.15	0.989	1.33	1.33	ND	86	74	37 - 94	15	27	
2-Chlorophenol	1.21	1.03	1.33	1.33	ND	91	77	37 - 95	16	32	
1,4-Dichlorobenzene	0.568	0.493	0.667	0.667	ND	85	74	23 - 97	14	37	
n-Nitroso-di-n-propylamine	0.580	0.501	0.667	0.667	ND	87	75	40 - 91	15	28	
1,2,4-Trichlorobenzene	0.563	0.505	0.667	0.667	ND	84	76	37 - 93	11	30	
4-Chloro-3-methylphenol	1.11	1.03	1.33	1.33	ND	83	77	46 - 96	7	25	
Acenaphthene	0.585	0.526	0.667	0.667	0.0395	82	73	43 - 90	11	25	
4-Nitrophenol	1.15	1.03	1.33	1.33	ND	86	77	31 - 104	11	28	
2,4-Dinitrotoluene	0.575	0.516	0.667	0.667	ND	86	77	31 - 96	11	32	
Pentachlorophenol	1.38	1.22	1.33	1.33	ND	104	92	20 - 123	12	29	
Pyrene	0.582	0.518	0.667	0.667	0.0828	75	65	28 - 114	12	35	
<i>Surrogate:</i>											
2-Fluorophenol						85	71	19 - 103			
Phenol-d6						84	73	30 - 103			
Nitrobenzene-d5						72	65	27 - 105			
2-Fluorobiphenyl						77	70	36 - 102			
2,4,6-Tribromophenol						92	84	33 - 110			
Terphenyl-d14						78	71	38 - 108			



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-293
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-133-10.0-082418					
Laboratory ID:	08-293-03					
Arsenic	ND	17	EPA 6010D	8-28-18	8-31-18	
Barium	200	8.3	EPA 6010D	8-28-18	8-31-18	
Cadmium	ND	1.7	EPA 6010D	8-28-18	8-31-18	
Chromium	29	1.7	EPA 6010D	8-28-18	8-31-18	
Lead	18	17	EPA 6010D	8-28-18	8-31-18	
Mercury	ND	0.83	EPA 7471B	8-29-18	8-29-18	
Selenium	ND	17	EPA 6010D	8-28-18	8-31-18	
Silver	ND	3.3	EPA 6010D	8-28-18	8-31-18	

Client ID:	FMW-133-20.0-082418					
Laboratory ID:	08-293-05					
Arsenic	ND	12	EPA 6010D	8-28-18	8-31-18	
Barium	50	3.0	EPA 6010D	8-28-18	8-31-18	
Cadmium	ND	0.60	EPA 6010D	8-28-18	8-31-18	
Chromium	27	0.60	EPA 6010D	8-28-18	8-31-18	
Lead	ND	6.0	EPA 6010D	8-28-18	8-31-18	
Mercury	ND	0.30	EPA 7471B	8-29-18	8-29-18	
Selenium	ND	12	EPA 6010D	8-28-18	8-31-18	
Silver	ND	1.2	EPA 6010D	8-28-18	8-31-18	



Date of Report: September 5, 2018
 Samples Submitted: August 25, 2018
 Laboratory Reference: 1808-293
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0828SM2					
Arsenic	ND	5.0	EPA 6010D	8-28-18	8-29-18	
Barium	ND	2.5	EPA 6010D	8-28-18	8-29-18	
Cadmium	ND	0.50	EPA 6010D	8-28-18	8-29-18	
Chromium	ND	0.50	EPA 6010D	8-28-18	8-28-18	
Lead	ND	5.0	EPA 6010D	8-28-18	8-29-18	
Selenium	ND	5.0	EPA 6010D	8-28-18	8-29-18	
Silver	ND	1.0	EPA 6010D	8-28-18	8-29-18	

Laboratory ID:	MB0829S1					
Mercury	ND	0.25	EPA 7471B	8-29-18	8-29-18	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-265-16							
	ORIG	DUP						
Arsenic	ND	ND	NA	NA	NA	NA	20	
Barium	22.1	19.5	NA	NA	NA	13	20	
Cadmium	25.2	23.2	NA	NA	NA	8	20	
Chromium	8.95	7.40	NA	NA	NA	19	20	
Lead	ND	ND	NA	NA	NA	NA	20	
Selenium	ND	ND	NA	NA	NA	NA	20	
Silver	ND	ND	NA	NA	NA	NA	20	

Laboratory ID:	08-277-03							
Mercury	ND	ND	NA	NA	NA	NA	20	

MATRIX SPIKES

Laboratory ID:	08-265-16									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	111	112	100	100	ND	111	112	75-125	1	20
Barium	141	139	100	100	22.1	119	117	75-125	1	20
Cadmium	75.1	75.9	50.0	50.0	25.2	100	101	75-125	1	20
Chromium	109	108	100	100	8.95	100	99	75-125	1	20
Lead	237	239	250	250	ND	95	95	75-125	1	20
Selenium	104	101	100	100	ND	104	101	75-125	2	20
Silver	25.6	25.4	25.0	25.0	ND	102	102	75-125	1	20

Laboratory ID:	08-277-03									
Mercury	0.534	0.537	0.500	0.500	0.0115	105	105	80-120	1	20



Date of Report: September 5, 2018
Samples Submitted: August 25, 2018
Laboratory Reference: 1808-293
Project: 397-019

% MOISTURE

Date Analyzed: 8-27&28-18

Client ID	Lab ID	% Moisture
FMW-132-5.0-082418	08-293-02	30
FMW-133-10.0-082418	08-293-03	70
FMW-133-20.0-082418	08-293-05	17





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





Mw Onsite Environmental Inc.
 Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)
(TPH analysis 5 Days)

_____ (other)

Laboratory Number:

08-293

Company: **Favallen**
 Project Number: **397-019**
 Project Name: **Block 38 West Property**
 Project Manager: **Jarvan Ruark**
 Sampled by: **Greg Peters**

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix
1	Fmw-132-2.5-082418	8/24/18	1320	Soil
2	Fmw-132-5.0-082418		1430	
3	Fmw-133-10.0-082418		1835	
4	Fmw-133-15.0-082418		1849	
5	Fmw-133-20.0-082418		1852	
6	Fmw-133-25.0-082418		1902	

Number of Containers	Laboratory Analysis																		
	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture	
5		X																	X
5		X																	X
1																			X

Signature	Company	Date	Time	Comments/Special Instructions
<i>[Signature]</i>	Favallen	8/24/18	0840	Please contact project manager for analyses and turn around time. Cartridges X-Added 8/27/18. DB (STA)
<i>[Signature]</i>	ONSITE	8/24/18	840	

Relinquished
 Received
 Relinquished
 Received
 Relinquished
 Received
 Relinquished
 Reviewed/Date

Reviewed/Date

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

September 11, 2018

Javan Ruark
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1808-374

Dear Javan:

Enclosed are the analytical results and associated quality control data for samples submitted on August 31, 2018.

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



OnSite Environmental, Inc. 14648 NE 95th 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: September 11, 2018
Samples Submitted: August 31, 2018
Laboratory Reference: 1808-374
Project: 397-019

Case Narrative

Samples were collected on August 30, 2018 and received by the laboratory on August 31, 2018. 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.

NWTPH-Gx Analysis

The gasoline result for sample FMW-134-083018 is mainly attributed to a single peak (Naphthalene).

Volatiles EPA 8260C Analysis

Some MTCA Method A cleanup levels are non-achievable for sample FMW-134-083018 due to the necessary dilution of the sample.

PAHs EPA 8270D/SIM Analysis

The associated method blank had one surrogate recovery out of control limits. This is within allowance of our standard operating procedure as long as the recovery is above 10%.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-134-083018					
Laboratory ID:	08-374-01					
Gasoline	1100	100	NWTPH-Gx	9-6-18	9-6-18	Z
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	114	66-117				
Client ID:	FMW-133-083018					
Laboratory ID:	08-374-02					
Gasoline	ND	100	NWTPH-Gx	9-6-18	9-6-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	112	66-117				
Client ID:	FMW-132-083018					
Laboratory ID:	08-374-03					
Gasoline	ND	100	NWTPH-Gx	9-6-18	9-6-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	112	66-117				
Client ID:	FMW-130-083018					
Laboratory ID:	08-374-04					
Gasoline	ND	100	NWTPH-Gx	9-6-18	9-6-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	111	66-117				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

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

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0906W3					
Gasoline	ND	100	NWTPH-Gx	9-6-18	9-6-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	111	66-117				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-380-02							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				112	112	66-117		



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

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

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-134-083018					
Laboratory ID:	08-374-01					
Diesel Range Organics	1.0	0.26	NWTPH-Dx	9-7-18	9-8-18	M
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	9-7-18	9-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	100	50-150				

Client ID:	FMW-133-083018					
Laboratory ID:	08-374-02					
Diesel Range Organics	0.27	0.26	NWTPH-Dx	9-7-18	9-8-18	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	9-7-18	9-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	95	50-150				

Client ID:	FMW-132-083018					
Laboratory ID:	08-374-03					
Diesel Range Organics	0.26	0.25	NWTPH-Dx	9-7-18	9-8-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	9-7-18	9-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	98	50-150				

Client ID:	FMW-130-083018					
Laboratory ID:	08-374-04					
Diesel Range Organics	ND	0.25	NWTPH-Dx	9-7-18	9-8-18	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	9-7-18	9-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	95	50-150				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

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

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0907W1					
Diesel Range Organics	ND	0.25	NWTPH-Dx	9-7-18	9-8-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	9-7-18	9-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>91</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-374-01							
	ORIG	DUP						
Diesel Range Organics	1.03	1.01	NA	NA	NA	NA	2	NA M
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				100	94	50-150		



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-134-083018					
Laboratory ID:	08-374-01					
Dichlorodifluoromethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Chloromethane	ND	5.0	EPA 8260C	9-5-18	9-5-18	
Vinyl Chloride	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Bromomethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Chloroethane	ND	5.0	EPA 8260C	9-5-18	9-5-18	
Trichlorofluoromethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,1-Dichloroethene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Iodomethane	ND	5.0	EPA 8260C	9-5-18	9-5-18	
Methylene Chloride	ND	5.0	EPA 8260C	9-5-18	9-5-18	
(trans) 1,2-Dichloroethene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,1-Dichloroethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
2,2-Dichloropropane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
(cis) 1,2-Dichloroethene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Bromochloromethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Chloroform	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,1,1-Trichloroethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Carbon Tetrachloride	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,1-Dichloropropene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Benzene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,2-Dichloroethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Trichloroethene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,2-Dichloropropane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Dibromomethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Bromodichloromethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
2-Chloroethyl Vinyl Ether	ND	5.0	EPA 8260C	9-5-18	9-5-18	
(cis) 1,3-Dichloropropene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Toluene	ND	5.0	EPA 8260C	9-5-18	9-5-18	
(trans) 1,3-Dichloropropene	ND	1.0	EPA 8260C	9-5-18	9-5-18	



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-134-083018					
Laboratory ID:	08-374-01					
1,1,2-Trichloroethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Tetrachloroethene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,3-Dichloropropane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Dibromochloromethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,2-Dibromoethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Chlorobenzene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,1,1,2-Tetrachloroethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Ethylbenzene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
m,p-Xylene	ND	2.0	EPA 8260C	9-5-18	9-5-18	
o-Xylene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Bromoform	ND	5.0	EPA 8260C	9-5-18	9-5-18	
Bromobenzene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,1,2,2-Tetrachloroethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,2,3-Trichloropropane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
2-Chlorotoluene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
4-Chlorotoluene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,3-Dichlorobenzene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,4-Dichlorobenzene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,2-Dichlorobenzene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,2-Dibromo-3-chloropropane	ND	5.0	EPA 8260C	9-5-18	9-5-18	
1,2,4-Trichlorobenzene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Hexachlorobutadiene	ND	5.0	EPA 8260C	9-5-18	9-5-18	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>113</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>107</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>87</i>	<i>78-125</i>				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-133-083018					
Laboratory ID:	08-374-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Chloromethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Vinyl Chloride	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Bromomethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Chloroethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Iodomethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Methylene Chloride	ND	2.0	EPA 8260C	9-5-18	9-5-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Bromochloromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Chloroform	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Benzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Trichloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Dibromomethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Bromodichloromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	9-5-18	9-5-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Toluene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-5-18	9-5-18	



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-133-083018					
Laboratory ID:	08-374-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Tetrachloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Dibromochloromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Chlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Ethylbenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
m,p-Xylene	ND	0.40	EPA 8260C	9-5-18	9-5-18	
o-Xylene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Bromoform	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Bromobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>116</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>107</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>89</i>	<i>78-125</i>				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-132-083018					
Laboratory ID:	08-374-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Chloromethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Vinyl Chloride	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Bromomethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Chloroethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Iodomethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Methylene Chloride	ND	2.0	EPA 8260C	9-5-18	9-5-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Bromochloromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Chloroform	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Benzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Trichloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Dibromomethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Bromodichloromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	9-5-18	9-5-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Toluene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-5-18	9-5-18	



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-132-083018					
Laboratory ID:	08-374-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Tetrachloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Dibromochloromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Chlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Ethylbenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
m,p-Xylene	ND	0.40	EPA 8260C	9-5-18	9-5-18	
o-Xylene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Bromoform	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Bromobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>116</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>105</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>87</i>	<i>78-125</i>				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-130-083018					
Laboratory ID:	08-374-04					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Chloromethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Vinyl Chloride	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Bromomethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Chloroethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Iodomethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Methylene Chloride	ND	1.0	EPA 8260C	9-5-18	9-5-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
(cis) 1,2-Dichloroethene	0.27	0.20	EPA 8260C	9-5-18	9-5-18	
Bromochloromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Chloroform	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Benzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Trichloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Dibromomethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Bromodichloromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	9-5-18	9-5-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Toluene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-5-18	9-5-18	



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-130-083018					
Laboratory ID:	08-374-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Tetrachloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Dibromochloromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Chlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Ethylbenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
m,p-Xylene	ND	0.40	EPA 8260C	9-5-18	9-5-18	
o-Xylene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Bromoform	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Bromobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>118</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>108</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>86</i>	<i>78-125</i>				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0905W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Chloromethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Vinyl Chloride	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Bromomethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Chloroethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Iodomethane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Methylene Chloride	ND	2.0	EPA 8260C	9-5-18	9-5-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Bromochloromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Chloroform	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Benzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Trichloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Dibromomethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Bromodichloromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	9-5-18	9-5-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Toluene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-5-18	9-5-18	



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0905W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Tetrachloroethene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Dibromochloromethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Chlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Ethylbenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
m,p-Xylene	ND	0.40	EPA 8260C	9-5-18	9-5-18	
o-Xylene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Bromoform	ND	1.0	EPA 8260C	9-5-18	9-5-18	
Bromobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	9-5-18	9-5-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	9-5-18	9-5-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	9-5-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>109</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>106</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>86</i>	<i>78-125</i>				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

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

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB0905W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	7.44	7.44	10.0	10.0	74	74	62-129	0	15	
Benzene	8.58	8.79	10.0	10.0	86	88	77-127	2	15	
Trichloroethene	8.79	8.75	10.0	10.0	88	88	70-120	0	15	
Toluene	9.25	9.39	10.0	10.0	93	94	82-123	2	15	
Chlorobenzene	9.02	9.13	10.0	10.0	90	91	79-120	1	15	
<i>Surrogate:</i>										
Dibromofluoromethane					105	107	75-127			
Toluene-d8					105	104	80-127			
4-Bromofluorobenzene					85	86	78-125			



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-134-083018					
Laboratory ID:	08-374-01					
Naphthalene	290	9.9	EPA 8270D/SIM	9-4-18	9-5-18	
2-Methylnaphthalene	12	2.0	EPA 8270D/SIM	9-4-18	9-5-18	
1-Methylnaphthalene	10	2.0	EPA 8270D/SIM	9-4-18	9-5-18	
Acenaphthylene	0.12	0.099	EPA 8270D/SIM	9-4-18	9-5-18	
Acenaphthene	8.3	2.0	EPA 8270D/SIM	9-4-18	9-5-18	
Fluorene	1.6	0.099	EPA 8270D/SIM	9-4-18	9-5-18	
Phenanthrene	0.48	0.099	EPA 8270D/SIM	9-4-18	9-5-18	
Anthracene	ND	0.099	EPA 8270D/SIM	9-4-18	9-5-18	
Fluoranthene	ND	0.099	EPA 8270D/SIM	9-4-18	9-5-18	
Pyrene	ND	0.099	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[a]anthracene	ND	0.0099	EPA 8270D/SIM	9-4-18	9-5-18	
Chrysene	ND	0.0099	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[b]fluoranthene	ND	0.0099	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo(j,k)fluoranthene	ND	0.0099	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[a]pyrene	ND	0.0099	EPA 8270D/SIM	9-4-18	9-5-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0099	EPA 8270D/SIM	9-4-18	9-5-18	
Dibenz[a,h]anthracene	ND	0.0099	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[g,h,i]perylene	ND	0.0099	EPA 8270D/SIM	9-4-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>64</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>73</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>73</i>	<i>32 - 137</i>				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-133-083018					
Laboratory ID:	08-374-02					
Naphthalene	ND	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
2-Methylnaphthalene	ND	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
1-Methylnaphthalene	ND	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
Acenaphthylene	ND	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
Acenaphthene	0.38	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
Fluorene	0.098	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
Phenanthrene	ND	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
Anthracene	ND	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
Fluoranthene	ND	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
Pyrene	ND	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[a]anthracene	ND	0.0097	EPA 8270D/SIM	9-4-18	9-5-18	
Chrysene	ND	0.0097	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[b]fluoranthene	ND	0.0097	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo(j,k)fluoranthene	ND	0.0097	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[a]pyrene	ND	0.0097	EPA 8270D/SIM	9-4-18	9-5-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0097	EPA 8270D/SIM	9-4-18	9-5-18	
Dibenz[a,h]anthracene	ND	0.0097	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[g,h,i]perylene	ND	0.0097	EPA 8270D/SIM	9-4-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>78</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>89</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>89</i>	<i>32 - 137</i>				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-132-083018					
Laboratory ID:	08-374-03					
Naphthalene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
2-Methylnaphthalene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
1-Methylnaphthalene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Acenaphthylene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Acenaphthene	0.40	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Fluorene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Phenanthrene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Anthracene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Fluoranthene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Pyrene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[a]anthracene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Chrysene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[b]fluoranthene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo(j,k)fluoranthene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[a]pyrene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Dibenz[a,h]anthracene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[g,h,i]perylene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>71</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>84</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>84</i>	<i>32 - 137</i>				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-130-083018					
Laboratory ID:	08-374-04					
Naphthalene	ND	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
2-Methylnaphthalene	ND	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
1-Methylnaphthalene	ND	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
Acenaphthylene	ND	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
Acenaphthene	ND	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
Fluorene	ND	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
Phenanthrene	ND	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
Anthracene	ND	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
Fluoranthene	ND	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
Pyrene	ND	0.097	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[a]anthracene	ND	0.0097	EPA 8270D/SIM	9-4-18	9-5-18	
Chrysene	ND	0.0097	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[b]fluoranthene	ND	0.0097	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo(j,k)fluoranthene	ND	0.0097	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[a]pyrene	ND	0.0097	EPA 8270D/SIM	9-4-18	9-5-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0097	EPA 8270D/SIM	9-4-18	9-5-18	
Dibenz[a,h]anthracene	ND	0.0097	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[g,h,i]perylene	ND	0.0097	EPA 8270D/SIM	9-4-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>69</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>85</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>84</i>	<i>32 - 137</i>				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

**PAHs EPA 8270D/SIM
 METHOD BLANK QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0904W1						
Naphthalene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
2-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
1-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
Acenaphthylene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
Acenaphthene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
Fluorene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
Phenanthrene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
Anthracene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
Fluoranthene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
Pyrene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	9-4-18	9-4-18	
Chrysene	ND	0.010	EPA 8270D/SIM	9-4-18	9-4-18	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	9-4-18	9-4-18	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270D/SIM	9-4-18	9-4-18	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	9-4-18	9-4-18	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	9-4-18	9-4-18	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	9-4-18	9-4-18	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270D/SIM	9-4-18	9-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorobiphenyl	115	21 - 110				Q
Pyrene-d10	88	19 - 111				
Terphenyl-d14	117	32 - 137				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-374
 Project: 397-019

**PAHs EPA 8270D/SIM
 SB/SBD QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					SB	SBD	Limits	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0904W1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.343	0.271	0.500	0.500	69	54	28 - 109	23	38	
Acenaphthylene	0.384	0.320	0.500	0.500	77	64	37 - 111	18	26	
Acenaphthene	0.375	0.304	0.500	0.500	75	61	41 - 113	21	33	
Fluorene	0.366	0.339	0.500	0.500	73	68	47 - 114	8	23	
Phenanthrene	0.363	0.339	0.500	0.500	73	68	50 - 113	7	18	
Anthracene	0.380	0.362	0.500	0.500	76	72	50 - 117	5	18	
Fluoranthene	0.396	0.381	0.500	0.500	79	76	52 - 120	4	15	
Pyrene	0.395	0.381	0.500	0.500	79	76	51 - 128	4	31	
Benzo[a]anthracene	0.428	0.413	0.500	0.500	86	83	57 - 127	4	15	
Chrysene	0.414	0.413	0.500	0.500	83	83	51 - 120	0	15	
Benzo[b]fluoranthene	0.412	0.402	0.500	0.500	82	80	54 - 124	2	17	
Benzo(j,k)fluoranthene	0.426	0.418	0.500	0.500	85	84	50 - 127	2	18	
Benzo[a]pyrene	0.414	0.398	0.500	0.500	83	80	50 - 120	4	16	
Indeno(1,2,3-c,d)pyrene	0.407	0.390	0.500	0.500	81	78	46 - 132	4	20	
Dibenz[a,h]anthracene	0.416	0.403	0.500	0.500	83	81	49 - 129	3	18	
Benzo[g,h,i]perylene	0.412	0.402	0.500	0.500	82	80	45 - 130	2	19	
<i>Surrogate:</i>										
2-Fluorobiphenyl					69	56	21 - 110			
Pyrene-d10					79	78	19 - 111			
Terphenyl-d14					79	77	32 - 137			





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 - The gasoline result is mainly attributed to a single peak (Naphthalene).

ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference





Onsite Environmental Inc.

Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 833-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Laboratory Number: **08-374**

Company: Favallan

Project Number: 397-019

Project Name: Block 38 West

Project Manager: Dawn Knuckle

Sampled by: Greg Peters

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix
1	Fmw-134-083018	8/30/18	1034	Water
2	Fmw-133-083018		1819	"
3	Fmw-132-083018		1707	"
4	Fmw-130-083018		1347	"

Number of Containers		Date	Time	Comments/Special Instructions
NWTPH-HCID				
NWTPH-Gx/BTEX		X		
NWTPH-Gx				
NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)		X		
Volatiles 8260C				
Halogenated Volatiles 8260C		X		
EDB EPA 8011 (Waters Only)				
Semivolatiles 8270D/SIM (with low-level PAHs)				
PAHs 8270D/SIM (low-level)		X		
PCBs 8082A				
Organochlorine Pesticides 8081B				
Organophosphorus Pesticides 8270D/SIM				
Chlorinated Acid Herbicides 8151A				
Total RCRA Metals				
Total MTCA Metals				
TCLP Metals				
HEM (oil and grease) 1664A				
% Moisture				

Relinquished Signature: [Signature] Company: Favallan Date: 8/30/18 Time: 1834

Received Signature: [Signature] Company: [Signature] Date: 8/31/18 Time: 1015

Relinquished

Received

Relinquished

Received

Relinquished

Received

Relinquished

Reviewed/Date

Reviewed/Date

Comments/Special Instructions: Please Contact Project Manager for Sample analysis and turnaround time. X-Added 9/14/18, DS (STA)

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

September 11, 2018

Javan Ruark
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1808-375

Dear Javan:

Enclosed are the analytical results and associated quality control data for samples submitted on August 31, 2018.

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 "D. Baumeister", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: September 11, 2018
Samples Submitted: August 31, 2018
Laboratory Reference: 1808-375
Project: 397-019

Case Narrative

Samples were collected on August 30, 2018 and received by the laboratory on August 31, 2018. 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.

PAHs EPA 8270D/SIM Analysis

The associated method blank had one surrogate recovery out of control limits. This is within allowance of our standard operating procedure as long as the recovery is above 10%.

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: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-375
 Project: 397-019

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-135-083018					
Laboratory ID:	08-375-01					
Gasoline	ND	100	NWTPH-Gx	9-6-18	9-6-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	110	66-117				
Client ID:	FMW-136-083018					
Laboratory ID:	08-375-02					
Gasoline	ND	100	NWTPH-Gx	9-6-18	9-6-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	110	66-117				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-375
 Project: 397-019

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

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0906W3					
Gasoline	ND	100	NWTPH-Gx	9-6-18	9-6-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	111	66-117				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-380-02							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				112	112	66-117		



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-375
 Project: 397-019

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

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-135-083018					
Laboratory ID:	08-375-01					
Diesel Range Organics	ND	0.26	NWTPH-Dx	9-7-18	9-8-18	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	9-7-18	9-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	89	50-150				

Client ID:	FMW-136-083018					
Laboratory ID:	08-375-02					
Diesel Range Organics	ND	0.25	NWTPH-Dx	9-7-18	9-8-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	9-7-18	9-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	91	50-150				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-375
 Project: 397-019

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

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0907W1					
Diesel Range Organics	ND	0.25	NWTPH-Dx	9-7-18	9-8-18	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	9-7-18	9-8-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>91</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	08-374-01							
	ORIG	DUP						
Diesel Range Organics	1.03	1.01	NA	NA	NA	NA	2	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	M
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				100	94	50-150		



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-375
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-135-083018					
Laboratory ID:	08-375-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Chloromethane	ND	1.0	EPA 8260C	9-10-18	9-10-18	
Vinyl Chloride	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Bromomethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Chloroethane	ND	1.0	EPA 8260C	9-10-18	9-10-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Iodomethane	ND	1.5	EPA 8260C	9-10-18	9-10-18	
Methylene Chloride	ND	1.0	EPA 8260C	9-10-18	9-10-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Bromochloromethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Chloroform	0.41	0.20	EPA 8260C	9-10-18	9-10-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Benzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Trichloroethene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Dibromomethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Bromodichloromethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	9-10-18	9-10-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Toluene	ND	1.0	EPA 8260C	9-10-18	9-10-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-10-18	9-10-18	



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-375
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-135-083018					
Laboratory ID:	08-375-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Tetrachloroethene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Dibromochloromethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Chlorobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Ethylbenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
m,p-Xylene	ND	0.40	EPA 8260C	9-10-18	9-10-18	
o-Xylene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Bromoform	ND	1.0	EPA 8260C	9-10-18	9-10-18	
Bromobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	9-10-18	9-10-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	9-10-18	9-10-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>111</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>108</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>84</i>	<i>78-125</i>				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-375
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-136-083018					
Laboratory ID:	08-375-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Chloromethane	ND	1.0	EPA 8260C	9-10-18	9-10-18	
Vinyl Chloride	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Bromomethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Chloroethane	ND	1.0	EPA 8260C	9-10-18	9-10-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Iodomethane	ND	1.5	EPA 8260C	9-10-18	9-10-18	
Methylene Chloride	ND	1.0	EPA 8260C	9-10-18	9-10-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
(cis) 1,2-Dichloroethene	0.36	0.20	EPA 8260C	9-10-18	9-10-18	
Bromochloromethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Chloroform	2.7	0.20	EPA 8260C	9-10-18	9-10-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Benzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Trichloroethene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Dibromomethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Bromodichloromethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	9-10-18	9-10-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Toluene	ND	1.0	EPA 8260C	9-10-18	9-10-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-10-18	9-10-18	



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-375
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-136-083018					
Laboratory ID:	08-375-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Tetrachloroethene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Dibromochloromethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Chlorobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Ethylbenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
m,p-Xylene	ND	0.40	EPA 8260C	9-10-18	9-10-18	
o-Xylene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Bromoform	ND	1.0	EPA 8260C	9-10-18	9-10-18	
Bromobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	9-10-18	9-10-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	9-10-18	9-10-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>114</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>107</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>84</i>	<i>78-125</i>				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-375
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0910W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Chloromethane	ND	1.0	EPA 8260C	9-10-18	9-10-18	
Vinyl Chloride	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Bromomethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Chloroethane	ND	1.0	EPA 8260C	9-10-18	9-10-18	
Trichlorofluoromethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,1-Dichloroethene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Iodomethane	ND	1.5	EPA 8260C	9-10-18	9-10-18	
Methylene Chloride	ND	1.0	EPA 8260C	9-10-18	9-10-18	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,1-Dichloroethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
2,2-Dichloropropane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Bromochloromethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Chloroform	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Carbon Tetrachloride	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,1-Dichloropropene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Benzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,2-Dichloroethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Trichloroethene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,2-Dichloropropane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Dibromomethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Bromodichloromethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	9-10-18	9-10-18	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Toluene	ND	1.0	EPA 8260C	9-10-18	9-10-18	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	9-10-18	9-10-18	



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-375
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0910W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Tetrachloroethene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,3-Dichloropropane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Dibromochloromethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,2-Dibromoethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Chlorobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Ethylbenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
m,p-Xylene	ND	0.40	EPA 8260C	9-10-18	9-10-18	
o-Xylene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Bromoform	ND	1.0	EPA 8260C	9-10-18	9-10-18	
Bromobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	9-10-18	9-10-18	
2-Chlorotoluene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
4-Chlorotoluene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	9-10-18	9-10-18	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
Hexachlorobutadiene	ND	1.0	EPA 8260C	9-10-18	9-10-18	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	9-10-18	9-10-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>111</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>106</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>83</i>	<i>78-125</i>				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-375
 Project: 397-019

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

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB0910W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	10.2	9.81	10.0	10.0	102	98	62-129	4	15	
Benzene	9.94	9.63	10.0	10.0	99	96	77-127	3	15	
Trichloroethene	9.86	9.35	10.0	10.0	99	94	70-120	5	15	
Toluene	10.2	9.78	10.0	10.0	102	98	82-123	4	15	
Chlorobenzene	9.76	9.14	10.0	10.0	98	91	79-120	7	15	
<i>Surrogate:</i>										
Dibromofluoromethane					109	111	75-127			
Toluene-d8					107	107	80-127			
4-Bromofluorobenzene					86	85	78-125			



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-375
 Project: 397-019

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-135-083018					
Laboratory ID:	08-375-01					
Naphthalene	0.35	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
2-Methylnaphthalene	0.29	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
1-Methylnaphthalene	0.68	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Acenaphthylene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Acenaphthene	0.39	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Fluorene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Phenanthrene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Anthracene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Fluoranthene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Pyrene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[a]anthracene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Chrysene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[b]fluoranthene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo(j,k)fluoranthene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[a]pyrene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Dibenz[a,h]anthracene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[g,h,i]perylene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>50</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>62</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>62</i>	<i>32 - 137</i>				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-375
 Project: 397-019

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-136-083018					
Laboratory ID:	08-375-02					
Naphthalene	0.39	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
2-Methylnaphthalene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
1-Methylnaphthalene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Acenaphthylene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Acenaphthene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Fluorene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Phenanthrene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Anthracene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Fluoranthene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Pyrene	ND	0.096	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[a]anthracene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Chrysene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[b]fluoranthene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo(j,k)fluoranthene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[a]pyrene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Indeno(1,2,3-c,d)pyrene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Dibenz[a,h]anthracene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
Benzo[g,h,i]perylene	ND	0.0096	EPA 8270D/SIM	9-4-18	9-5-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>83</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>84</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>83</i>	<i>32 - 137</i>				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-375
 Project: 397-019

**PAHs EPA 8270D/SIM
 METHOD BLANK QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0904W1						
Naphthalene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
2-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
1-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
Acenaphthylene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
Acenaphthene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
Fluorene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
Phenanthrene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
Anthracene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
Fluoranthene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
Pyrene	ND	0.10	EPA 8270D/SIM	9-4-18	9-4-18	
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	9-4-18	9-4-18	
Chrysene	ND	0.010	EPA 8270D/SIM	9-4-18	9-4-18	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	9-4-18	9-4-18	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270D/SIM	9-4-18	9-4-18	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	9-4-18	9-4-18	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	9-4-18	9-4-18	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	9-4-18	9-4-18	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270D/SIM	9-4-18	9-4-18	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorobiphenyl	115	21 - 110				Q
Pyrene-d10	88	19 - 111				
Terphenyl-d14	117	32 - 137				



Date of Report: September 11, 2018
 Samples Submitted: August 31, 2018
 Laboratory Reference: 1808-375
 Project: 397-019

**PAHs EPA 8270D/SIM
 SB/SBD QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					SB	SBD	Limits	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0904W1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.343	0.271	0.500	0.500	69	54	28 - 109	23	38	
Acenaphthylene	0.384	0.320	0.500	0.500	77	64	37 - 111	18	26	
Acenaphthene	0.375	0.304	0.500	0.500	75	61	41 - 113	21	33	
Fluorene	0.366	0.339	0.500	0.500	73	68	47 - 114	8	23	
Phenanthrene	0.363	0.339	0.500	0.500	73	68	50 - 113	7	18	
Anthracene	0.380	0.362	0.500	0.500	76	72	50 - 117	5	18	
Fluoranthene	0.396	0.381	0.500	0.500	79	76	52 - 120	4	15	
Pyrene	0.395	0.381	0.500	0.500	79	76	51 - 128	4	31	
Benzo[a]anthracene	0.428	0.413	0.500	0.500	86	83	57 - 127	4	15	
Chrysene	0.414	0.413	0.500	0.500	83	83	51 - 120	0	15	
Benzo[b]fluoranthene	0.412	0.402	0.500	0.500	82	80	54 - 124	2	17	
Benzo(j,k)fluoranthene	0.426	0.418	0.500	0.500	85	84	50 - 127	2	18	
Benzo[a]pyrene	0.414	0.398	0.500	0.500	83	80	50 - 120	4	16	
Indeno(1,2,3-c,d)pyrene	0.407	0.390	0.500	0.500	81	78	46 - 132	4	20	
Dibenz[a,h]anthracene	0.416	0.403	0.500	0.500	83	81	49 - 129	3	18	
Benzo[g,h,i]perylene	0.412	0.402	0.500	0.500	82	80	45 - 130	2	19	
<i>Surrogate:</i>										
2-Fluorobiphenyl					69	56	21 - 110			
Pyrene-d10					79	78	19 - 111			
Terphenyl-d14					79	77	32 - 137			





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





Onsite Environmental Inc.
 Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(In working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Company: **Favallon**
 Project Number: **397-019**
 Project Name: **Block 38 West**
 Project Manager: **Jovan Kneale**
 Sampled by: **Greg Roberts**

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	FMW-125 - 083018	8/30/18	1545	Water II	11
2	FMW-136-083018	8/30/18	1151	Water II	11

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C + BTEX	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture	
1	FMW-125 - 083018	8/30/18	1545	Water II	11	X	X		X		X		X	X										
2	FMW-136-083018	8/30/18	1151	Water II	11	X	X		X		X		X	X										

Laboratory Number: **08-375**

Signature	Company	Date	Time	Comments/Special Instructions
	Favallon	8/30/18	1839	Project Contact Project
	OBE	8/31/18	1015	Always for sample analysis and turnaround time 11.

Received _____
 Relinquished _____
 Received _____
 Relinquished _____
 Received _____
 Relinquished _____
 Reviewed/Date _____

Reviewed/Date _____

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

January 7, 2019

Rob Leet
Farallon Consulting
1809 7th Ave., Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-061
Laboratory Reference No. 1812-266

Dear Rob:

Enclosed are the analytical results and associated quality control data for samples submitted on December 31, 2018.

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 flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: January 7, 2019
Samples Submitted: December 31, 2018
Laboratory Reference: 1812-266
Project: 397-061

Case Narrative

Samples were collected on December 28, 2018 and received by the laboratory on December 31, 2018. 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.



Date of Report: January 7, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-266
 Project: 397-061

VOLATILE ORGANICS EPA 8260C

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW137-122818					
Laboratory ID:	12-266-01					
Vinyl Chloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
(cis) 1,2-Dichloroethene	1.1	0.20	EPA 8260C	1-4-19	1-4-19	
Trichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Tetrachloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>94</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>78-125</i>				



Date of Report: January 7, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-266
 Project: 397-061

VOLATILE ORGANICS EPA 8260C

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW138-122818					
Laboratory ID:	12-266-02					
Vinyl Chloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
(cis) 1,2-Dichloroethene	0.34	0.20	EPA 8260C	1-4-19	1-4-19	
Trichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Tetrachloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>92</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-125</i>				



Date of Report: January 7, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-266
 Project: 397-061

**VOLATILE ORGANICS EPA 8260C
 METHOD BLANK QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0104W1					
Vinyl Chloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Trichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Tetrachloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	96	75-127				
<i>Toluene-d8</i>	101	80-127				
<i>4-Bromofluorobenzene</i>	103	78-125				



Date of Report: January 7, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-266
 Project: 397-061

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

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0104W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.38	8.96	10.0	10.0	94	90	62-129	5	15	
Benzene	8.81	8.40	10.0	10.0	88	84	77-127	5	15	
Trichloroethene	9.49	8.88	10.0	10.0	95	89	70-120	7	15	
Toluene	9.23	8.71	10.0	10.0	92	87	82-123	6	15	
Chlorobenzene	9.40	8.93	10.0	10.0	94	89	79-120	5	15	
<i>Surrogate:</i>										
Dibromofluoromethane					95	95	75-127			
Toluene-d8					102	100	80-127			
4-Bromofluorobenzene					101	101	78-125			





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





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

January 9, 2019

Rob Leet
Farallon Consulting
1809 7th Ave., Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1812-267

Dear Rob:

Enclosed are the analytical results and associated quality control data for samples submitted on December 31, 2018.

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



OnSite Environmental, Inc. 14648 NE 95th 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: January 9, 2019
Samples Submitted: December 31, 2018
Laboratory Reference: 1812-267
Project: 397-019

Case Narrative

Samples were collected on December 28, 2018 and received by the laboratory on December 31, 2018. 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.



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

**GASOLINE RANGE ORGANICS
 NWTPH-Gx**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW130-122818					
Laboratory ID:	12-267-01					
Gasoline	ND	100	NWTPH-Gx	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	82	66-117				
Client ID:	FMW132-122818					
Laboratory ID:	12-267-02					
Gasoline	ND	100	NWTPH-Gx	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	84	66-117				
Client ID:	FMW133-122818					
Laboratory ID:	12-267-03					
Gasoline	ND	100	NWTPH-Gx	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	84	66-117				
Client ID:	FMW134-122818					
Laboratory ID:	12-267-04					
Gasoline	ND	100	NWTPH-Gx	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	83	66-117				
Client ID:	FMW135-122818					
Laboratory ID:	12-267-05					
Gasoline	ND	100	NWTPH-Gx	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	82	66-117				
Client ID:	FMW136-122818					
Laboratory ID:	12-267-06					
Gasoline	ND	100	NWTPH-Gx	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	83	66-117				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW500-122818					
Laboratory ID:	12-267-07					
Gasoline	ND	100	NWTPH-Gx	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>83</i>	<i>66-117</i>				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

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

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0102W1					
Gasoline	ND	100	NWTPH-Gx	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>84</i>	<i>66-117</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-267-01							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				<i>82</i>	<i>81</i>	<i>66-117</i>		



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

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

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW130-122818					
Laboratory ID:	12-267-01					
Diesel Range Organics	ND	0.26	NWTPH-Dx	1-2-19	1-2-19	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	83	50-150				

Client ID:	FMW132-122818					
Laboratory ID:	12-267-02					
Diesel Range Organics	ND	0.26	NWTPH-Dx	1-2-19	1-2-19	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	85	50-150				

Client ID:	FMW133-122818					
Laboratory ID:	12-267-03					
Diesel Range Organics	0.31	0.26	NWTPH-Dx	1-2-19	1-2-19	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	80	50-150				

Client ID:	FMW134-122818					
Laboratory ID:	12-267-04					
Diesel Range Organics	0.56	0.26	NWTPH-Dx	1-2-19	1-2-19	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	87	50-150				

Client ID:	FMW135-122818					
Laboratory ID:	12-267-05					
Diesel Range Organics	0.37	0.26	NWTPH-Dx	1-2-19	1-2-19	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	86	50-150				

Client ID:	FMW136-122818					
Laboratory ID:	12-267-06					
Diesel Range Organics	ND	0.26	NWTPH-Dx	1-2-19	1-2-19	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	79	50-150				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

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

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW500-122818					
Laboratory ID:	12-267-07					
Diesel Range Organics	0.68	0.26	NWTPH-Dx	1-2-19	1-2-19	
Lube Oil Range Organics	0.49	0.41	NWTPH-Dx	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	89	50-150				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

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

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0102W1					
Diesel Range Organics	ND	0.25	NWTPH-Dx	1-2-19	1-2-19	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>82</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-267-07							
	ORIG	DUP						
Diesel Range Organics	0.675	0.593	NA	NA	NA	NA	13	NA
Lube Oil Range Organics	0.487	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				89	88	50-150		



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW130-122818					
Laboratory ID:	12-267-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloromethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Vinyl Chloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromomethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloroethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Iodomethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Methylene Chloride	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
(cis) 1,2-Dichloroethene	0.22	0.20	EPA 8260C	1-4-19	1-4-19	
Bromochloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloroform	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Benzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Trichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Dibromomethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromodichloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Toluene	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW130-122818					
Laboratory ID:	12-267-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Tetrachloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Dibromochloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Ethylbenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
m,p-Xylene	ND	0.40	EPA 8260C	1-4-19	1-4-19	
o-Xylene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromoform	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Bromobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Hexachlorobutadiene	ND	1.0	EPA 8260C	1-4-19	1-4-19	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>83</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>95</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>92</i>	<i>78-125</i>				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW132-122818					
Laboratory ID:	12-267-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloromethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Vinyl Chloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromomethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloroethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Iodomethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Methylene Chloride	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromochloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloroform	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Benzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Trichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Dibromomethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromodichloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Toluene	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW132-122818					
Laboratory ID:	12-267-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Tetrachloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Dibromochloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Ethylbenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
m,p-Xylene	ND	0.40	EPA 8260C	1-4-19	1-4-19	
o-Xylene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromoform	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Bromobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Hexachlorobutadiene	ND	1.0	EPA 8260C	1-4-19	1-4-19	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>89</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>96</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-125</i>				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW133-122818					
Laboratory ID:	12-267-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloromethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Vinyl Chloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromomethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloroethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Iodomethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Methylene Chloride	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromochloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloroform	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Benzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Trichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Dibromomethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromodichloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Toluene	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW133-122818					
Laboratory ID:	12-267-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Tetrachloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Dibromochloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Ethylbenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
m,p-Xylene	ND	0.40	EPA 8260C	1-4-19	1-4-19	
o-Xylene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromoform	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Bromobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Hexachlorobutadiene	ND	1.0	EPA 8260C	1-4-19	1-4-19	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>92</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>78-125</i>				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW134-122818					
Laboratory ID:	12-267-04					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloromethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Vinyl Chloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromomethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloroethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Iodomethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Methylene Chloride	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromochloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloroform	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Benzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Trichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Dibromomethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromodichloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Toluene	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW134-122818					
Laboratory ID:	12-267-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Tetrachloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Dibromochloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Ethylbenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
m,p-Xylene	ND	0.40	EPA 8260C	1-4-19	1-4-19	
o-Xylene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromoform	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Bromobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Hexachlorobutadiene	ND	1.0	EPA 8260C	1-4-19	1-4-19	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>93</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>78-125</i>				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW135-122818					
Laboratory ID:	12-267-05					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloromethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Vinyl Chloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromomethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloroethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Iodomethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Methylene Chloride	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromochloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloroform	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Benzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Trichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Dibromomethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromodichloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Toluene	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW135-122818					
Laboratory ID:	12-267-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Tetrachloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Dibromochloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Ethylbenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
m,p-Xylene	ND	0.40	EPA 8260C	1-4-19	1-4-19	
o-Xylene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromoform	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Bromobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Hexachlorobutadiene	ND	1.0	EPA 8260C	1-4-19	1-4-19	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>95</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-125</i>				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW136-122818					
Laboratory ID:	12-267-06					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloromethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Vinyl Chloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromomethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloroethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Iodomethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Methylene Chloride	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
(cis) 1,2-Dichloroethene	0.35	0.20	EPA 8260C	1-4-19	1-4-19	
Bromochloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloroform	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Benzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Trichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Dibromomethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromodichloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Toluene	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW136-122818					
Laboratory ID:	12-267-06					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Tetrachloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Dibromochloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Ethylbenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
m,p-Xylene	ND	0.40	EPA 8260C	1-4-19	1-4-19	
o-Xylene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromoform	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Bromobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Hexachlorobutadiene	ND	1.0	EPA 8260C	1-4-19	1-4-19	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>94</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>78-125</i>				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW500-122818					
Laboratory ID:	12-267-07					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloromethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Vinyl Chloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromomethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloroethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Iodomethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Methylene Chloride	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromochloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloroform	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Benzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Trichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Dibromomethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromodichloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Toluene	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW500-122818					
Laboratory ID:	12-267-07					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Tetrachloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Dibromochloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Ethylbenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
m,p-Xylene	ND	0.40	EPA 8260C	1-4-19	1-4-19	
o-Xylene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromoform	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Bromobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Hexachlorobutadiene	ND	1.0	EPA 8260C	1-4-19	1-4-19	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>93</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>78-125</i>				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0104W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloromethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Vinyl Chloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromomethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloroethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Trichlorofluoromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Iodomethane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Methylene Chloride	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromochloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chloroform	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Carbon Tetrachloride	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Benzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Trichloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Dibromomethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromodichloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Toluene	ND	1.0	EPA 8260C	1-4-19	1-4-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	1-4-19	1-4-19	



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0104W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Tetrachloroethene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,3-Dichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Dibromochloromethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dibromoethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Chlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Ethylbenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
m,p-Xylene	ND	0.40	EPA 8260C	1-4-19	1-4-19	
o-Xylene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Bromoform	ND	1.0	EPA 8260C	1-4-19	1-4-19	
Bromobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	1-4-19	1-4-19	
2-Chlorotoluene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
4-Chlorotoluene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	1-4-19	1-4-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
Hexachlorobutadiene	ND	1.0	EPA 8260C	1-4-19	1-4-19	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	1-4-19	1-4-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>96</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>78-125</i>				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

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

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB0104W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.38	8.96	10.0	10.0	94	90	62-129	5	15	
Benzene	8.81	8.40	10.0	10.0	88	84	77-127	5	15	
Trichloroethene	9.49	8.88	10.0	10.0	95	89	70-120	7	15	
Toluene	9.23	8.71	10.0	10.0	92	87	82-123	6	15	
Chlorobenzene	9.40	8.93	10.0	10.0	94	89	79-120	5	15	
<i>Surrogate:</i>										
Dibromofluoromethane					95	95	75-127			
Toluene-d8					102	100	80-127			
4-Bromofluorobenzene					101	101	78-125			



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW130-122818					
Laboratory ID:	12-267-01					
Naphthalene	ND	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
2-Methylnaphthalene	ND	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
1-Methylnaphthalene	ND	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
Acenaphthylene	ND	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
Acenaphthene	ND	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
Fluorene	ND	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
Phenanthrene	ND	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
Anthracene	ND	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
Fluoranthene	ND	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
Pyrene	ND	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[a]anthracene	ND	0.011	EPA 8270D/SIM	1-2-19	1-2-19	
Chrysene	ND	0.011	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[b]fluoranthene	ND	0.011	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo(j,k)fluoranthene	ND	0.011	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[a]pyrene	ND	0.011	EPA 8270D/SIM	1-2-19	1-2-19	
Indeno(1,2,3-c,d)pyrene	ND	0.011	EPA 8270D/SIM	1-2-19	1-2-19	
Dibenz[a,h]anthracene	ND	0.011	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[g,h,i]perylene	ND	0.011	EPA 8270D/SIM	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>48</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>58</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>56</i>	<i>32 - 137</i>				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW132-122818					
Laboratory ID:	12-267-02					
Naphthalene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
2-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
1-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Acenaphthylene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Acenaphthene	0.29	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Fluorene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Phenanthrene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Anthracene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Fluoranthene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Pyrene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Chrysene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>61</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>65</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>64</i>	<i>32 - 137</i>				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW133-122818					
Laboratory ID:	12-267-03					
Naphthalene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
2-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
1-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Acenaphthylene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Acenaphthene	0.33	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Fluorene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Phenanthrene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Anthracene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Fluoranthene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Pyrene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Chrysene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>54</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>59</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>58</i>	<i>32 - 137</i>				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW134-122818					
Laboratory ID:	12-267-04					
Naphthalene	23	1.1	EPA 8270D/SIM	1-2-19	1-3-19	
2-Methylnaphthalene	0.77	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
1-Methylnaphthalene	0.67	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
Acenaphthylene	ND	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
Acenaphthene	0.71	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
Fluorene	ND	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
Phenanthrene	ND	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
Anthracene	ND	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
Fluoranthene	ND	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
Pyrene	ND	0.11	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[a]anthracene	ND	0.011	EPA 8270D/SIM	1-2-19	1-2-19	
Chrysene	ND	0.011	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[b]fluoranthene	ND	0.011	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo(j,k)fluoranthene	ND	0.011	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[a]pyrene	ND	0.011	EPA 8270D/SIM	1-2-19	1-2-19	
Indeno(1,2,3-c,d)pyrene	ND	0.011	EPA 8270D/SIM	1-2-19	1-2-19	
Dibenz[a,h]anthracene	ND	0.011	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[g,h,i]perylene	ND	0.011	EPA 8270D/SIM	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>60</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>62</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>60</i>	<i>32 - 137</i>				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW135-122818					
Laboratory ID:	12-267-05					
Naphthalene	ND	0.099	EPA 8270D/SIM	1-2-19	1-2-19	
2-Methylnaphthalene	0.11	0.099	EPA 8270D/SIM	1-2-19	1-2-19	
1-Methylnaphthalene	0.45	0.099	EPA 8270D/SIM	1-2-19	1-2-19	
Acenaphthylene	ND	0.099	EPA 8270D/SIM	1-2-19	1-2-19	
Acenaphthene	0.33	0.099	EPA 8270D/SIM	1-2-19	1-2-19	
Fluorene	ND	0.099	EPA 8270D/SIM	1-2-19	1-2-19	
Phenanthrene	ND	0.099	EPA 8270D/SIM	1-2-19	1-2-19	
Anthracene	ND	0.099	EPA 8270D/SIM	1-2-19	1-2-19	
Fluoranthene	ND	0.099	EPA 8270D/SIM	1-2-19	1-2-19	
Pyrene	ND	0.099	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[a]anthracene	ND	0.0099	EPA 8270D/SIM	1-2-19	1-2-19	
Chrysene	ND	0.0099	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[b]fluoranthene	ND	0.0099	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo(j,k)fluoranthene	ND	0.0099	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[a]pyrene	ND	0.0099	EPA 8270D/SIM	1-2-19	1-2-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0099	EPA 8270D/SIM	1-2-19	1-2-19	
Dibenz[a,h]anthracene	ND	0.0099	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[g,h,i]perylene	ND	0.0099	EPA 8270D/SIM	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>51</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>57</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>56</i>	<i>32 - 137</i>				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW136-122818					
Laboratory ID:	12-267-06					
Naphthalene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
2-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
1-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Acenaphthylene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Acenaphthene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Fluorene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Phenanthrene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Anthracene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Fluoranthene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Pyrene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Chrysene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>49</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>61</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>58</i>	<i>32 - 137</i>				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW500-122818					
Laboratory ID:	12-267-07					
Naphthalene	62	2.1	EPA 8270D/SIM	1-2-19	1-3-19	
2-Methylnaphthalene	2.3	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
1-Methylnaphthalene	1.7	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Acenaphthylene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Acenaphthene	1.6	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Fluorene	0.15	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Phenanthrene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Anthracene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Fluoranthene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Pyrene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Chrysene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>50</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>58</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>56</i>	<i>32 - 137</i>				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

**PAHs EPA 8270D/SIM
 METHOD BLANK QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0102W2					
Naphthalene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
2-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
1-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Acenaphthylene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Acenaphthene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Fluorene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Phenanthrene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Anthracene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Fluoranthene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Pyrene	ND	0.10	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Chrysene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270D/SIM	1-2-19	1-2-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>50</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>67</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>63</i>	<i>32 - 137</i>				



Date of Report: January 9, 2019
 Samples Submitted: December 31, 2018
 Laboratory Reference: 1812-267
 Project: 397-019

**PAHs EPA 8270D/SIM
 SB/SBD QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0102W2									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.279	0.245	0.500	0.500	56	49	28 - 109	13	38	
Acenaphthylene	0.362	0.354	0.500	0.500	72	71	37 - 111	2	26	
Acenaphthene	0.375	0.322	0.500	0.500	75	64	41 - 113	15	33	
Fluorene	0.352	0.322	0.500	0.500	70	64	47 - 114	9	23	
Phenanthrene	0.375	0.345	0.500	0.500	75	69	50 - 113	8	18	
Anthracene	0.370	0.347	0.500	0.500	74	69	50 - 117	6	18	
Fluoranthene	0.393	0.363	0.500	0.500	79	73	52 - 120	8	15	
Pyrene	0.364	0.335	0.500	0.500	73	67	51 - 128	8	31	
Benzo[a]anthracene	0.405	0.376	0.500	0.500	81	75	57 - 127	7	15	
Chrysene	0.386	0.357	0.500	0.500	77	71	51 - 120	8	15	
Benzo[b]fluoranthene	0.402	0.361	0.500	0.500	80	72	54 - 124	11	17	
Benzo(j,k)fluoranthene	0.413	0.367	0.500	0.500	83	73	50 - 127	12	18	
Benzo[a]pyrene	0.419	0.384	0.500	0.500	84	77	50 - 120	9	16	
Indeno(1,2,3-c,d)pyrene	0.418	0.375	0.500	0.500	84	75	46 - 132	11	20	
Dibenz[a,h]anthracene	0.411	0.368	0.500	0.500	82	74	49 - 129	11	18	
Benzo[g,h,i]perylene	0.396	0.360	0.500	0.500	79	72	45 - 130	10	19	
<i>Surrogate:</i>										
2-Fluorobiphenyl					52	48	21 - 110			
Pyrene-d10					69	63	19 - 111			
Terphenyl-d14					67	60	32 - 137			





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





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

April 3, 2019

Javan Ruark
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1903-242

Dear Javan:

Enclosed are the analytical results and associated quality control data for samples submitted on March 27, 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



OnSite Environmental, Inc. 14648 NE 95th 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: April 3, 2019
Samples Submitted: March 27, 2019
Laboratory Reference: 1903-242
Project: 397-019

Case Narrative

Samples were collected on March 26, 2019 and received by the laboratory on March 27, 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.

NWTPH Gx/BTEX Analysis

The gasoline result for sample FMW-134-032619 is mainly attributed to a single peak (Naphthalene).

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: April 3, 2019
 Samples Submitted: March 27, 2019
 Laboratory Reference: 1903-242
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-132-032619					
Laboratory ID:	03-242-01					
Benzene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Toluene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Ethyl Benzene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
m,p-Xylene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
o-Xylene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Gasoline	ND	100	NWTPH-Gx	3-28-19	3-28-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	78	66-117				

Client ID:	FMW-135-032619					
Laboratory ID:	03-242-02					
Benzene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Toluene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Ethyl Benzene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
m,p-Xylene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
o-Xylene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Gasoline	ND	100	NWTPH-Gx	3-28-19	3-28-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	79	66-117				

Client ID:	FMW-136-032619					
Laboratory ID:	03-242-03					
Benzene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Toluene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Ethyl Benzene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
m,p-Xylene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
o-Xylene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Gasoline	ND	100	NWTPH-Gx	3-28-19	3-28-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	79	66-117				



Date of Report: April 3, 2019
 Samples Submitted: March 27, 2019
 Laboratory Reference: 1903-242
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-134-032619					
Laboratory ID:	03-242-04					
Benzene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Toluene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Ethyl Benzene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
m,p-Xylene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
o-Xylene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Gasoline	140	100	NWTPH-Gx	3-28-19	3-28-19	Z
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	75	66-117				

Client ID:	FMW-130-032619					
Laboratory ID:	03-242-05					
Benzene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Toluene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Ethyl Benzene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
m,p-Xylene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
o-Xylene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Gasoline	ND	100	NWTPH-Gx	3-28-19	3-28-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	77	66-117				

Client ID:	FMW-133-032619					
Laboratory ID:	03-242-06					
Benzene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Toluene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Ethyl Benzene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
m,p-Xylene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
o-Xylene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Gasoline	ND	100	NWTPH-Gx	3-28-19	3-28-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	79	66-117				



Date of Report: April 3, 2019
 Samples Submitted: March 27, 2019
 Laboratory Reference: 1903-242
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0328W1					
Benzene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Toluene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Ethyl Benzene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
m,p-Xylene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
o-Xylene	ND	1.0	EPA 8021B	3-28-19	3-28-19	
Gasoline	ND	100	NWTPH-Gx	3-28-19	3-28-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	75	66-117				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	03-242-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				78	79	66-117		

SPIKE BLANKS

Laboratory ID:	SB0328W1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	48.4	47.4	50.0	50.0	97	95	82-122	2	11
Toluene	49.9	48.8	50.0	50.0	100	98	83-123	2	12
Ethyl Benzene	50.5	49.2	50.0	50.0	101	98	83-123	3	12
m,p-Xylene	49.3	48.1	50.0	50.0	99	96	83-123	2	12
o-Xylene	49.6	48.7	50.0	50.0	99	97	83-123	2	11
<i>Surrogate:</i>									
<i>Fluorobenzene</i>					85	82	66-117		



Date of Report: April 3, 2019
 Samples Submitted: March 27, 2019
 Laboratory Reference: 1903-242
 Project: 397-019

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

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-132-032619					
Laboratory ID:	03-242-01					
Diesel Range Organics	ND	0.25	NWTPH-Dx	3-29-19	3-29-19	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	3-29-19	3-29-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	85	50-150				

Client ID:	FMW-135-032619					
Laboratory ID:	03-242-02					
Diesel Range Organics	ND	0.25	NWTPH-Dx	3-29-19	3-29-19	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	3-29-19	3-29-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	86	50-150				

Client ID:	FMW-136-032619					
Laboratory ID:	03-242-03					
Diesel Range Organics	ND	0.25	NWTPH-Dx	3-29-19	3-29-19	
Lube Oil Range Organics	ND	0.41	NWTPH-Dx	3-29-19	3-29-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	78	50-150				

Client ID:	FMW-134-032619					
Laboratory ID:	03-242-04					
Diesel Range Organics	0.54	0.25	NWTPH-Dx	3-29-19	3-29-19	M
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	3-29-19	3-29-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	85	50-150				

Client ID:	FMW-130-032619					
Laboratory ID:	03-242-05					
Diesel Range Organics	ND	0.25	NWTPH-Dx	3-29-19	3-29-19	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	3-29-19	3-29-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	88	50-150				

Client ID:	FMW-133-032619					
Laboratory ID:	03-242-06					
Diesel Range Organics	0.28	0.25	NWTPH-Dx	3-29-19	3-29-19	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	3-29-19	3-29-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	89	50-150				



Date of Report: April 3, 2019
 Samples Submitted: March 27, 2019
 Laboratory Reference: 1903-242
 Project: 397-019

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

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0329W1					
Diesel Range Organics	ND	0.25	NWTPH-Dx	3-29-19	3-29-19	
Lube Oil Range Organics	ND	0.40	NWTPH-Dx	3-29-19	3-29-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>86</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	03-242-01							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>85</i>	<i>85</i>	<i>50-150</i>		



Date of Report: April 3, 2019
 Samples Submitted: March 27, 2019
 Laboratory Reference: 1903-242
 Project: 397-019

cPAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-132-032619					
Laboratory ID:	03-242-01					
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Chrysene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>99</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>96</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>120</i>	<i>32 - 137</i>				



Date of Report: April 3, 2019
 Samples Submitted: March 27, 2019
 Laboratory Reference: 1903-242
 Project: 397-019

cPAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-135-032619					
Laboratory ID:	03-242-02					
Benzo[a]anthracene	ND	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
Chrysene	ND	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo[b]fluoranthene	ND	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo(j,k)fluoranthene	ND	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo[a]pyrene	ND	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
Indeno(1,2,3-c,d)pyrene	ND	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
Dibenz[a,h]anthracene	ND	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>64</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>84</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>86</i>	<i>32 - 137</i>				



Date of Report: April 3, 2019
 Samples Submitted: March 27, 2019
 Laboratory Reference: 1903-242
 Project: 397-019

cPAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-136-032619					
Laboratory ID:	03-242-03					
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Chrysene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>49</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>65</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>69</i>	<i>32 - 137</i>				



Date of Report: April 3, 2019
 Samples Submitted: March 27, 2019
 Laboratory Reference: 1903-242
 Project: 397-019

cPAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-134-032619					
Laboratory ID:	03-242-04					
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Chrysene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>56</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>78</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>80</i>	<i>32 - 137</i>				



Date of Report: April 3, 2019
 Samples Submitted: March 27, 2019
 Laboratory Reference: 1903-242
 Project: 397-019

cPAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-130-032619					
Laboratory ID:	03-242-05					
Benzo[a]anthracene	0.015	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
Chrysene	0.015	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo[b]fluoranthene	0.011	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo(j,k)fluoranthene	ND	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo[a]pyrene	ND	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
Indeno(1,2,3-c,d)pyrene	ND	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
Dibenz[a,h]anthracene	ND	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>53</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>73</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>84</i>	<i>32 - 137</i>				



Date of Report: April 3, 2019
 Samples Submitted: March 27, 2019
 Laboratory Reference: 1903-242
 Project: 397-019

cPAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-133-032619					
Laboratory ID:	03-242-06					
Benzo[a]anthracene	ND	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
Chrysene	ND	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo[b]fluoranthene	ND	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo(j,k)fluoranthene	ND	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo[a]pyrene	ND	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
Indeno(1,2,3-c,d)pyrene	ND	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
Dibenz[a,h]anthracene	ND	0.011	EPA 8270D/SIM	3-28-19	3-28-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>58</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>84</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>77</i>	<i>32 - 137</i>				



Date of Report: April 3, 2019
 Samples Submitted: March 27, 2019
 Laboratory Reference: 1903-242
 Project: 397-019

**cPAHs EPA 8270D/SIM
 METHOD BLANK QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0328W1					
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Chrysene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	3-28-19	3-28-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>76</i>	<i>21 - 110</i>				
<i>Pyrene-d10</i>	<i>89</i>	<i>19 - 111</i>				
<i>Terphenyl-d14</i>	<i>117</i>	<i>32 - 137</i>				



Date of Report: April 3, 2019
 Samples Submitted: March 27, 2019
 Laboratory Reference: 1903-242
 Project: 397-019

**cPAHs EPA 8270D/SIM
 SB/SBD QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0328W1									
	SB	SBD	SB	SBD	SB	SBD				
Benzo[a]anthracene	0.396	0.371	0.500	0.500	79	74	57 - 127	7	15	
Chrysene	0.416	0.393	0.500	0.500	83	79	51 - 120	6	15	
Benzo[b]fluoranthene	0.473	0.444	0.500	0.500	95	89	54 - 124	6	17	
Benzo(j,k)fluoranthene	0.444	0.415	0.500	0.500	89	83	50 - 127	7	18	
Benzo[a]pyrene	0.456	0.405	0.500	0.500	91	81	50 - 120	12	16	
Indeno(1,2,3-c,d)pyrene	0.472	0.432	0.500	0.500	94	86	46 - 132	9	20	
Dibenz[a,h]anthracene	0.455	0.425	0.500	0.500	91	85	49 - 129	7	18	
<i>Surrogate:</i>										
<i>2-Fluorobiphenyl</i>					<i>59</i>	<i>68</i>	<i>21 - 110</i>			
<i>Pyrene-d10</i>					<i>89</i>	<i>79</i>	<i>19 - 111</i>			
<i>Terphenyl-d14</i>					<i>95</i>	<i>102</i>	<i>32 - 137</i>			





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 - The gasoline result is mainly attributed to a single peak (Naphthalene).
- ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference





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

May 13, 2019

Joe Rounds
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-061
Laboratory Reference No. 1905-076

Dear Joe:

Enclosed are the analytical results and associated quality control data for samples submitted on May 7, 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 "D. Baumeister", with a long horizontal stroke extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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 13, 2019
Samples Submitted: May 7, 2019
Laboratory Reference: 1905-076
Project: 397-061

Case Narrative

Samples were collected on May 6, 2019 and received by the laboratory on May 7, 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.



Date of Report: May 13, 2019
 Samples Submitted: May 7, 2019
 Laboratory Reference: 1905-076
 Project: 397-061

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-137-050619					
Laboratory ID:	05-076-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Chloromethane	ND	1.0	EPA 8260C	5-11-19	5-11-19	
Vinyl Chloride	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Bromomethane	ND	0.43	EPA 8260C	5-11-19	5-11-19	
Chloroethane	ND	1.0	EPA 8260C	5-11-19	5-11-19	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Iodomethane	ND	3.5	EPA 8260C	5-11-19	5-11-19	
Methylene Chloride	ND	1.0	EPA 8260C	5-11-19	5-11-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
(cis) 1,2-Dichloroethene	1.3	0.20	EPA 8260C	5-11-19	5-11-19	
Bromochloromethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Chloroform	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Trichloroethene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Dibromomethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Bromodichloromethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	5-11-19	5-11-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-11-19	5-11-19	



Date of Report: May 13, 2019
 Samples Submitted: May 7, 2019
 Laboratory Reference: 1905-076
 Project: 397-061

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-137-050619					
Laboratory ID:	05-076-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Tetrachloroethene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Dibromochloromethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Chlorobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Bromoform	ND	1.0	EPA 8260C	5-11-19	5-11-19	
Bromobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-11-19	5-11-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Hexachlorobutadiene	ND	1.0	EPA 8260C	5-11-19	5-11-19	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>78-125</i>				



Date of Report: May 13, 2019
 Samples Submitted: May 7, 2019
 Laboratory Reference: 1905-076
 Project: 397-061

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-138-050619					
Laboratory ID:	05-076-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Chloromethane	ND	1.0	EPA 8260C	5-11-19	5-11-19	
Vinyl Chloride	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Bromomethane	ND	0.43	EPA 8260C	5-11-19	5-11-19	
Chloroethane	ND	1.0	EPA 8260C	5-11-19	5-11-19	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Iodomethane	ND	3.5	EPA 8260C	5-11-19	5-11-19	
Methylene Chloride	ND	1.0	EPA 8260C	5-11-19	5-11-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
(cis) 1,2-Dichloroethene	0.38	0.20	EPA 8260C	5-11-19	5-11-19	
Bromochloromethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Chloroform	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Trichloroethene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Dibromomethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Bromodichloromethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	5-11-19	5-11-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-11-19	5-11-19	



Date of Report: May 13, 2019
 Samples Submitted: May 7, 2019
 Laboratory Reference: 1905-076
 Project: 397-061

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-138-050619					
Laboratory ID:	05-076-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Tetrachloroethene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Dibromochloromethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Chlorobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Bromoform	ND	1.0	EPA 8260C	5-11-19	5-11-19	
Bromobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-11-19	5-11-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Hexachlorobutadiene	ND	1.0	EPA 8260C	5-11-19	5-11-19	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-125</i>				



Date of Report: May 13, 2019
 Samples Submitted: May 7, 2019
 Laboratory Reference: 1905-076
 Project: 397-061

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0511W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Chloromethane	ND	1.0	EPA 8260C	5-11-19	5-11-19	
Vinyl Chloride	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Bromomethane	ND	0.43	EPA 8260C	5-11-19	5-11-19	
Chloroethane	ND	1.0	EPA 8260C	5-11-19	5-11-19	
Trichlorofluoromethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,1-Dichloroethene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Iodomethane	ND	3.5	EPA 8260C	5-11-19	5-11-19	
Methylene Chloride	ND	1.0	EPA 8260C	5-11-19	5-11-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,1-Dichloroethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
2,2-Dichloropropane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Bromochloromethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Chloroform	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Carbon Tetrachloride	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,1-Dichloropropene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,2-Dichloroethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Trichloroethene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,2-Dichloropropane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Dibromomethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Bromodichloromethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	5-11-19	5-11-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	5-11-19	5-11-19	



Date of Report: May 13, 2019
 Samples Submitted: May 7, 2019
 Laboratory Reference: 1905-076
 Project: 397-061

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0511W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Tetrachloroethene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,3-Dichloropropane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Dibromochloromethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,2-Dibromoethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Chlorobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Bromoform	ND	1.0	EPA 8260C	5-11-19	5-11-19	
Bromobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	5-11-19	5-11-19	
2-Chlorotoluene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
4-Chlorotoluene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	5-11-19	5-11-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
Hexachlorobutadiene	ND	1.0	EPA 8260C	5-11-19	5-11-19	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	5-11-19	5-11-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>99</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>78-125</i>				



Date of Report: May 13, 2019
 Samples Submitted: May 7, 2019
 Laboratory Reference: 1905-076
 Project: 397-061

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

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB0511W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.93	9.84	10.0	10.0	99	98	63-130	1	17	
Benzene	9.23	9.12	10.0	10.0	92	91	76-125	1	19	
Trichloroethene	9.87	9.71	10.0	10.0	99	97	76-121	2	18	
Toluene	9.63	9.45	10.0	10.0	96	95	80-124	2	18	
Chlorobenzene	10.3	9.84	10.0	10.0	103	98	75-120	5	19	
<i>Surrogate:</i>										
Dibromofluoromethane					96	99	75-127			
Toluene-d8					101	102	80-127			
4-Bromofluorobenzene					99	101	78-125			





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





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

July 12, 2019

Joe Rounds
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-061
Laboratory Reference No. 1907-103

Dear Joe:

Enclosed are the analytical results and associated quality control data for samples submitted on July 10, 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



OnSite Environmental, Inc. 14648 NE 95th 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: July 12, 2019
Samples Submitted: July 10, 2019
Laboratory Reference: 1907-103
Project: 397-061

Case Narrative

Samples were collected on July 8, 2019 and received by the laboratory on July 10, 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.



Date of Report: July 12, 2019
 Samples Submitted: July 10, 2019
 Laboratory Reference: 1907-103
 Project: 397-061

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-137-070819					
Laboratory ID:	07-103-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Chloromethane	ND	1.0	EPA 8260C	7-11-19	7-11-19	
Vinyl Chloride	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Bromomethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Chloroethane	ND	1.0	EPA 8260C	7-11-19	7-11-19	
Trichlorofluoromethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,1-Dichloroethene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Iodomethane	ND	1.0	EPA 8260C	7-11-19	7-11-19	
Methylene Chloride	ND	1.0	EPA 8260C	7-11-19	7-11-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,1-Dichloroethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
2,2-Dichloropropane	ND	0.26	EPA 8260C	7-11-19	7-11-19	
(cis) 1,2-Dichloroethene	1.3	0.20	EPA 8260C	7-11-19	7-11-19	
Bromochloromethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Chloroform	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Carbon Tetrachloride	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,1-Dichloropropene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,2-Dichloroethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Trichloroethene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,2-Dichloropropane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Dibromomethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Bromodichloromethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	7-11-19	7-11-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-11-19	7-11-19	



Date of Report: July 12, 2019
 Samples Submitted: July 10, 2019
 Laboratory Reference: 1907-103
 Project: 397-061

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-137-070819					
Laboratory ID:	07-103-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Tetrachloroethene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,3-Dichloropropane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Dibromochloromethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,2-Dibromoethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Chlorobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Bromoform	ND	1.0	EPA 8260C	7-11-19	7-11-19	
Bromobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
2-Chlorotoluene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
4-Chlorotoluene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,2-Dibromo-3-chloropropane	ND	1.4	EPA 8260C	7-11-19	7-11-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Hexachlorobutadiene	ND	1.0	EPA 8260C	7-11-19	7-11-19	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>78-125</i>				



Date of Report: July 12, 2019
 Samples Submitted: July 10, 2019
 Laboratory Reference: 1907-103
 Project: 397-061

VOLATILE ORGANICS EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-138-070819					
Laboratory ID:	07-103-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Chloromethane	ND	1.0	EPA 8260C	7-11-19	7-11-19	
Vinyl Chloride	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Bromomethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Chloroethane	ND	1.0	EPA 8260C	7-11-19	7-11-19	
Trichlorofluoromethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,1-Dichloroethene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Iodomethane	ND	1.0	EPA 8260C	7-11-19	7-11-19	
Methylene Chloride	ND	1.0	EPA 8260C	7-11-19	7-11-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,1-Dichloroethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
2,2-Dichloropropane	ND	0.26	EPA 8260C	7-11-19	7-11-19	
(cis) 1,2-Dichloroethene	0.34	0.20	EPA 8260C	7-11-19	7-11-19	
Bromochloromethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Chloroform	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Carbon Tetrachloride	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,1-Dichloropropene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,2-Dichloroethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Trichloroethene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,2-Dichloropropane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Dibromomethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Bromodichloromethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	7-11-19	7-11-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-11-19	7-11-19	



Date of Report: July 12, 2019
 Samples Submitted: July 10, 2019
 Laboratory Reference: 1907-103
 Project: 397-061

VOLATILE ORGANICS EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-138-070819					
Laboratory ID:	07-103-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Tetrachloroethene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,3-Dichloropropane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Dibromochloromethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,2-Dibromoethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Chlorobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Bromoform	ND	1.0	EPA 8260C	7-11-19	7-11-19	
Bromobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
2-Chlorotoluene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
4-Chlorotoluene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,2-Dibromo-3-chloropropane	ND	1.4	EPA 8260C	7-11-19	7-11-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Hexachlorobutadiene	ND	1.0	EPA 8260C	7-11-19	7-11-19	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>78-125</i>				



Date of Report: July 12, 2019
 Samples Submitted: July 10, 2019
 Laboratory Reference: 1907-103
 Project: 397-061

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0711W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Chloromethane	ND	1.0	EPA 8260C	7-11-19	7-11-19	
Vinyl Chloride	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Bromomethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Chloroethane	ND	1.0	EPA 8260C	7-11-19	7-11-19	
Trichlorofluoromethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,1-Dichloroethene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Iodomethane	ND	1.0	EPA 8260C	7-11-19	7-11-19	
Methylene Chloride	ND	1.0	EPA 8260C	7-11-19	7-11-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,1-Dichloroethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
2,2-Dichloropropane	ND	0.26	EPA 8260C	7-11-19	7-11-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Bromochloromethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Chloroform	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Carbon Tetrachloride	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,1-Dichloropropene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,2-Dichloroethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Trichloroethene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,2-Dichloropropane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Dibromomethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Bromodichloromethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	7-11-19	7-11-19	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	7-11-19	7-11-19	



Date of Report: July 12, 2019
 Samples Submitted: July 10, 2019
 Laboratory Reference: 1907-103
 Project: 397-061

VOLATILE ORGANICS EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0711W1					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Tetrachloroethene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,3-Dichloropropane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Dibromochloromethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,2-Dibromoethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Chlorobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Bromoform	ND	1.0	EPA 8260C	7-11-19	7-11-19	
Bromobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	7-11-19	7-11-19	
2-Chlorotoluene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
4-Chlorotoluene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
1,2-Dibromo-3-chloropropane	ND	1.4	EPA 8260C	7-11-19	7-11-19	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
Hexachlorobutadiene	ND	1.0	EPA 8260C	7-11-19	7-11-19	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	7-11-19	7-11-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>78-125</i>				



Date of Report: July 12, 2019
 Samples Submitted: July 10, 2019
 Laboratory Reference: 1907-103
 Project: 397-061

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

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB0711W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	7.84	7.82	10.0	10.0	78	78	63-130	0	17	
Benzene	8.52	8.55	10.0	10.0	85	86	76-125	0	19	
Trichloroethene	9.85	9.92	10.0	10.0	99	99	76-121	1	18	
Toluene	9.28	9.22	10.0	10.0	93	92	80-124	1	18	
Chlorobenzene	9.76	9.92	10.0	10.0	98	99	75-120	2	19	
<i>Surrogate:</i>										
Dibromofluoromethane					100	101	75-127			
Toluene-d8					102	102	80-127			
4-Bromofluorobenzene					99	101	78-125			





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 methods 8260 & 8270, 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



Chain of Custody

Company: Favallen
 Project Number: 397-061
 Project Name: Block 38 West
 Project Manager: Joe Rando
 Sampled by: Greg Peters

Turnaround Request (in working days)
 (Check One)
 Same Day 1 Day
 2 Days 3 Days
 Standard (7 Days)
 _____ (other)

Laboratory Number: **07-103**

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture	
1	FMW-137-070819	7/8/19	0924	Water	3						X													
2	FMW-138-070819	7/8/19	1855	Water	3						X													
<i>[Large handwritten signature]</i>																								

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished	<i>[Signature]</i>	Favallen	7/9/19	1830	
Received	<i>[Signature]</i>	Speedy	7-9-19	0920	
Relinquished	<i>[Signature]</i>	Speedy	7-9-19	1109	
Received	<i>[Signature]</i>	<i>[Signature]</i>	7/10/19	1109	
Relinquished					
Received					Data Package: Standard <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/>
Reviewed/Date		Reviewed/Date			Chromatograms with final report <input type="checkbox"/> Electronic Data Deliverables (EDDs) <input type="checkbox"/>



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

January 6, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1912-093

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on December 11, 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



OnSite Environmental, Inc. 14648 NE 95th 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: January 6, 2020
Samples Submitted: December 11, 2019
Laboratory Reference: 1912-093
Project: 397-019

Case Narrative

Samples were collected on December 10 and 11, 2019 and received by the laboratory on December 11, 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.

NWTPH-Gx/BTEX Analysis

The client requested the analysis of sample N3-20.0-121019 after the holding time had expired.

NWTPH-Dx Analysis

Per client request, sample N3-20.0-121019 was extracted and analyzed outside of hold time.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



Date of Report: January 6, 2020
 Samples Submitted: December 11, 2019
 Laboratory Reference: 1912-093
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N3-20.0-121019					
Laboratory ID:	12-093-01					
Benzene	ND	0.020	EPA 8021B	12-26-19	12-26-19	
Toluene	ND	0.057	EPA 8021B	12-26-19	12-26-19	
Ethyl Benzene	ND	0.057	EPA 8021B	12-26-19	12-26-19	
m,p-Xylene	ND	0.057	EPA 8021B	12-26-19	12-26-19	
o-Xylene	ND	0.057	EPA 8021B	12-26-19	12-26-19	
Gasoline	ND	5.7	NWTPH-Gx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	97	58-129				



Date of Report: January 6, 2020
 Samples Submitted: December 11, 2019
 Laboratory Reference: 1912-093
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1226S1					
Benzene	ND	0.020	EPA 8021B	12-26-19	12-26-19	
Toluene	ND	0.050	EPA 8021B	12-26-19	12-26-19	
Ethyl Benzene	ND	0.050	EPA 8021B	12-26-19	12-26-19	
m,p-Xylene	ND	0.050	EPA 8021B	12-26-19	12-26-19	
o-Xylene	ND	0.050	EPA 8021B	12-26-19	12-26-19	
Gasoline	ND	5.0	NWTPH-Gx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	77	58-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-243-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				80	83	58-129		

SPIKE BLANKS

Laboratory ID:	SB1226S1							
	SB	SBD	SB	SBD	SB	SBD		
Benzene	0.904	0.935	1.00	1.00	90	94	69-109	3 10
Toluene	0.948	0.968	1.00	1.00	95	97	67-112	2 10
Ethyl Benzene	0.967	0.982	1.00	1.00	97	98	67-113	2 10
m,p-Xylene	0.960	0.971	1.00	1.00	96	97	66-114	1 11
o-Xylene	0.949	0.961	1.00	1.00	95	96	68-112	1 11
<i>Surrogate:</i>								
<i>Fluorobenzene</i>					94	97	58-129	



Date of Report: January 6, 2020
 Samples Submitted: December 11, 2019
 Laboratory Reference: 1912-093
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N3-20.0-121019					
Laboratory ID:	12-093-01					
Diesel Range Organics	ND	30	NWTPH-Dx	12-27-19	12-27-19	
Lube Oil Range Organics	ND	61	NWTPH-Dx	12-27-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	56	50-150				



Date of Report: January 6, 2020
 Samples Submitted: December 11, 2019
 Laboratory Reference: 1912-093
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB1227S2					
Diesel Range Organics	ND	25	NWTPH-Dx	12-27-19	12-27-19	
Lube Oil Range Organics	ND	50	NWTPH-Dx	12-27-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	64	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-093-01							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				56	53	50-150		



Date of Report: January 6, 2020
Samples Submitted: December 11, 2019
Laboratory Reference: 1912-093
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
N3-20.0-121019	12-093-01	17	12-27-19





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 methods 8260 & 8270, 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





MVA Onsite Environmental Inc.
 Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Laboratory Number: **12-093**

Company: Fovallan
 Project Number: 397-019
 Project Name: Block 38
 Project Manager: Suey Staupf
 Sampled by: Gary Peters

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	N3-20.0-121019	12/10/19	1430	Soil	5
2	K1-30.0-121019	12/10/19	1500	Soil	5
3	L1-30.0-121019	12/10/19	1530	Soil	5
4	J-1-30.0-121119	12/11/19	1200	Soil	5

Number of Containers	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture		
5		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>															<input checked="" type="checkbox"/>	
5																				X
5																				X
5																				X

Signature	Company	Date	Time	Comments/Special Instructions
	Fovallan	12/11/19	1515	Please see from sample analyses and forwarded
	Fovallan	12/11/19	1515	not with project manager
				(X) Added 12/26/19. DB (STA)

Received _____
 Relinquished _____
 Received _____
 Relinquished _____
 Reviewed/Date _____

Reviewed/Date _____

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

December 24, 2019

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1912-141

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on December 13, 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



OnSite Environmental, Inc. 14648 NE 95th 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: December 24, 2019
Samples Submitted: December 13, 2019
Laboratory Reference: 1912-141
Project: 397-019

Case Narrative

Samples were collected on December 13, 2019 and received by the laboratory on December 13, 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.



Date of Report: December 24, 2019
 Samples Submitted: December 13, 2019
 Laboratory Reference: 1912-141
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H4-1.0-121319					
Laboratory ID:	12-141-01					
Benzene	ND	0.022	EPA 8021B	12-17-19	12-18-19	
Toluene	ND	0.11	EPA 8021B	12-17-19	12-18-19	
Ethyl Benzene	ND	0.11	EPA 8021B	12-17-19	12-18-19	
m,p-Xylene	ND	0.11	EPA 8021B	12-17-19	12-18-19	
o-Xylene	ND	0.11	EPA 8021B	12-17-19	12-18-19	
Gasoline	31	11	NWTPH-Gx	12-17-19	12-18-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	74	58-129				



Date of Report: December 24, 2019
 Samples Submitted: December 13, 2019
 Laboratory Reference: 1912-141
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1217S1					
Benzene	ND	0.020	EPA 8021B	12-17-19	12-17-19	
Toluene	ND	0.050	EPA 8021B	12-17-19	12-17-19	
Ethyl Benzene	ND	0.050	EPA 8021B	12-17-19	12-17-19	
m,p-Xylene	ND	0.050	EPA 8021B	12-17-19	12-17-19	
o-Xylene	ND	0.050	EPA 8021B	12-17-19	12-17-19	
Gasoline	ND	5.0	NWTPH-Gx	12-17-19	12-17-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	76	58-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-159-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				82	82	58-129		

SPIKE BLANKS

Laboratory ID:	SB1217S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	0.832	0.851	1.00	1.00	83	85	69-109	2	10
Toluene	0.879	0.883	1.00	1.00	88	88	67-112	0	10
Ethyl Benzene	0.881	0.886	1.00	1.00	88	89	67-113	1	10
m,p-Xylene	0.900	0.905	1.00	1.00	90	91	66-114	1	11
o-Xylene	0.885	0.900	1.00	1.00	89	90	68-112	2	11
<i>Surrogate:</i>									
<i>Fluorobenzene</i>					79	79	58-129		



Date of Report: December 24, 2019
 Samples Submitted: December 13, 2019
 Laboratory Reference: 1912-141
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H4-1.0-121319					
Laboratory ID:	12-141-01					
Diesel Range Organics	600	220	NWTPH-Dx	12-17-19	12-20-19	N
Lube Oil	5000	440	NWTPH-Dx	12-17-19	12-20-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	79	50-150				



Date of Report: December 24, 2019
 Samples Submitted: December 13, 2019
 Laboratory Reference: 1912-141
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB1217S2					
Diesel Range Organics	ND	25	NWTPH-Dx	12-17-19	12-18-19	
Lube Oil Range Organics	ND	50	NWTPH-Dx	12-17-19	12-18-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	99	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-153-02							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				75	65	50-150		



Date of Report: December 24, 2019
Samples Submitted: December 13, 2019
Laboratory Reference: 1912-141
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
H4-1.0-121319	12-141-01	43	12-17-19





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 methods 8260 & 8270, 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





Onsite Environmental Inc.

Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request (in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Laboratory Number: 12-141

Company: Favallon
 Project Number: 394-019
 Project Name: Block 38 West
 Project Manager: Suzy Stampf
 Sampled by: GRILT

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	HH-1.0-121319	12/13/19	0850	Soil	5
2	HH-2.0-121319	12/13/19	0900	Soil	5
3	HH-6.0-121319	12/13/19	0910	Soil	5

Number of Containers	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
		X		X														X

Signature	Company	Date	Time	Comments/Special Instructions
<i>[Signature]</i>	Favallon	12/13/19	15:42	Hold 2ct and 6ct samples pending 1 ct results
<i>[Signature]</i>	ALPHA	12/13/19	17:16	
<i>[Signature]</i>	OGRE	12/13/19	17:16	

Received _____ Reviewed/Date _____

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

January 10, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1912-207

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on December 19, 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 flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: January 10, 2020
Samples Submitted: December 19, 2019
Laboratory Reference: 1912-207
Project: 397-019

Case Narrative

Samples were collected on December 19, 2019 and received by the laboratory on December 19, 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.

NWTPH-Gx/BTEX Analysis

The MTCA Method A cleanup level of 0.030 ppm for Benzene is not achievable for sample TP-3-15.0-121919 due to the low dry weight of the sample.

The MTCA Method A cleanup level of 30.0 ppm for fresh gasoline is not achievable for sample TP-3-15.0-121919 due to the low dry weight of the sample.

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: January 10, 2020
 Samples Submitted: December 19, 2019
 Laboratory Reference: 1912-207
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-2-20.0-121919					
Laboratory ID:	12-207-01					
Benzene	ND	0.020	EPA 8021B	1-2-20	1-2-20	
Toluene	ND	0.042	EPA 8021B	1-2-20	1-2-20	
Ethyl Benzene	ND	0.042	EPA 8021B	1-2-20	1-2-20	
m,p-Xylene	ND	0.042	EPA 8021B	1-2-20	1-2-20	
o-Xylene	ND	0.042	EPA 8021B	1-2-20	1-2-20	
Gasoline	ND	4.2	NWTPH-Gx	1-2-20	1-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	97	58-129				
Client ID:	TP-2-15.0-121919					
Laboratory ID:	12-207-02					
Benzene	ND	0.026	EPA 8021B	1-2-20	1-2-20	
Toluene	ND	0.13	EPA 8021B	1-2-20	1-2-20	
Ethyl Benzene	ND	0.13	EPA 8021B	1-2-20	1-2-20	
m,p-Xylene	ND	0.13	EPA 8021B	1-2-20	1-2-20	
o-Xylene	ND	0.13	EPA 8021B	1-2-20	1-2-20	
Gasoline	ND	420	NWTPH-Gx	1-2-20	1-2-20	U1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	115	58-129				
Client ID:	TP-3-20.0-121919					
Laboratory ID:	12-207-03					
Benzene	ND	0.020	EPA 8021B	1-2-20	1-2-20	
Toluene	ND	0.052	EPA 8021B	1-2-20	1-2-20	
Ethyl Benzene	ND	0.052	EPA 8021B	1-2-20	1-2-20	
m,p-Xylene	ND	0.052	EPA 8021B	1-2-20	1-2-20	
o-Xylene	ND	0.052	EPA 8021B	1-2-20	1-2-20	
Gasoline	ND	5.2	NWTPH-Gx	1-2-20	1-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	101	58-129				



Date of Report: January 10, 2020
 Samples Submitted: December 19, 2019
 Laboratory Reference: 1912-207
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-3-15.0-121919					
Laboratory ID:	12-207-04					
Benzene	ND	0.12	EPA 8021B	1-2-20	1-2-20	
Toluene	ND	0.59	EPA 8021B	1-2-20	1-2-20	
Ethyl Benzene	ND	0.59	EPA 8021B	1-2-20	1-2-20	
m,p-Xylene	ND	0.59	EPA 8021B	1-2-20	1-2-20	
o-Xylene	ND	0.59	EPA 8021B	1-2-20	1-2-20	
Gasoline	ND	59	NWTPH-Gx	1-2-20	1-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	92	58-129				



Date of Report: January 10, 2020
 Samples Submitted: December 19, 2019
 Laboratory Reference: 1912-207
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0102S2					
Benzene	ND	0.020	EPA 8021B	1-2-20	1-2-20	
Toluene	ND	0.050	EPA 8021B	1-2-20	1-2-20	
Ethyl Benzene	ND	0.050	EPA 8021B	1-2-20	1-2-20	
m,p-Xylene	ND	0.050	EPA 8021B	1-2-20	1-2-20	
o-Xylene	ND	0.050	EPA 8021B	1-2-20	1-2-20	
Gasoline	ND	5.0	NWTPH-Gx	1-2-20	1-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	92	58-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	01-003-02							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				93	92	58-129		

SPIKE BLANKS

Laboratory ID:	SB0102S1							
	SB	SBD	SB	SBD	SB	SBD		
Benzene	0.927	0.961	1.00	1.00	93	96	69-109	4 10
Toluene	0.939	0.976	1.00	1.00	94	98	67-112	4 10
Ethyl Benzene	0.944	0.987	1.00	1.00	94	99	67-113	4 10
m,p-Xylene	0.926	0.967	1.00	1.00	93	97	66-114	4 11
o-Xylene	0.930	0.960	1.00	1.00	93	96	68-112	3 11
<i>Surrogate:</i>								
<i>Fluorobenzene</i>					93	97	58-129	



Date of Report: January 10, 2020
 Samples Submitted: December 19, 2019
 Laboratory Reference: 1912-207
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-2-20.0-121919					
Laboratory ID:	12-207-01					
Diesel Range Organics	ND	27	NWTPH-Dx	1-2-20	1-3-20	
Lube Oil	210	54	NWTPH-Dx	1-2-20	1-3-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	81	50-150				

Client ID:	TP-2-15.0-121919					
Laboratory ID:	12-207-02					
Diesel Range Organics	6600	330	NWTPH-Dx	1-2-20	1-3-20	
Lube Oil Range Organics	9000	660	NWTPH-Dx	1-2-20	1-3-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	---	50-150				

S

Client ID:	TP-3-20.0-121919					
Laboratory ID:	12-207-03					
Diesel Range Organics	ND	29	NWTPH-Dx	1-2-20	1-3-20	
Lube Oil Range Organics	ND	59	NWTPH-Dx	1-2-20	1-3-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	78	50-150				

Client ID:	TP-3-15.0-121919					
Laboratory ID:	12-207-04					
Diesel Range Organics	ND	160	NWTPH-Dx	1-2-20	1-3-20	
Lube Oil Range Organics	1700	310	NWTPH-Dx	1-2-20	1-3-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	77	50-150				



Date of Report: January 10, 2020
 Samples Submitted: December 19, 2019
 Laboratory Reference: 1912-207
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0102S3					
Diesel Range Organics	ND	25	NWTPH-Dx	1-2-20	1-2-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	1-2-20	1-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	96	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0102S3							
	ORIG	DUP						
Diesel Fuel #2	93.8	93.1	NA	NA	NA	NA	1	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				86	88	50-150		



Date of Report: January 10, 2020
 Samples Submitted: December 19, 2019
 Laboratory Reference: 1912-207
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-3-20.0-121919					
Laboratory ID:	12-207-03					
Naphthalene	ND	0.0078	EPA 8270E/SIM	1-2-20	1-3-20	
2-Methylnaphthalene	ND	0.0078	EPA 8270E/SIM	1-2-20	1-3-20	
1-Methylnaphthalene	ND	0.0078	EPA 8270E/SIM	1-2-20	1-3-20	
Acenaphthylene	ND	0.0078	EPA 8270E/SIM	1-2-20	1-3-20	
Acenaphthene	ND	0.0078	EPA 8270E/SIM	1-2-20	1-3-20	
Fluorene	ND	0.0078	EPA 8270E/SIM	1-2-20	1-3-20	
Phenanthrene	0.016	0.0078	EPA 8270E/SIM	1-2-20	1-3-20	
Anthracene	ND	0.0078	EPA 8270E/SIM	1-2-20	1-3-20	
Fluoranthene	0.026	0.0078	EPA 8270E/SIM	1-2-20	1-3-20	
Pyrene	0.028	0.0078	EPA 8270E/SIM	1-2-20	1-3-20	
Benzo[a]anthracene	0.012	0.0078	EPA 8270E/SIM	1-2-20	1-3-20	
Chrysene	0.012	0.0078	EPA 8270E/SIM	1-2-20	1-3-20	
Benzo[b]fluoranthene	0.014	0.0078	EPA 8270E/SIM	1-2-20	1-3-20	
Benzo(j,k)fluoranthene	ND	0.0078	EPA 8270E/SIM	1-2-20	1-3-20	
Benzo[a]pyrene	0.015	0.0078	EPA 8270E/SIM	1-2-20	1-3-20	
Indeno(1,2,3-c,d)pyrene	0.0089	0.0078	EPA 8270E/SIM	1-2-20	1-3-20	
Dibenz[a,h]anthracene	ND	0.0078	EPA 8270E/SIM	1-2-20	1-3-20	
Benzo[g,h,i]perylene	0.0087	0.0078	EPA 8270E/SIM	1-2-20	1-3-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>87</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>85</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>83</i>	<i>45 - 122</i>				



Date of Report: January 10, 2020
 Samples Submitted: December 19, 2019
 Laboratory Reference: 1912-207
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-3-15.0-121919					
Laboratory ID:	12-207-04					
Naphthalene	ND	0.041	EPA 8270E/SIM	1-2-20	1-3-20	
2-Methylnaphthalene	ND	0.041	EPA 8270E/SIM	1-2-20	1-3-20	
1-Methylnaphthalene	ND	0.041	EPA 8270E/SIM	1-2-20	1-3-20	
Acenaphthylene	ND	0.041	EPA 8270E/SIM	1-2-20	1-3-20	
Acenaphthene	ND	0.041	EPA 8270E/SIM	1-2-20	1-3-20	
Fluorene	ND	0.041	EPA 8270E/SIM	1-2-20	1-3-20	
Phenanthrene	ND	0.041	EPA 8270E/SIM	1-2-20	1-3-20	
Anthracene	ND	0.041	EPA 8270E/SIM	1-2-20	1-3-20	
Fluoranthene	ND	0.041	EPA 8270E/SIM	1-2-20	1-3-20	
Pyrene	ND	0.041	EPA 8270E/SIM	1-2-20	1-3-20	
Benzo[a]anthracene	ND	0.041	EPA 8270E/SIM	1-2-20	1-3-20	
Chrysene	ND	0.041	EPA 8270E/SIM	1-2-20	1-3-20	
Benzo[b]fluoranthene	ND	0.041	EPA 8270E/SIM	1-2-20	1-3-20	
Benzo(j,k)fluoranthene	ND	0.041	EPA 8270E/SIM	1-2-20	1-3-20	
Benzo[a]pyrene	ND	0.041	EPA 8270E/SIM	1-2-20	1-3-20	
Indeno(1,2,3-c,d)pyrene	ND	0.041	EPA 8270E/SIM	1-2-20	1-3-20	
Dibenz[a,h]anthracene	ND	0.041	EPA 8270E/SIM	1-2-20	1-3-20	
Benzo[g,h,i]perylene	ND	0.041	EPA 8270E/SIM	1-2-20	1-3-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>77</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>82</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>65</i>	<i>45 - 122</i>				



Date of Report: January 10, 2020
 Samples Submitted: December 19, 2019
 Laboratory Reference: 1912-207
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0102S2					
Naphthalene	ND	0.0067	EPA 8270E/SIM	1-2-20	1-3-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	1-2-20	1-3-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	1-2-20	1-3-20	
Acenaphthylene	ND	0.0067	EPA 8270E/SIM	1-2-20	1-3-20	
Acenaphthene	ND	0.0067	EPA 8270E/SIM	1-2-20	1-3-20	
Fluorene	ND	0.0067	EPA 8270E/SIM	1-2-20	1-3-20	
Phenanthrene	ND	0.0067	EPA 8270E/SIM	1-2-20	1-3-20	
Anthracene	ND	0.0067	EPA 8270E/SIM	1-2-20	1-3-20	
Fluoranthene	ND	0.0067	EPA 8270E/SIM	1-2-20	1-3-20	
Pyrene	ND	0.0067	EPA 8270E/SIM	1-2-20	1-3-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	1-2-20	1-3-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	1-2-20	1-3-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	1-2-20	1-3-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	1-2-20	1-3-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	1-2-20	1-3-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	1-2-20	1-3-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	1-2-20	1-3-20	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270E/SIM	1-2-20	1-3-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>99</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>100</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>90</i>	<i>45 - 122</i>				



Date of Report: January 10, 2020
 Samples Submitted: December 19, 2019
 Laboratory Reference: 1912-207
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	12-271-01										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.139	0.129	0.167	0.167	ND	83	77	44 - 111	7	21	
Acenaphthylene	0.164	0.163	0.167	0.167	ND	98	98	47 - 122	1	24	
Acenaphthene	0.136	0.136	0.167	0.167	ND	81	81	46 - 122	0	24	
Fluorene	0.143	0.139	0.167	0.167	ND	86	83	53 - 118	3	23	
Phenanthrene	0.143	0.138	0.167	0.167	ND	86	83	41 - 124	4	24	
Anthracene	0.156	0.153	0.167	0.167	ND	93	92	53 - 119	2	21	
Fluoranthene	0.154	0.162	0.167	0.167	0.00895	87	92	39 - 135	5	32	
Pyrene	0.168	0.172	0.167	0.167	0.0103	94	97	39 - 134	2	34	
Benzo[a]anthracene	0.165	0.168	0.167	0.167	ND	99	101	53 - 131	2	23	
Chrysene	0.145	0.148	0.167	0.167	ND	87	89	46 - 126	2	24	
Benzo[b]fluoranthene	0.158	0.163	0.167	0.167	ND	95	98	45 - 127	3	25	
Benzo(j,k)fluoranthene	0.127	0.135	0.167	0.167	ND	76	81	52 - 122	6	21	
Benzo[a]pyrene	0.183	0.193	0.167	0.167	ND	110	116	51 - 126	5	24	
Indeno(1,2,3-c,d)pyrene	0.173	0.176	0.167	0.167	ND	104	105	48 - 127	2	23	
Dibenz[a,h]anthracene	0.151	0.147	0.167	0.167	ND	90	88	51 - 124	3	22	
Benzo(g,h,i)perylene	0.153	0.156	0.167	0.167	ND	92	93	50 - 120	2	22	
<i>Surrogate:</i>											
2-Fluorobiphenyl						81	78	40 - 111			
Pyrene-d10						84	82	40 - 110			
Terphenyl-d14						71	72	45 - 122			



Date of Report: January 10, 2020
Samples Submitted: December 19, 2019
Laboratory Reference: 1912-207
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
TP-2-20.0-121919	12-207-01	8	1-2-20
TP-2-15.0-121919	12-207-02	25	1-2-20
TP-3-20.0-121919	12-207-03	15	1-2-20
TP-3-15.0-121919	12-207-04	84	1-2-20





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 methods 8260 & 8270, 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





OnSite Environmental Inc.

Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

(other) _____

Laboratory Number: **12-207**

Company: Favallan Consulting

Project Number: 391-019

Project Name: Block 38 West

Project Manager: Suzy Stumpf Thomson K

Sampled by: Gary Roberts

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	TP-2-20.0-121919	12/19/19	0930	Soil	5
2	TP-2-15.0-121919	12/19/19	1000	Soil	5
3	TP-3-20.0-121919	12/19/19	1030	Soil	5
4	TP-3-15.0-121919	12/19/19	1045	Soil	5
5	TP-3-10.0-121919	12/19/19	1050	Soil	5

Matrix	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx <input checked="" type="checkbox"/> D3 <input checked="" type="checkbox"/> D3	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
Soil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>									<input checked="" type="checkbox"/>
Soil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>									<input checked="" type="checkbox"/>
Soil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>									<input checked="" type="checkbox"/>
Soil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>									<input checked="" type="checkbox"/>
Soil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>									<input checked="" type="checkbox"/>

Signature: [Signature] Company: Favallan

Received: [Signature] Date: 12/19/19 Time: 1400

Received: [Signature] Date: 12/19/19 Time: 1430

Relinquished: _____

Relinquished: _____

Relinquished: _____

Relinquished: _____

Reviewed/Date: _____

Comments/Special Instructions: Confirm sample analysis with project manager and turnaround time.

Added 12/19/19 D3 (STA) O Extract and hold.

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables



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

January 3, 2020

Javan Ruark
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1912-230

Dear Javan:

Enclosed are the analytical results and associated quality control data for samples submitted on December 23, 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 flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: January 3, 2020
Samples Submitted: December 23, 2019
Laboratory Reference: 1912-230
Project: 397-019

Case Narrative

Samples were collected on December 21, 2019 and received by the laboratory on December 23, 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.

NWTPH-Gx/BTEX Analysis

The chromatogram for sample FB-08-13 is not similar to a typical gas.

The MTCA Method A cleanup level of 0.030 ppm for Benzene is not achievable for sample FB-09-11 due to the low dry weight of the sample.

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: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-07-24					
Laboratory ID:	12-230-03					
Benzene	ND	0.020	EPA 8021B	12-26-19	12-27-19	
Toluene	ND	0.060	EPA 8021B	12-26-19	12-27-19	
Ethyl Benzene	ND	0.060	EPA 8021B	12-26-19	12-27-19	
m,p-Xylene	ND	0.060	EPA 8021B	12-26-19	12-27-19	
o-Xylene	ND	0.060	EPA 8021B	12-26-19	12-27-19	
Gasoline	ND	6.0	NWTPH-Gx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	92	58-129				
Client ID:	FB-07-29					
Laboratory ID:	12-230-04					
Benzene	ND	0.020	EPA 8021B	12-26-19	12-27-19	
Toluene	ND	0.054	EPA 8021B	12-26-19	12-27-19	
Ethyl Benzene	ND	0.054	EPA 8021B	12-26-19	12-27-19	
m,p-Xylene	ND	0.054	EPA 8021B	12-26-19	12-27-19	
o-Xylene	ND	0.054	EPA 8021B	12-26-19	12-27-19	
Gasoline	ND	5.4	NWTPH-Gx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	93	58-129				
Client ID:	FB-07-31.5					
Laboratory ID:	12-230-05					
Benzene	ND	0.020	EPA 8021B	12-26-19	12-27-19	
Toluene	ND	0.056	EPA 8021B	12-26-19	12-27-19	
Ethyl Benzene	ND	0.056	EPA 8021B	12-26-19	12-27-19	
m,p-Xylene	ND	0.056	EPA 8021B	12-26-19	12-27-19	
o-Xylene	ND	0.056	EPA 8021B	12-26-19	12-27-19	
Gasoline	ND	5.6	NWTPH-Gx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	92	58-129				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-08-2.5					
Laboratory ID:	12-230-06					
Benzene	0.12	0.023	EPA 8021B	12-26-19	12-27-19	
Toluene	0.49	0.11	EPA 8021B	12-26-19	12-27-19	
Ethyl Benzene	0.13	0.11	EPA 8021B	12-26-19	12-27-19	
m,p-Xylene	0.58	0.11	EPA 8021B	12-26-19	12-27-19	
o-Xylene	0.36	0.11	EPA 8021B	12-26-19	12-27-19	
Gasoline	23	11	NWTPH-Gx	12-26-19	12-27-19	O
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	77	58-129				
Client ID:	FB-08-8					
Laboratory ID:	12-230-07					
Benzene	ND	0.020	EPA 8021B	12-26-19	12-27-19	
Toluene	ND	0.052	EPA 8021B	12-26-19	12-27-19	
Ethyl Benzene	ND	0.052	EPA 8021B	12-26-19	12-27-19	
m,p-Xylene	ND	0.052	EPA 8021B	12-26-19	12-27-19	
o-Xylene	ND	0.052	EPA 8021B	12-26-19	12-27-19	
Gasoline	ND	5.2	NWTPH-Gx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	101	58-129				
Client ID:	FB-08-13					
Laboratory ID:	12-230-08					
Benzene	ND	0.020	EPA 8021B	12-26-19	12-27-19	
Toluene	ND	0.064	EPA 8021B	12-26-19	12-27-19	
Ethyl Benzene	ND	0.064	EPA 8021B	12-26-19	12-27-19	
m,p-Xylene	ND	0.064	EPA 8021B	12-26-19	12-27-19	
o-Xylene	ND	0.064	EPA 8021B	12-26-19	12-27-19	
Gasoline	15	6.4	NWTPH-Gx	12-26-19	12-27-19	T
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	95	58-129				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-08-18					
Laboratory ID:	12-230-09					
Benzene	ND	0.020	EPA 8021B	12-26-19	12-27-19	
Toluene	ND	0.061	EPA 8021B	12-26-19	12-27-19	
Ethyl Benzene	ND	0.061	EPA 8021B	12-26-19	12-27-19	
m,p-Xylene	ND	0.061	EPA 8021B	12-26-19	12-27-19	
o-Xylene	ND	0.061	EPA 8021B	12-26-19	12-27-19	
Gasoline	ND	6.1	NWTPH-Gx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	90	58-129				
Client ID:	FB-08-30.5					
Laboratory ID:	12-230-11					
Benzene	ND	0.020	EPA 8021B	12-26-19	12-27-19	
Toluene	ND	0.060	EPA 8021B	12-26-19	12-27-19	
Ethyl Benzene	ND	0.060	EPA 8021B	12-26-19	12-27-19	
m,p-Xylene	ND	0.060	EPA 8021B	12-26-19	12-27-19	
o-Xylene	ND	0.060	EPA 8021B	12-26-19	12-27-19	
Gasoline	ND	6.0	NWTPH-Gx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	95	58-129				
Client ID:	FB-09-11					
Laboratory ID:	12-230-12					
Benzene	ND	0.039	EPA 8021B	12-26-19	12-27-19	
Toluene	ND	0.20	EPA 8021B	12-26-19	12-27-19	
Ethyl Benzene	ND	0.20	EPA 8021B	12-26-19	12-27-19	
m,p-Xylene	ND	0.20	EPA 8021B	12-26-19	12-27-19	
o-Xylene	ND	0.20	EPA 8021B	12-26-19	12-27-19	
Gasoline	ND	20	NWTPH-Gx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	93	58-129				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-09-33					
Laboratory ID:	12-230-14					
Benzene	ND	0.020	EPA 8021B	12-26-19	12-27-19	
Toluene	ND	0.058	EPA 8021B	12-26-19	12-27-19	
Ethyl Benzene	ND	0.058	EPA 8021B	12-26-19	12-27-19	
m,p-Xylene	ND	0.058	EPA 8021B	12-26-19	12-27-19	
o-Xylene	ND	0.058	EPA 8021B	12-26-19	12-27-19	
Gasoline	ND	5.8	NWTPH-Gx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>99</i>	<i>58-129</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1226S1					
Benzene	ND	0.020	EPA 8021B	12-26-19	12-26-19	
Toluene	ND	0.050	EPA 8021B	12-26-19	12-26-19	
Ethyl Benzene	ND	0.050	EPA 8021B	12-26-19	12-26-19	
m,p-Xylene	ND	0.050	EPA 8021B	12-26-19	12-26-19	
o-Xylene	ND	0.050	EPA 8021B	12-26-19	12-26-19	
Gasoline	ND	5.0	NWTPH-Gx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	77	58-129				
Laboratory ID:	MB1226S2					
Benzene	ND	0.020	EPA 8021B	12-26-19	12-26-19	
Toluene	ND	0.050	EPA 8021B	12-26-19	12-26-19	
Ethyl Benzene	ND	0.050	EPA 8021B	12-26-19	12-26-19	
m,p-Xylene	ND	0.050	EPA 8021B	12-26-19	12-26-19	
o-Xylene	ND	0.050	EPA 8021B	12-26-19	12-26-19	
Gasoline	ND	5.0	NWTPH-Gx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	79	58-129				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-243-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
Fluorobenzene				80	83	58-129		
Laboratory ID:	12-243-02							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
Fluorobenzene				77	77	58-129		
SPIKE BLANKS								
Laboratory ID:	SB1226S1							
	SB	SBD	SB	SBD	SB	SBD		
Benzene	0.904	0.935	1.00	1.00	90	94	69-109	3 10
Toluene	0.948	0.968	1.00	1.00	95	97	67-112	2 10
Ethyl Benzene	0.967	0.982	1.00	1.00	97	98	67-113	2 10
m,p-Xylene	0.960	0.971	1.00	1.00	96	97	66-114	1 11
o-Xylene	0.949	0.961	1.00	1.00	95	96	68-112	1 11
<i>Surrogate:</i>								
Fluorobenzene					94	97	58-129	



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-07-24					
Laboratory ID:	12-230-03					
Diesel Range Organics	ND	30	NWTPH-Dx	12-26-19	12-27-19	
Lube Oil Range Organics	ND	60	NWTPH-Dx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	77	50-150				

Client ID:	FB-07-29					
Laboratory ID:	12-230-04					
Diesel Range Organics	ND	30	NWTPH-Dx	12-26-19	12-27-19	
Lube Oil Range Organics	ND	60	NWTPH-Dx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	76	50-150				

Client ID:	FB-07-31.5					
Laboratory ID:	12-230-05					
Diesel Range Organics	ND	30	NWTPH-Dx	12-26-19	12-27-19	
Lube Oil Range Organics	ND	60	NWTPH-Dx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	79	50-150				

Client ID:	FB-08-2.5					
Laboratory ID:	12-230-06					
Diesel Range Organics	1700	360	NWTPH-Dx	12-26-19	12-30-19	N
Lube Oil Range Organics	4500	710	NWTPH-Dx	12-26-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	---	50-150				S

Client ID:	FB-08-8					
Laboratory ID:	12-230-07					
Diesel Range Organics	ND	29	NWTPH-Dx	12-26-19	12-27-19	
Lube Oil Range Organics	ND	58	NWTPH-Dx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	57	50-150				

Client ID:	FB-08-13					
Laboratory ID:	12-230-08					
Diesel Range Organics	ND	31	NWTPH-Dx	12-26-19	12-27-19	
Lube Oil Range Organics	ND	61	NWTPH-Dx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	61	50-150				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-08-18					
Laboratory ID:	12-230-09					
Diesel Range Organics	ND	29	NWTPH-Dx	12-26-19	12-27-19	
Lube Oil Range Organics	ND	58	NWTPH-Dx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	69	50-150				

Client ID:	FB-08-30.5					
Laboratory ID:	12-230-11					
Diesel Range Organics	ND	31	NWTPH-Dx	12-26-19	12-27-19	
Lube Oil Range Organics	ND	61	NWTPH-Dx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	65	50-150				

Client ID:	FB-09-11					
Laboratory ID:	12-230-12					
Diesel Range Organics	ND	58	NWTPH-Dx	12-26-19	12-27-19	
Lube Oil Range Organics	220	120	NWTPH-Dx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	54	50-150				

Client ID:	FB-09-33					
Laboratory ID:	12-230-14					
Diesel Range Organics	ND	31	NWTPH-Dx	1-2-20	1-3-20	
Lube Oil Range Organics	ND	62	NWTPH-Dx	1-2-20	1-3-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	66	50-150				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0102S3					
Diesel Range Organics	ND	25	NWTPH-Dx	1-2-20	1-2-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	1-2-20	1-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	96	50-150				
Laboratory ID:	MB1226S3					
Diesel Range Organics	ND	25	NWTPH-Dx	12-26-19	12-27-19	
Lube Oil Range Organics	ND	50	NWTPH-Dx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	71	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-230-03							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				77	65	50-150		
Laboratory ID:	12-230-04							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				76	77	50-150		
Laboratory ID:	SB0102S3							
	ORIG	DUP						
Diesel Fuel #2	93.8	93.1	NA	NA	NA	NA	1	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				86	88	50-150		



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-07-24					
Laboratory ID:	12-230-03					
Naphthalene	0.028	0.0081	EPA 8270E/SIM	12-27-19	12-31-19	
2-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-31-19	
1-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-31-19	
Benzo[a]anthracene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-31-19	
Chrysene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-31-19	
Benzo[b]fluoranthene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-31-19	
Benzo(j,k)fluoranthene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-31-19	
Benzo[a]pyrene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-31-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>88</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>92</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>100</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-07-29					
Laboratory ID:	12-230-04					
Naphthalene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
2-Methylnaphthalene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
1-Methylnaphthalene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[a]anthracene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
Chrysene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[b]fluoranthene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo(j,k)fluoranthene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[a]pyrene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
Dibenz[a,h]anthracene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>89</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>98</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>96</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-07-31.5					
Laboratory ID:	12-230-05					
Naphthalene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
2-Methylnaphthalene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
1-Methylnaphthalene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[a]anthracene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
Chrysene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[b]fluoranthene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo(j,k)fluoranthene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[a]pyrene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
Dibenz[a,h]anthracene	ND	0.0080	EPA 8270E/SIM	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>96</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>110</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>97</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-08-2.5					
Laboratory ID:	12-230-06					
Naphthalene	3.8	0.095	EPA 8270E/SIM	12-27-19	12-30-19	
2-Methylnaphthalene	5.5	0.095	EPA 8270E/SIM	12-27-19	12-30-19	
1-Methylnaphthalene	5.0	0.095	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[a]anthracene	4.6	0.095	EPA 8270E/SIM	12-27-19	12-30-19	
Chrysene	4.7	0.095	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[b]fluoranthene	6.4	0.095	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo(j,k)fluoranthene	2.0	0.095	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[a]pyrene	4.8	0.095	EPA 8270E/SIM	12-27-19	12-30-19	
Indeno(1,2,3-c,d)pyrene	3.1	0.095	EPA 8270E/SIM	12-27-19	12-30-19	
Dibenz[a,h]anthracene	0.70	0.095	EPA 8270E/SIM	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>79</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>82</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>79</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-08-8					
Laboratory ID:	12-230-07					
Naphthalene	0.013	0.0078	EPA 8270E/SIM	12-27-19	12-31-19	
2-Methylnaphthalene	0.0089	0.0078	EPA 8270E/SIM	12-27-19	12-31-19	
1-Methylnaphthalene	ND	0.0078	EPA 8270E/SIM	12-27-19	12-31-19	
Benzo[a]anthracene	0.013	0.0078	EPA 8270E/SIM	12-27-19	12-31-19	
Chrysene	0.015	0.0078	EPA 8270E/SIM	12-27-19	12-31-19	
Benzo[b]fluoranthene	0.017	0.0078	EPA 8270E/SIM	12-27-19	12-31-19	
Benzo(j,k)fluoranthene	ND	0.0078	EPA 8270E/SIM	12-27-19	12-31-19	
Benzo[a]pyrene	0.015	0.0078	EPA 8270E/SIM	12-27-19	12-31-19	
Indeno(1,2,3-c,d)pyrene	0.011	0.0078	EPA 8270E/SIM	12-27-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.0078	EPA 8270E/SIM	12-27-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>91</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>94</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>90</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-08-13					
Laboratory ID:	12-230-08					
Naphthalene	4.6	0.082	EPA 8270E/SIM	12-27-19	12-30-19	
2-Methylnaphthalene	2.3	0.082	EPA 8270E/SIM	12-27-19	12-30-19	
1-Methylnaphthalene	1.9	0.082	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[a]anthracene	ND	0.0082	EPA 8270E/SIM	12-27-19	12-30-19	
Chrysene	ND	0.0082	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[b]fluoranthene	ND	0.0082	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo(j,k)fluoranthene	ND	0.0082	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[a]pyrene	ND	0.0082	EPA 8270E/SIM	12-27-19	12-30-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0082	EPA 8270E/SIM	12-27-19	12-30-19	
Dibenz[a,h]anthracene	ND	0.0082	EPA 8270E/SIM	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>91</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>102</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>90</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-08-18					
Laboratory ID:	12-230-09					
Naphthalene	0.12	0.0077	EPA 8270E/SIM	12-27-19	12-30-19	
2-Methylnaphthalene	0.040	0.0077	EPA 8270E/SIM	12-27-19	12-30-19	
1-Methylnaphthalene	0.040	0.0077	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[a]anthracene	ND	0.0077	EPA 8270E/SIM	12-27-19	12-30-19	
Chrysene	ND	0.0077	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[b]fluoranthene	ND	0.0077	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo(j,k)fluoranthene	ND	0.0077	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[a]pyrene	ND	0.0077	EPA 8270E/SIM	12-27-19	12-30-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0077	EPA 8270E/SIM	12-27-19	12-30-19	
Dibenz[a,h]anthracene	ND	0.0077	EPA 8270E/SIM	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>87</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>110</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>91</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-08-30.5					
Laboratory ID:	12-230-11					
Naphthalene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-30-19	
2-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-30-19	
1-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[a]anthracene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-30-19	
Chrysene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[b]fluoranthene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo(j,k)fluoranthene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[a]pyrene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-30-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-30-19	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270E/SIM	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>86</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>102</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>80</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-09-11					
Laboratory ID:	12-230-12					
Naphthalene	ND	0.015	EPA 8270E/SIM	12-27-19	12-30-19	
2-Methylnaphthalene	ND	0.015	EPA 8270E/SIM	12-27-19	12-30-19	
1-Methylnaphthalene	ND	0.015	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[a]anthracene	ND	0.015	EPA 8270E/SIM	12-27-19	12-30-19	
Chrysene	ND	0.015	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[b]fluoranthene	0.021	0.015	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo(j,k)fluoranthene	ND	0.015	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[a]pyrene	0.018	0.015	EPA 8270E/SIM	12-27-19	12-30-19	
Indeno(1,2,3-c,d)pyrene	ND	0.015	EPA 8270E/SIM	12-27-19	12-30-19	
Dibenz[a,h]anthracene	ND	0.015	EPA 8270E/SIM	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>78</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>94</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>81</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FB-09-33					
Laboratory ID:	12-230-14					
Naphthalene	ND	0.0083	EPA 8270E/SIM	12-27-19	12-30-19	
2-Methylnaphthalene	ND	0.0083	EPA 8270E/SIM	12-27-19	12-30-19	
1-Methylnaphthalene	ND	0.0083	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[a]anthracene	ND	0.0083	EPA 8270E/SIM	12-27-19	12-30-19	
Chrysene	ND	0.0083	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[b]fluoranthene	ND	0.0083	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo(j,k)fluoranthene	ND	0.0083	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[a]pyrene	ND	0.0083	EPA 8270E/SIM	12-27-19	12-30-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0083	EPA 8270E/SIM	12-27-19	12-30-19	
Dibenz[a,h]anthracene	ND	0.0083	EPA 8270E/SIM	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>87</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>105</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>90</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1227S2					
Naphthalene	ND	0.0067	EPA 8270E/SIM	12-27-19	12-30-19	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	12-27-19	12-30-19	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	12-27-19	12-30-19	
Chrysene	ND	0.0067	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	12-27-19	12-30-19	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	12-27-19	12-30-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	12-27-19	12-30-19	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>101</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>106</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>101</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-230
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
					Result	Recovery	Limits		RPD	Limit	
MATRIX SPIKES											
Laboratory ID:	12-230-04										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0801	0.0751	0.0833	0.0833	ND	96	90	44 - 111	6	21	
Acenaphthylene	0.0819	0.0792	0.0833	0.0833	ND	98	95	47 - 122	3	24	
Acenaphthene	0.0821	0.0866	0.0833	0.0833	ND	99	104	46 - 122	5	24	
Fluorene	0.0820	0.0786	0.0833	0.0833	ND	98	94	53 - 118	4	23	
Phenanthrene	0.0810	0.0773	0.0833	0.0833	ND	97	93	41 - 124	5	24	
Anthracene	0.0902	0.0858	0.0833	0.0833	ND	108	103	53 - 119	5	21	
Fluoranthene	0.0870	0.0846	0.0833	0.0833	ND	104	102	39 - 135	3	32	
Pyrene	0.0876	0.0854	0.0833	0.0833	ND	105	103	39 - 134	3	34	
Benzo[a]anthracene	0.0847	0.0862	0.0833	0.0833	ND	102	103	53 - 131	2	23	
Chrysene	0.0822	0.0837	0.0833	0.0833	ND	99	100	46 - 126	2	24	
Benzo[b]fluoranthene	0.0827	0.0799	0.0833	0.0833	ND	99	96	45 - 127	3	25	
Benzo(j,k)fluoranthene	0.0774	0.0796	0.0833	0.0833	ND	93	96	52 - 122	3	21	
Benzo[a]pyrene	0.0792	0.0809	0.0833	0.0833	ND	95	97	51 - 126	2	24	
Indeno(1,2,3-c,d)pyrene	0.0756	0.0774	0.0833	0.0833	ND	91	93	48 - 127	2	23	
Dibenz[a,h]anthracene	0.0718	0.0751	0.0833	0.0833	ND	86	90	51 - 124	4	22	
Benzo[g,h,i]perylene	0.0799	0.0803	0.0833	0.0833	ND	96	96	50 - 120	0	22	
<i>Surrogate:</i>											
<i>2-Fluorobiphenyl</i>						<i>91</i>	<i>86</i>	<i>40 - 111</i>			
<i>Pyrene-d10</i>						<i>103</i>	<i>101</i>	<i>40 - 110</i>			
<i>Terphenyl-d14</i>						<i>94</i>	<i>94</i>	<i>45 - 122</i>			



Date of Report: January 3, 2020
Samples Submitted: December 23, 2019
Laboratory Reference: 1912-230
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FB-07-24	12-230-03	17	12-26-19
FB-07-29	12-230-04	17	12-26-19
FB-07-31.5	12-230-05	16	12-26-19
FB-08-2.5	12-230-06	30	12-26-19
FB-08-8	12-230-07	14	12-26-19
FB-08-13	12-230-08	18	12-26-19
FB-08-18	12-230-09	13	12-26-19
FB-08-30.5	12-230-11	18	12-26-19
FB-09-11	12-230-12	57	12-26-19
FB-09-33	12-230-14	19	12-26-19





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 gas.
 - 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 methods 8260 & 8270, 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





Onsite Environmental Inc.
Analytical Laboratory Testing Services

14649 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)

(Check One)

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

(other)

Laboratory Number: 12-230

Company: F2-2110n
 Project Number: 397-019
 Project Name: Block 38
 Project Manager: J. Ruck / S. Stumpf
 Sampled by: YP/AB

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	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)	cPAHs + Naphthalenes	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture	
1	FR-07-5	12-21-19	13:49	S	5																				
2	FR-07-10		13:58		5																				
3	FR-07-24		14:14		2																				
4	FR-07-29		14:25																						
5	FR-07-31.5		14:30																						
6	FR-08-2.5		12:05																						
7	FR-08-8		11:20																						
8	FR-08-13		11:23																						
9	FR-08-18		11:32																						
10	FR-08-23		11:45																						

Relinquished	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished		F2-2110n	12-28	1900	(X) Added 12/23/19 STA
Received	<u>Van</u>	Spdy	12/23/19	925	
Relinquished	<u>Van</u>	Spdy	12/23/19	1250	
Received		QRT	12/23/19	1250	
Relinquished					
Received					
Reviewed/Date					Chromatograms with final report <input type="checkbox"/> Electronic Data Deliverables (EDDs) <input type="checkbox"/>

HOLD



**OnSite
Environmental Inc.**

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

January 3, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1912-231

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on December 23, 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,

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: January 3, 2020
Samples Submitted: December 23, 2019
Laboratory Reference: 1912-231
Project: 397-019

Case Narrative

Samples were collected on December 20, 21 and 22, 2019 and received by the laboratory on December 23, 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.

NWTPH-Gx/BTEX Analysis

The MTCA Method A cleanup level of 0.030 ppm for Benzene is not achievable for samples FWM-144-9.0 and FMW-147-8.5 due to the low dry weight of the samples.

The MTCA Method A cleanup level of 30.0 ppm for fresh gasoline is not achievable for sample FMW-147-8.5 due to the low dry weight of the sample.

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: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FWM-144-9.0					
Laboratory ID:	12-231-01					
Benzene	ND	0.036	EPA 8021B	12-27-19	12-30-19	
Toluene	ND	0.18	EPA 8021B	12-27-19	12-30-19	
Ethyl Benzene	ND	0.18	EPA 8021B	12-27-19	12-30-19	
m,p-Xylene	ND	0.18	EPA 8021B	12-27-19	12-30-19	
o-Xylene	ND	0.18	EPA 8021B	12-27-19	12-30-19	
Gasoline	ND	18	NWTPH-Gx	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	72	58-129				
Client ID:	FMW-145-13.0					
Laboratory ID:	12-231-02					
Benzene	ND	0.020	EPA 8021B	12-27-19	12-30-19	
Toluene	ND	0.075	EPA 8021B	12-27-19	12-30-19	
Ethyl Benzene	ND	0.075	EPA 8021B	12-27-19	12-30-19	
m,p-Xylene	ND	0.075	EPA 8021B	12-27-19	12-30-19	
o-Xylene	ND	0.075	EPA 8021B	12-27-19	12-30-19	
Gasoline	83	7.5	NWTPH-Gx	12-27-19	12-30-19	O
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	84	58-129				
Client ID:	FMW-145-23.0					
Laboratory ID:	12-231-03					
Benzene	ND	0.020	EPA 8021B	12-27-19	12-30-19	
Toluene	ND	0.053	EPA 8021B	12-27-19	12-30-19	
Ethyl Benzene	ND	0.053	EPA 8021B	12-27-19	12-30-19	
m,p-Xylene	ND	0.053	EPA 8021B	12-27-19	12-30-19	
o-Xylene	ND	0.053	EPA 8021B	12-27-19	12-30-19	
Gasoline	ND	5.3	NWTPH-Gx	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	75	58-129				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-145-28.0					
Laboratory ID:	12-231-04					
Benzene	ND	0.020	EPA 8021B	12-27-19	12-30-19	
Toluene	ND	0.065	EPA 8021B	12-27-19	12-30-19	
Ethyl Benzene	ND	0.065	EPA 8021B	12-27-19	12-30-19	
m,p-Xylene	ND	0.065	EPA 8021B	12-27-19	12-30-19	
o-Xylene	ND	0.065	EPA 8021B	12-27-19	12-30-19	
Gasoline	ND	6.5	NWTPH-Gx	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	82	58-129				
Client ID:	FMW-145-30.5					
Laboratory ID:	12-231-05					
Benzene	ND	0.020	EPA 8021B	12-27-19	12-30-19	
Toluene	ND	0.048	EPA 8021B	12-27-19	12-30-19	
Ethyl Benzene	ND	0.048	EPA 8021B	12-27-19	12-30-19	
m,p-Xylene	ND	0.048	EPA 8021B	12-27-19	12-30-19	
o-Xylene	ND	0.048	EPA 8021B	12-27-19	12-30-19	
Gasoline	ND	4.8	NWTPH-Gx	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	77	58-129				
Client ID:	FMW-145-33.0					
Laboratory ID:	12-231-06					
Benzene	ND	0.020	EPA 8021B	12-27-19	12-30-19	
Toluene	ND	0.055	EPA 8021B	12-27-19	12-30-19	
Ethyl Benzene	ND	0.055	EPA 8021B	12-27-19	12-30-19	
m,p-Xylene	ND	0.055	EPA 8021B	12-27-19	12-30-19	
o-Xylene	ND	0.055	EPA 8021B	12-27-19	12-30-19	
Gasoline	ND	5.5	NWTPH-Gx	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	81	58-129				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-145-18.0					
Laboratory ID:	12-231-07					
Benzene	ND	0.020	EPA 8021B	12-27-19	12-30-19	
Toluene	ND	0.080	EPA 8021B	12-27-19	12-30-19	
Ethyl Benzene	ND	0.080	EPA 8021B	12-27-19	12-30-19	
m,p-Xylene	ND	0.080	EPA 8021B	12-27-19	12-30-19	
o-Xylene	ND	0.080	EPA 8021B	12-27-19	12-30-19	
Gasoline	ND	28	NWTPH-Gx	12-27-19	12-30-19	U1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	84	58-129				
Client ID:	FMW-146-13.0					
Laboratory ID:	12-231-08					
Benzene	ND	0.020	EPA 8021B	12-27-19	12-30-19	
Toluene	ND	0.070	EPA 8021B	12-27-19	12-30-19	
Ethyl Benzene	ND	0.070	EPA 8021B	12-27-19	12-30-19	
m,p-Xylene	ND	0.070	EPA 8021B	12-27-19	12-30-19	
o-Xylene	ND	0.070	EPA 8021B	12-27-19	12-30-19	
Gasoline	ND	7.0	NWTPH-Gx	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	82	58-129				
Client ID:	FMW-146-18.0					
Laboratory ID:	12-231-09					
Benzene	ND	0.020	EPA 8021B	12-27-19	12-30-19	
Toluene	ND	0.054	EPA 8021B	12-27-19	12-30-19	
Ethyl Benzene	ND	0.054	EPA 8021B	12-27-19	12-30-19	
m,p-Xylene	ND	0.054	EPA 8021B	12-27-19	12-30-19	
o-Xylene	ND	0.054	EPA 8021B	12-27-19	12-30-19	
Gasoline	ND	5.4	NWTPH-Gx	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	76	58-129				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-147-8.5					
Laboratory ID:	12-231-10					
Benzene	ND	0.10	EPA 8021B	12-27-19	12-30-19	
Toluene	ND	0.51	EPA 8021B	12-27-19	12-30-19	
Ethyl Benzene	ND	0.51	EPA 8021B	12-27-19	12-30-19	
m,p-Xylene	ND	0.51	EPA 8021B	12-27-19	12-30-19	
o-Xylene	ND	0.51	EPA 8021B	12-27-19	12-30-19	
Gasoline	ND	51	NWTPH-Gx	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	70	58-129				
Client ID:	FMW-147-13.5					
Laboratory ID:	12-231-11					
Benzene	ND	0.020	EPA 8021B	12-27-19	12-30-19	
Toluene	ND	0.055	EPA 8021B	12-27-19	12-30-19	
Ethyl Benzene	ND	0.055	EPA 8021B	12-27-19	12-30-19	
m,p-Xylene	ND	0.055	EPA 8021B	12-27-19	12-30-19	
o-Xylene	ND	0.055	EPA 8021B	12-27-19	12-30-19	
Gasoline	ND	5.5	NWTPH-Gx	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	77	58-129				
Client ID:	FMW-147-23.5					
Laboratory ID:	12-231-12					
Benzene	ND	0.020	EPA 8021B	12-27-19	12-30-19	
Toluene	ND	0.051	EPA 8021B	12-27-19	12-30-19	
Ethyl Benzene	ND	0.051	EPA 8021B	12-27-19	12-30-19	
m,p-Xylene	ND	0.051	EPA 8021B	12-27-19	12-30-19	
o-Xylene	ND	0.051	EPA 8021B	12-27-19	12-30-19	
Gasoline	ND	5.1	NWTPH-Gx	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	75	58-129				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-147-30.5					
Laboratory ID:	12-231-13					
Benzene	ND	0.020	EPA 8021B	12-27-19	12-30-19	
Toluene	ND	0.064	EPA 8021B	12-27-19	12-30-19	
Ethyl Benzene	ND	0.064	EPA 8021B	12-27-19	12-30-19	
m,p-Xylene	ND	0.064	EPA 8021B	12-27-19	12-30-19	
o-Xylene	ND	0.064	EPA 8021B	12-27-19	12-30-19	
Gasoline	ND	6.4	NWTPH-Gx	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	76	58-129				
Client ID:	FMW-149-21.0					
Laboratory ID:	12-231-15					
Benzene	ND	0.020	EPA 8021B	12-27-19	12-30-19	
Toluene	ND	0.070	EPA 8021B	12-27-19	12-30-19	
Ethyl Benzene	ND	0.070	EPA 8021B	12-27-19	12-30-19	
m,p-Xylene	ND	0.070	EPA 8021B	12-27-19	12-30-19	
o-Xylene	ND	0.070	EPA 8021B	12-27-19	12-30-19	
Gasoline	ND	7.0	NWTPH-Gx	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	77	58-129				
Client ID:	FMW-149-31.0					
Laboratory ID:	12-231-16					
Benzene	ND	0.020	EPA 8021B	12-27-19	12-30-19	
Toluene	ND	0.063	EPA 8021B	12-27-19	12-30-19	
Ethyl Benzene	ND	0.063	EPA 8021B	12-27-19	12-30-19	
m,p-Xylene	ND	0.063	EPA 8021B	12-27-19	12-30-19	
o-Xylene	ND	0.063	EPA 8021B	12-27-19	12-30-19	
Gasoline	ND	6.3	NWTPH-Gx	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	79	58-129				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-149-41.0					
Laboratory ID:	12-231-18					
Benzene	ND	0.020	EPA 8021B	12-27-19	12-30-19	
Toluene	ND	0.044	EPA 8021B	12-27-19	12-30-19	
Ethyl Benzene	ND	0.044	EPA 8021B	12-27-19	12-30-19	
m,p-Xylene	ND	0.044	EPA 8021B	12-27-19	12-30-19	
o-Xylene	ND	0.044	EPA 8021B	12-27-19	12-30-19	
Gasoline	ND	4.4	NWTPH-Gx	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	73	58-129				
Client ID:	FMW-149-43.5					
Laboratory ID:	12-231-19					
Benzene	ND	0.020	EPA 8021B	12-27-19	12-30-19	
Toluene	ND	0.043	EPA 8021B	12-27-19	12-30-19	
Ethyl Benzene	ND	0.043	EPA 8021B	12-27-19	12-30-19	
m,p-Xylene	ND	0.043	EPA 8021B	12-27-19	12-30-19	
o-Xylene	ND	0.043	EPA 8021B	12-27-19	12-30-19	
Gasoline	ND	4.3	NWTPH-Gx	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	75	58-129				
Client ID:	FMW-148-27.0					
Laboratory ID:	12-231-22					
Benzene	ND	0.020	EPA 8021B	12-27-19	12-30-19	
Toluene	ND	0.057	EPA 8021B	12-27-19	12-30-19	
Ethyl Benzene	ND	0.057	EPA 8021B	12-27-19	12-30-19	
m,p-Xylene	ND	0.057	EPA 8021B	12-27-19	12-30-19	
o-Xylene	ND	0.057	EPA 8021B	12-27-19	12-30-19	
Gasoline	ND	5.7	NWTPH-Gx	12-27-19	12-30-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	75	58-129				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1227S1					
Benzene	ND	0.020	EPA 8021B	12-27-19	12-27-19	
Toluene	ND	0.050	EPA 8021B	12-27-19	12-27-19	
Ethyl Benzene	ND	0.050	EPA 8021B	12-27-19	12-27-19	
m,p-Xylene	ND	0.050	EPA 8021B	12-27-19	12-27-19	
o-Xylene	ND	0.050	EPA 8021B	12-27-19	12-27-19	
Gasoline	ND	5.0	NWTPH-Gx	12-27-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	76	58-129				
Laboratory ID:	MB1227S2					
Benzene	ND	0.020	EPA 8021B	12-27-19	12-27-19	
Toluene	ND	0.050	EPA 8021B	12-27-19	12-27-19	
Ethyl Benzene	ND	0.050	EPA 8021B	12-27-19	12-27-19	
m,p-Xylene	ND	0.050	EPA 8021B	12-27-19	12-27-19	
o-Xylene	ND	0.050	EPA 8021B	12-27-19	12-27-19	
Gasoline	ND	5.0	NWTPH-Gx	12-27-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	76	58-129				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	12-251-01									
	ORIG	DUP								
Benzene	ND	ND	NA	NA		NA	NA	NA	30	
Toluene	ND	ND	NA	NA		NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA		NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA		NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA		NA	NA	NA	30	
Gasoline	ND	ND	NA	NA		NA	NA	NA	30	
<i>Surrogate:</i>										
Fluorobenzene						84	78	58-129		
Laboratory ID:	12-251-02									
	ORIG	DUP								
Benzene	ND	ND	NA	NA		NA	NA	NA	30	
Toluene	ND	ND	NA	NA		NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA		NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA		NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA		NA	NA	NA	30	
Gasoline	ND	ND	NA	NA		NA	NA	NA	30	
<i>Surrogate:</i>										
Fluorobenzene						87	86	58-129		
SPIKE BLANKS										
Laboratory ID:	SB1227S1									
	SB	SBD	SB	SBD		SB	SBD			
Benzene	0.918	0.939	1.00	1.00		92	94	69-109	2	10
Toluene	0.949	0.975	1.00	1.00		95	98	67-112	3	10
Ethyl Benzene	0.963	0.992	1.00	1.00		96	99	67-113	3	10
m,p-Xylene	0.945	0.974	1.00	1.00		95	97	66-114	3	11
o-Xylene	0.946	0.974	1.00	1.00		95	97	68-112	3	11
<i>Surrogate:</i>										
Fluorobenzene						95	96	58-129		



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FWM-144-9.0					
Laboratory ID:	12-231-01					
Diesel Range Organics	ND	52	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	110	100	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	68	50-150				

Client ID:	FMW-145-13.0					
Laboratory ID:	12-231-02					
Diesel Range Organics	650	34	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	1400	69	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	85	50-150				

Client ID:	FMW-145-23.0					
Laboratory ID:	12-231-03					
Diesel Range Organics	ND	30	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	ND	60	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	71	50-150				

Client ID:	FMW-145-28.0					
Laboratory ID:	12-231-04					
Diesel Range Organics	ND	31	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	ND	61	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	70	50-150				

Client ID:	FMW-145-30.5					
Laboratory ID:	12-231-05					
Diesel Range Organics	ND	29	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	ND	57	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	77	50-150				

Client ID:	FMW-145-33.0					
Laboratory ID:	12-231-06					
Diesel Range Organics	ND	31	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	ND	61	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	57	50-150				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-145-18.0					
Laboratory ID:	12-231-07					
Diesel Range Organics	58	36	NWTPH-Dx	12-26-19	12-26-19	N
Lube Oil Range Organics	210	72	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	76	50-150				

Client ID:	FMW-146-13.0					
Laboratory ID:	12-231-08					
Diesel Range Organics	ND	34	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	ND	69	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	89	50-150				

Client ID:	FMW-146-18.0					
Laboratory ID:	12-231-09					
Diesel Range Organics	ND	31	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	ND	62	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	63	50-150				

Client ID:	FMW-147-8.5					
Laboratory ID:	12-231-10					
Diesel Range Organics	ND	120	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	1100	230	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	59	50-150				

Client ID:	FMW-147-13.5					
Laboratory ID:	12-231-11					
Diesel Range Organics	ND	31	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	ND	61	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	72	50-150				

Client ID:	FMW-147-23.5					
Laboratory ID:	12-231-12					
Diesel Range Organics	ND	30	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	ND	61	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	64	50-150				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-147-30.5					
Laboratory ID:	12-231-13					
Diesel Range Organics	ND	30	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	ND	61	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	74	50-150				

Client ID:	FMW-149-21.0					
Laboratory ID:	12-231-15					
Diesel Range Organics	ND	33	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	ND	66	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	61	50-150				

Client ID:	FMW-149-31.0					
Laboratory ID:	12-231-16					
Diesel Range Organics	ND	31	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	ND	63	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	80	50-150				

Client ID:	FMW-149-41.0					
Laboratory ID:	12-231-18					
Diesel Range Organics	ND	26	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	ND	53	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	76	50-150				

Client ID:	FMW-149-43.5					
Laboratory ID:	12-231-19					
Diesel Range Organics	ND	28	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	ND	56	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	68	50-150				

Client ID:	FMW-148-27.0					
Laboratory ID:	12-231-22					
Diesel Range Organics	ND	31	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	ND	63	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	53	50-150				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB1226S2					
Diesel Range Organics	ND	25	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	ND	50	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	94	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-231-01							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range Organics	54.3	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				68	61	50-150		
Laboratory ID:	12-231-02							
	ORIG	DUP						
Diesel Range Organics	472	331	NA	NA	NA	NA	35	NA
Lube Oil Range Organics	1010	730	NA	NA	NA	NA	32	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				85	75	50-150		



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FWM-144-9.0					
Laboratory ID:	12-231-01					
Naphthalene	ND	0.014	EPA 8270E/SIM	12-30-19	12-31-19	
2-Methylnaphthalene	ND	0.014	EPA 8270E/SIM	12-30-19	12-31-19	
1-Methylnaphthalene	ND	0.014	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]anthracene	0.033	0.014	EPA 8270E/SIM	12-30-19	12-31-19	
Chrysene	0.032	0.014	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[b]fluoranthene	0.088	0.014	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo(j,k)fluoranthene	0.025	0.014	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]pyrene	0.085	0.014	EPA 8270E/SIM	12-30-19	12-31-19	
Indeno(1,2,3-c,d)pyrene	0.081	0.014	EPA 8270E/SIM	12-30-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.014	EPA 8270E/SIM	12-30-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>84</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>87</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>87</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-145-13.0					
Laboratory ID:	12-231-02					
Naphthalene	0.075	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
2-Methylnaphthalene	0.056	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
1-Methylnaphthalene	0.17	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
Benzo[a]anthracene	0.062	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
Chrysene	0.11	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
Benzo[b]fluoranthene	0.060	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
Benzo(j,k)fluoranthene	0.018	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
Benzo[a]pyrene	0.063	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
Indeno(1,2,3-c,d)pyrene	0.037	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
Dibenz[a,h]anthracene	0.011	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>73</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>78</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>73</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-145-23.0					
Laboratory ID:	12-231-03					
Naphthalene	ND	0.0079	EPA 8270E/SIM	12-30-19	1-2-20	
2-Methylnaphthalene	ND	0.0079	EPA 8270E/SIM	12-30-19	1-2-20	
1-Methylnaphthalene	ND	0.0079	EPA 8270E/SIM	12-30-19	1-2-20	
Benzo[a]anthracene	ND	0.0079	EPA 8270E/SIM	12-30-19	1-2-20	
Chrysene	ND	0.0079	EPA 8270E/SIM	12-30-19	1-2-20	
Benzo[b]fluoranthene	ND	0.0079	EPA 8270E/SIM	12-30-19	1-2-20	
Benzo(j,k)fluoranthene	ND	0.0079	EPA 8270E/SIM	12-30-19	1-2-20	
Benzo[a]pyrene	ND	0.0079	EPA 8270E/SIM	12-30-19	1-2-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0079	EPA 8270E/SIM	12-30-19	1-2-20	
Dibenz[a,h]anthracene	ND	0.0079	EPA 8270E/SIM	12-30-19	1-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>84</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>84</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>86</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-145-28.0					
Laboratory ID:	12-231-04					
Naphthalene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
2-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
1-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]anthracene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Chrysene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[b]fluoranthene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo(j,k)fluoranthene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]pyrene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>92</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>91</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>80</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-145-30.5					
Laboratory ID:	12-231-05					
Naphthalene	ND	0.0076	EPA 8270E/SIM	12-30-19	12-31-19	
2-Methylnaphthalene	ND	0.0076	EPA 8270E/SIM	12-30-19	12-31-19	
1-Methylnaphthalene	ND	0.0076	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]anthracene	ND	0.0076	EPA 8270E/SIM	12-30-19	12-31-19	
Chrysene	ND	0.0076	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[b]fluoranthene	ND	0.0076	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo(j,k)fluoranthene	ND	0.0076	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]pyrene	ND	0.0076	EPA 8270E/SIM	12-30-19	12-31-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0076	EPA 8270E/SIM	12-30-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.0076	EPA 8270E/SIM	12-30-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>91</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>93</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>89</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-145-33.0					
Laboratory ID:	12-231-06					
Naphthalene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
2-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
1-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]anthracene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Chrysene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[b]fluoranthene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo(j,k)fluoranthene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]pyrene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>86</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>89</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>85</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-145-18.0					
Laboratory ID:	12-231-07					
Naphthalene	0.018	0.0096	EPA 8270E/SIM	12-30-19	1-2-20	
2-Methylnaphthalene	0.044	0.0096	EPA 8270E/SIM	12-30-19	1-2-20	
1-Methylnaphthalene	0.054	0.0096	EPA 8270E/SIM	12-30-19	1-2-20	
Benzo[a]anthracene	0.051	0.0096	EPA 8270E/SIM	12-30-19	1-2-20	
Chrysene	0.066	0.0096	EPA 8270E/SIM	12-30-19	1-2-20	
Benzo[b]fluoranthene	0.051	0.0096	EPA 8270E/SIM	12-30-19	1-2-20	
Benzo(j,k)fluoranthene	0.016	0.0096	EPA 8270E/SIM	12-30-19	1-2-20	
Benzo[a]pyrene	0.055	0.0096	EPA 8270E/SIM	12-30-19	1-2-20	
Indeno(1,2,3-c,d)pyrene	0.035	0.0096	EPA 8270E/SIM	12-30-19	1-2-20	
Dibenz[a,h]anthracene	ND	0.0096	EPA 8270E/SIM	12-30-19	1-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>82</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>85</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>80</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-146-13.0					
Laboratory ID:	12-231-08					
Naphthalene	0.25	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
2-Methylnaphthalene	0.18	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
1-Methylnaphthalene	0.33	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
Benzo[a]anthracene	0.060	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
Chrysene	0.059	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
Benzo[b]fluoranthene	0.054	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
Benzo(j,k)fluoranthene	0.015	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
Benzo[a]pyrene	0.050	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
Indeno(1,2,3-c,d)pyrene	0.031	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
Dibenz[a,h]anthracene	ND	0.0091	EPA 8270E/SIM	12-30-19	1-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>82</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>85</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>93</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-146-18.0					
Laboratory ID:	12-231-09					
Naphthalene	0.20	0.0082	EPA 8270E/SIM	12-30-19	12-31-19	
2-Methylnaphthalene	0.12	0.0082	EPA 8270E/SIM	12-30-19	12-31-19	
1-Methylnaphthalene	0.13	0.0082	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]anthracene	0.034	0.0082	EPA 8270E/SIM	12-30-19	12-31-19	
Chrysene	0.035	0.0082	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[b]fluoranthene	0.031	0.0082	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo(j,k)fluoranthene	0.0084	0.0082	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]pyrene	0.031	0.0082	EPA 8270E/SIM	12-30-19	12-31-19	
Indeno(1,2,3-c,d)pyrene	0.018	0.0082	EPA 8270E/SIM	12-30-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.0082	EPA 8270E/SIM	12-30-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>79</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>81</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>83</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-147-8.5					
Laboratory ID:	12-231-10					
Naphthalene	0.095	0.031	EPA 8270E/SIM	12-30-19	12-31-19	
2-Methylnaphthalene	0.035	0.031	EPA 8270E/SIM	12-30-19	12-31-19	
1-Methylnaphthalene	ND	0.031	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]anthracene	0.054	0.031	EPA 8270E/SIM	12-30-19	12-31-19	
Chrysene	0.048	0.031	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[b]fluoranthene	0.042	0.031	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo(j,k)fluoranthene	ND	0.031	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]pyrene	ND	0.079	EPA 8270E/SIM	12-30-19	12-31-19	U1
Indeno(1,2,3-c,d)pyrene	ND	0.031	EPA 8270E/SIM	12-30-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.031	EPA 8270E/SIM	12-30-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>73</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>79</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>78</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-147-13.5					
Laboratory ID:	12-231-11					
Naphthalene	0.10	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
2-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
1-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]anthracene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Chrysene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[b]fluoranthene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo(j,k)fluoranthene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]pyrene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>95</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>100</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>91</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-147-23.5					
Laboratory ID:	12-231-12					
Naphthalene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
2-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
1-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]anthracene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Chrysene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[b]fluoranthene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo(j,k)fluoranthene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]pyrene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>88</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>96</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>87</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-147-30.5					
Laboratory ID:	12-231-13					
Naphthalene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
2-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
1-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]anthracene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Chrysene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[b]fluoranthene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo(j,k)fluoranthene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]pyrene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270E/SIM	12-30-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>93</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>99</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>88</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-149-21.0					
Laboratory ID:	12-231-15					
Naphthalene	ND	0.0088	EPA 8270E/SIM	12-30-19	12-31-19	
2-Methylnaphthalene	ND	0.0088	EPA 8270E/SIM	12-30-19	12-31-19	
1-Methylnaphthalene	ND	0.0088	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]anthracene	ND	0.0088	EPA 8270E/SIM	12-30-19	12-31-19	
Chrysene	ND	0.0088	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[b]fluoranthene	ND	0.0088	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo(j,k)fluoranthene	ND	0.0088	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]pyrene	ND	0.0088	EPA 8270E/SIM	12-30-19	12-31-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0088	EPA 8270E/SIM	12-30-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.0088	EPA 8270E/SIM	12-30-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>94</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>95</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>90</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-149-31.0					
Laboratory ID:	12-231-16					
Naphthalene	0.044	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
2-Methylnaphthalene	0.013	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
1-Methylnaphthalene	0.010	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]anthracene	ND	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
Chrysene	ND	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[b]fluoranthene	ND	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo(j,k)fluoranthene	ND	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]pyrene	ND	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>83</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>86</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>90</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-149-41.0					
Laboratory ID:	12-231-18					
Naphthalene	ND	0.0070	EPA 8270E/SIM	12-30-19	12-31-19	
2-Methylnaphthalene	ND	0.0070	EPA 8270E/SIM	12-30-19	12-31-19	
1-Methylnaphthalene	ND	0.0070	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]anthracene	ND	0.0070	EPA 8270E/SIM	12-30-19	12-31-19	
Chrysene	ND	0.0070	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[b]fluoranthene	ND	0.0070	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo(j,k)fluoranthene	ND	0.0070	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]pyrene	ND	0.0070	EPA 8270E/SIM	12-30-19	12-31-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0070	EPA 8270E/SIM	12-30-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.0070	EPA 8270E/SIM	12-30-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>99</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>99</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>98</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-149-43.5					
Laboratory ID:	12-231-19					
Naphthalene	ND	0.0075	EPA 8270E/SIM	12-30-19	12-31-19	
2-Methylnaphthalene	ND	0.0075	EPA 8270E/SIM	12-30-19	12-31-19	
1-Methylnaphthalene	ND	0.0075	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]anthracene	ND	0.0075	EPA 8270E/SIM	12-30-19	12-31-19	
Chrysene	ND	0.0075	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[b]fluoranthene	ND	0.0075	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo(j,k)fluoranthene	ND	0.0075	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]pyrene	ND	0.0075	EPA 8270E/SIM	12-30-19	12-31-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0075	EPA 8270E/SIM	12-30-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.0075	EPA 8270E/SIM	12-30-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>96</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>100</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>93</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-148-27.0					
Laboratory ID:	12-231-22					
Naphthalene	0.38	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
2-Methylnaphthalene	0.11	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
1-Methylnaphthalene	0.056	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]anthracene	ND	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
Chrysene	ND	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[b]fluoranthene	ND	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo(j,k)fluoranthene	ND	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]pyrene	ND	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.0084	EPA 8270E/SIM	12-30-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>87</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>94</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>89</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1230S2					
Naphthalene	ND	0.0067	EPA 8270E/SIM	12-30-19	12-31-19	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	12-30-19	12-31-19	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	12-30-19	12-31-19	
Chrysene	ND	0.0067	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	12-30-19	12-31-19	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	12-30-19	12-31-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	12-30-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	12-30-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>92</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>103</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>93</i>	<i>45 - 122</i>				



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
					Result	Recovery	Limits		RPD	Limit	
MATRIX SPIKES											
Laboratory ID:	12-231-05										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0740	0.0727	0.0833	0.0833	ND	89	87	44 - 111	2	21	
Acenaphthylene	0.0823	0.0824	0.0833	0.0833	ND	99	99	47 - 122	0	24	
Acenaphthene	0.0817	0.0805	0.0833	0.0833	ND	98	97	46 - 122	1	24	
Fluorene	0.0880	0.0808	0.0833	0.0833	ND	106	97	53 - 118	9	23	
Phenanthrene	0.0819	0.0787	0.0833	0.0833	ND	98	94	41 - 124	4	24	
Anthracene	0.0885	0.0854	0.0833	0.0833	ND	106	103	53 - 119	4	21	
Fluoranthene	0.0820	0.0833	0.0833	0.0833	ND	98	100	39 - 135	2	32	
Pyrene	0.0807	0.0758	0.0833	0.0833	ND	97	91	39 - 134	6	34	
Benzo[a]anthracene	0.0891	0.0879	0.0833	0.0833	ND	107	106	53 - 131	1	23	
Chrysene	0.0826	0.0799	0.0833	0.0833	ND	99	96	46 - 126	3	24	
Benzo[b]fluoranthene	0.0854	0.0819	0.0833	0.0833	ND	103	98	45 - 127	4	25	
Benzo(j,k)fluoranthene	0.0849	0.0779	0.0833	0.0833	ND	102	94	52 - 122	9	21	
Benzo[a]pyrene	0.0894	0.0877	0.0833	0.0833	ND	107	105	51 - 126	2	24	
Indeno(1,2,3-c,d)pyrene	0.0873	0.0847	0.0833	0.0833	ND	105	102	48 - 127	3	23	
Dibenz[a,h]anthracene	0.0866	0.0845	0.0833	0.0833	ND	104	101	51 - 124	2	22	
Benzo[g,h,i]perylene	0.0852	0.0839	0.0833	0.0833	ND	102	101	50 - 120	2	22	
<i>Surrogate:</i>											
<i>2-Fluorobiphenyl</i>						<i>90</i>	<i>87</i>	<i>40 - 111</i>			
<i>Pyrene-d10</i>						<i>92</i>	<i>89</i>	<i>40 - 110</i>			
<i>Terphenyl-d14</i>						<i>96</i>	<i>92</i>	<i>45 - 122</i>			



Date of Report: January 3, 2020
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-231
 Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
FWM-144-9.0	12-231-01	52	12-26-19
FMW-145-13.0	12-231-02	27	12-26-19
FMW-145-23.0	12-231-03	16	12-26-19
FMW-145-28.0	12-231-04	18	12-26-19
FMW-145-30.5	12-231-05	12	12-26-19
FMW-145-33.0	12-231-06	18	12-26-19
FMW-145-18.0	12-231-07	31	12-26-19
FMW-146-13.0	12-231-08	27	12-26-19
FMW-146-18.0	12-231-09	19	12-26-19
FMW-147-8.5	12-231-10	78	12-26-19
FMW-147-13.5	12-231-11	18	12-26-19
FMW-147-23.5	12-231-12	18	12-26-19
FMW-147-30.5	12-231-13	18	12-26-19
FMW-149-21.0	12-231-15	24	12-26-19
FMW-149-31.0	12-231-16	20	12-26-19
FMW-149-41.0	12-231-18	5	12-26-19
FMW-149-43.5	12-231-19	11	12-26-19
FMW-148-27.0	12-231-22	20	12-26-19





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 methods 8260 & 8270, 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





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

December 27, 2019

Javan Ruark
Farallon Consulting, LLC
975 5th Avenue NW
Issaquah, WA 98027

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1912-240

Dear Javan:

Enclosed are the analytical results and associated quality control data for samples submitted on December 23, 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



OnSite Environmental, Inc. 14648 NE 95th 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: December 27, 2019
Samples Submitted: December 23, 2019
Laboratory Reference: 1912-240
Project: 397-019

Case Narrative

Samples were collected on December 23, 2019 and received by the laboratory on December 23, 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.



Date of Report: December 27, 2019
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-240
 Project: 397-019

**GASOLINE RANGE ORGANICS
 NWTPH-Gx**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-7-4.0					
Laboratory ID:	12-240-01					
Gasoline	ND	25	NWTPH-Gx	12-24-19	12-24-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>84</i>	<i>58-129</i>				



Date of Report: December 27, 2019
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-240
 Project: 397-019

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1224S1					
Gasoline	ND	5.0	NWTPH-Gx	12-24-19	12-24-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	92	58-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-240-01							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				84	83	58-129		



Date of Report: December 27, 2019
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-240
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-7-4.0					
Laboratory ID:	12-240-01					
Diesel Range Organics	ND	74	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	230	150	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	96	50-150				



Date of Report: December 27, 2019
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-240
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB1226S1					
Diesel Range Organics	ND	25	NWTPH-Dx	12-26-19	12-26-19	
Lube Oil Range Organics	ND	50	NWTPH-Dx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	115	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB1226S1							
	ORIG	DUP						
Diesel Fuel #2	107	100	NA	NA	NA	NA	7	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				119	109	50-150		



Date of Report: December 27, 2019
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-240
 Project: 397-019

VOLATILE ORGANICS EPA 8260D

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-7-4.0					
Laboratory ID:	12-240-01					
Vinyl Chloride	ND	0.0044	EPA 8260D	12-24-19	12-24-19	
(trans) 1,2-Dichloroethene	ND	0.0044	EPA 8260D	12-24-19	12-24-19	
Methyl t-Butyl Ether	ND	0.0044	EPA 8260D	12-24-19	12-24-19	
(cis) 1,2-Dichloroethene	ND	0.0044	EPA 8260D	12-24-19	12-24-19	
Benzene	ND	0.0044	EPA 8260D	12-24-19	12-24-19	
1,2-Dichloroethane	ND	0.0044	EPA 8260D	12-24-19	12-24-19	
Trichloroethene	ND	0.0044	EPA 8260D	12-24-19	12-24-19	
Toluene	ND	0.022	EPA 8260D	12-24-19	12-24-19	
Tetrachloroethene	ND	0.0044	EPA 8260D	12-24-19	12-24-19	
1,2-Dibromoethane	ND	0.0044	EPA 8260D	12-24-19	12-24-19	
Ethylbenzene	ND	0.0044	EPA 8260D	12-24-19	12-24-19	
m,p-Xylene	ND	0.0088	EPA 8260D	12-24-19	12-24-19	
o-Xylene	ND	0.0044	EPA 8260D	12-24-19	12-24-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>109</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>80</i>	<i>71-130</i>				



Date of Report: December 27, 2019
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-240
 Project: 397-019

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1224S1					
Vinyl Chloride	ND	0.0010	EPA 8260D	12-24-19	12-24-19	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	12-24-19	12-24-19	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260D	12-24-19	12-24-19	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	12-24-19	12-24-19	
Benzene	ND	0.0010	EPA 8260D	12-24-19	12-24-19	
1,2-Dichloroethane	ND	0.0010	EPA 8260D	12-24-19	12-24-19	
Trichloroethene	ND	0.0010	EPA 8260D	12-24-19	12-24-19	
Toluene	ND	0.0050	EPA 8260D	12-24-19	12-24-19	
Tetrachloroethene	ND	0.0010	EPA 8260D	12-24-19	12-24-19	
1,2-Dibromoethane	ND	0.0010	EPA 8260D	12-24-19	12-24-19	
Ethylbenzene	ND	0.0010	EPA 8260D	12-24-19	12-24-19	
m,p-Xylene	ND	0.0020	EPA 8260D	12-24-19	12-24-19	
o-Xylene	ND	0.0010	EPA 8260D	12-24-19	12-24-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>113</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>107</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>71-130</i>				



Date of Report: December 27, 2019
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-240
 Project: 397-019

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB1224S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0527	0.0516	0.0500	0.0500	105	103	57-133	2	18	
Benzene	0.0592	0.0590	0.0500	0.0500	118	118	71-129	0	16	
Trichloroethene	0.0564	0.0546	0.0500	0.0500	113	109	71-122	3	16	
Toluene	0.0599	0.0571	0.0500	0.0500	120	114	74-125	5	15	
Chlorobenzene	0.0522	0.0492	0.0500	0.0500	104	98	72-120	6	14	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					<i>102</i>	<i>107</i>	<i>76-131</i>			
<i>Toluene-d8</i>					<i>105</i>	<i>108</i>	<i>78-128</i>			
<i>4-Bromofluorobenzene</i>					<i>107</i>	<i>106</i>	<i>71-130</i>			



Date of Report: December 27, 2019
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-240
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-7-4.0					
Laboratory ID:	12-240-01					
Naphthalene	0.061	0.020	EPA 8270E/SIM	12-24-19	12-26-19	
2-Methylnaphthalene	ND	0.020	EPA 8270E/SIM	12-24-19	12-26-19	
1-Methylnaphthalene	ND	0.020	EPA 8270E/SIM	12-24-19	12-26-19	
Benzo[a]anthracene	0.033	0.020	EPA 8270E/SIM	12-24-19	12-26-19	
Chrysene	0.067	0.020	EPA 8270E/SIM	12-24-19	12-26-19	
Benzo[b]fluoranthene	0.043	0.020	EPA 8270E/SIM	12-24-19	12-26-19	
Benzo(j,k)fluoranthene	ND	0.020	EPA 8270E/SIM	12-24-19	12-26-19	
Benzo[a]pyrene	0.031	0.020	EPA 8270E/SIM	12-24-19	12-26-19	
Indeno(1,2,3-c,d)pyrene	0.026	0.020	EPA 8270E/SIM	12-24-19	12-26-19	
Dibenz[a,h]anthracene	ND	0.020	EPA 8270E/SIM	12-24-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>72</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>79</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>65</i>	<i>45 - 122</i>				



Date of Report: December 27, 2019
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-240
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1224S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	12-24-19	12-26-19	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	12-24-19	12-26-19	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	12-24-19	12-26-19	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	12-24-19	12-26-19	
Chrysene	ND	0.0067	EPA 8270E/SIM	12-24-19	12-26-19	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	12-24-19	12-26-19	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	12-24-19	12-26-19	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	12-24-19	12-26-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	12-24-19	12-26-19	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	12-24-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>103</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>108</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>91</i>	<i>45 - 122</i>				



Date of Report: December 27, 2019
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-240
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB1224S1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.0723	0.0701	0.0833	0.0833	87	84	57 - 109	3	15	
Acenaphthylene	0.0770	0.0737	0.0833	0.0833	92	88	60 - 121	4	15	
Acenaphthene	0.0760	0.0709	0.0833	0.0833	91	85	59 - 121	7	15	
Fluorene	0.0815	0.0794	0.0833	0.0833	98	95	63 - 119	3	15	
Phenanthrene	0.0827	0.0818	0.0833	0.0833	99	98	59 - 114	1	15	
Anthracene	0.0872	0.0867	0.0833	0.0833	105	104	63 - 119	1	15	
Fluoranthene	0.0850	0.0838	0.0833	0.0833	102	101	63 - 120	1	15	
Pyrene	0.0785	0.0782	0.0833	0.0833	94	94	62 - 119	0	15	
Benzo[a]anthracene	0.0960	0.0976	0.0833	0.0833	115	117	64 - 127	2	15	
Chrysene	0.0827	0.0812	0.0833	0.0833	99	97	63 - 121	2	15	
Benzo[b]fluoranthene	0.0795	0.0796	0.0833	0.0833	95	96	61 - 122	0	15	
Benzo(j,k)fluoranthene	0.0649	0.0752	0.0833	0.0833	78	90	64 - 123	15	15	
Benzo[a]pyrene	0.0921	0.0898	0.0833	0.0833	111	108	62 - 122	3	15	
Indeno(1,2,3-c,d)pyrene	0.0839	0.0840	0.0833	0.0833	101	101	59 - 124	0	15	
Dibenz[a,h]anthracene	0.0862	0.0870	0.0833	0.0833	103	104	61 - 123	1	15	
Benzo[g,h,i]perylene	0.0901	0.0879	0.0833	0.0833	108	106	61 - 119	2	15	
<i>Surrogate:</i>										
2-Fluorobiphenyl					96	94	40 - 111			
Pyrene-d10					99	98	40 - 110			
Terphenyl-d14					89	95	45 - 122			



Date of Report: December 27, 2019
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-240
 Project: 397-019

PCBs EPA 8082A

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-7-4.0					
Laboratory ID:	12-240-01					
Aroclor 1016	ND	0.15	EPA 8082A	12-26-19	12-26-19	
Aroclor 1221	ND	0.15	EPA 8082A	12-26-19	12-26-19	
Aroclor 1232	ND	0.15	EPA 8082A	12-26-19	12-26-19	
Aroclor 1242	ND	0.15	EPA 8082A	12-26-19	12-26-19	
Aroclor 1248	ND	0.15	EPA 8082A	12-26-19	12-26-19	
Aroclor 1254	ND	0.15	EPA 8082A	12-26-19	12-26-19	
Aroclor 1260	ND	0.15	EPA 8082A	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>DCB</i>	<i>64</i>	<i>37-122</i>				



Date of Report: December 27, 2019
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-240
 Project: 397-019

**PCBs EPA 8082A
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1226S1					
Aroclor 1016	ND	0.050	EPA 8082A	12-26-19	12-26-19	
Aroclor 1221	ND	0.050	EPA 8082A	12-26-19	12-26-19	
Aroclor 1232	ND	0.050	EPA 8082A	12-26-19	12-26-19	
Aroclor 1242	ND	0.050	EPA 8082A	12-26-19	12-26-19	
Aroclor 1248	ND	0.050	EPA 8082A	12-26-19	12-26-19	
Aroclor 1254	ND	0.050	EPA 8082A	12-26-19	12-26-19	
Aroclor 1260	ND	0.050	EPA 8082A	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>		<i>Control Limits</i>			
DCB	73		37-122			

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB1226S1										
	SB	SBD	SB	SBD		SB	SBD				
Aroclor 1260	0.503	0.473	0.500	0.500	N/A	101	95	49-125	6	18	
<i>Surrogate:</i>											
DCB						83	82	37-122			



Date of Report: December 27, 2019
Samples Submitted: December 23, 2019
Laboratory Reference: 1912-240
Project: 397-019

**TOTAL LEAD
EPA 6020B**

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-7-4.0					
Laboratory ID:	12-240-01					
Lead	33	15	EPA 6020B	12-24-19	12-24-19	



Date of Report: December 27, 2019
 Samples Submitted: December 23, 2019
 Laboratory Reference: 1912-240
 Project: 397-019

**TOTAL LEAD
 EPA 6020B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1224SM1					
Lead	ND	5.0	EPA 6020B	12-24-19	12-24-19	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-186-06							
	ORIG	DUP						
Lead	ND	ND	NA	NA	NA	NA	20	

MATRIX SPIKES

Laboratory ID:	12-186-06									
	MS	MSD	MS	MSD		MS	MSD			
Lead	238	238	250	250	ND	95	95	75-125	0	20



Date of Report: December 27, 2019
Samples Submitted: December 23, 2019
Laboratory Reference: 1912-240
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
TP-7-4.0	12-240-01	66	12-24-19





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 methods 8260 & 8270, 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





Onsite Environmental Inc.
 Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
 (in working days)
 (Check One)

Same Day
 1 Day
 2 Days
 3 Days
 Standard (7 Days)
 (other) _____

Laboratory Number: **12-240**

Company: **Favallon**
 Project Number: **397-019**
 Project Name: **Block 38**
 Project Manager: **Solan Kwark / Stacy Stumpf**
 Sampled by: **G. Peters / L. Thompson**

Lab ID: **7** Sample Identification

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	TP - side stream 4.0	12/23/19	1030	Soil	5
2	TP - side stream -10.0	12/23/19	1035	Soil	5

<input checked="" type="checkbox"/>	NWTPH-HCID
<input checked="" type="checkbox"/>	NWTPH-Gx/BTEX 8260
<input checked="" type="checkbox"/>	NWTPH-Gx
<input type="checkbox"/>	NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)
<input checked="" type="checkbox"/>	Volatiles 8260C
<input checked="" type="checkbox"/>	Halogenated Volatiles 8260C *
<input type="checkbox"/>	EDB EPA 8011 (Waters Only)
<input checked="" type="checkbox"/>	Semivolatiles 8270D/SIM (with low-level PAHs)
<input checked="" type="checkbox"/>	PAHs 8270D/SIM (low-level) SVPAHs + Naphthalene
<input type="checkbox"/>	PCBs 8082A
<input type="checkbox"/>	Organochlorine Pesticides 8081B
<input type="checkbox"/>	Organophosphorus Pesticides 8270D/SIM
<input type="checkbox"/>	Chlorinated Acid Herbicides 8151A
<input type="checkbox"/>	Total RCRA Metals
<input type="checkbox"/>	Total MTCA Metals
<input type="checkbox"/>	TCLP Metals
<input type="checkbox"/>	HEM (oil and grease) 1664A
<input checked="" type="checkbox"/>	Total Lead
<input checked="" type="checkbox"/>	EDB/EDC
<input checked="" type="checkbox"/>	MTBE
<input checked="" type="checkbox"/>	HOLD
<input checked="" type="checkbox"/>	% Moisture

Signature	Company	Date	Time	Comments/Special Instructions
<i>[Signature]</i>	Favallon	12/23/19	9:20	contact project manager for analyses and turnaround time . (1/15/20) 5:15 PM (1/23/19) 1715 Add 12/23/19 1 day TA
<i>[Signature]</i>	Favallon	12/23/19	9:20	
<i>[Signature]</i>	Favallon	12/23/19	9:20	
<i>[Signature]</i>	Favallon	12/23/19	9:20	

Relinquished _____
 Received _____
 Relinquished _____
 Received _____
 Relinquished _____
 Received _____
 Relinquished _____
 Received _____
 Relinquished _____

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

January 2, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 1912-256

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on December 26, 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



OnSite Environmental, Inc. 14648 NE 95th 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: January 2, 2020
Samples Submitted: December 26, 2019
Laboratory Reference: 1912-256
Project: 397-019

Case Narrative

Samples were collected on December 26, 2019 and received by the laboratory on December 26, 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.

NWTPH-Gx/BTEX Analysis

The chromatogram for sample FMW-146-122619 is not similar to a typical gas.

PAHs EPA 8270D/SIM Analysis

Sample FMW-146-122619 had one surrogate recovery out of control limits. This is within allowance of our standard operating procedure as long as the recovery is above 10%.

The spike blank extracted on 12-26-2019, and the spike blank duplicate extracted on 12-31-2019 each had one surrogate recovery out of control limits. This is within allowance of our standard operating procedure as long as the recovery is above 10%.

PCBs EPA 8082A Analysis

The surrogate recoveries of DCB for the samples FMW-146-122619 and FMW-145-122619 were below the quality control limits of 50 – 153%. There is insufficient sample for re-extraction.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-149-122619					
Laboratory ID:	12-256-01					
Benzene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
Toluene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
Ethyl Benzene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
m,p-Xylene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
o-Xylene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
Gasoline	ND	100	NWTPH-Gx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	95	59-122				
Client ID:	FMW-147-122619					
Laboratory ID:	12-256-02					
Benzene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
Toluene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
Ethyl Benzene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
m,p-Xylene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
o-Xylene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
Gasoline	ND	100	NWTPH-Gx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	93	59-122				
Client ID:	FMW-146-122619					
Laboratory ID:	12-256-03					
Benzene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
Toluene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
Ethyl Benzene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
m,p-Xylene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
o-Xylene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
Gasoline	170	100	NWTPH-Gx	12-26-19	12-26-19	T
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	92	59-122				



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-145-122619					
Laboratory ID:	12-256-04					
Benzene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
Toluene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
Ethyl Benzene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
m,p-Xylene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
o-Xylene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
Gasoline	ND	100	NWTPH-Gx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	95	59-122				
Client ID:	FMW-144-122619					
Laboratory ID:	12-256-05					
Benzene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
Toluene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
Ethyl Benzene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
m,p-Xylene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
o-Xylene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
Gasoline	ND	100	NWTPH-Gx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	95	59-122				



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1226W1					
Benzene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
Toluene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
Ethyl Benzene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
m,p-Xylene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
o-Xylene	ND	1.0	EPA 8021B	12-26-19	12-26-19	
Gasoline	ND	100	NWTPH-Gx	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	100	59-122				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-256-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				95	96	59-122		

SPIKE BLANKS

Laboratory ID:	SB1226W1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	48.7	47.2	50.0	50.0	97	94	76-120	3	11
Toluene	49.3	47.9	50.0	50.0	99	96	80-116	3	12
Ethyl Benzene	49.8	48.3	50.0	50.0	100	97	80-116	3	12
m,p-Xylene	48.5	47.2	50.0	50.0	97	94	76-117	3	12
o-Xylene	48.3	47.2	50.0	50.0	97	94	79-114	2	11
<i>Surrogate:</i>									
<i>Fluorobenzene</i>					100	100	59-122		



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

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

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-149-122619					
Laboratory ID:	12-256-01					
Diesel Range Organics	ND	0.21	NWTPH-Dx	12-26-19	12-27-19	
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	95	50-150				

Client ID:	FMW-147-122619					
Laboratory ID:	12-256-02					
Diesel Range Organics	1.9	0.20	NWTPH-Dx	12-26-19	12-27-19	
Lube Oil Range Organics	1.4	0.20	NWTPH-Dx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	98	50-150				

Client ID:	FMW-146-122619					
Laboratory ID:	12-256-03					
Diesel Range Organics	1.1	0.20	NWTPH-Dx	12-26-19	12-27-19	
Lube Oil Range Organics	0.65	0.20	NWTPH-Dx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	114	50-150				

Client ID:	FMW-145-122619					
Laboratory ID:	12-256-04					
Diesel Range Organics	0.28	0.20	NWTPH-Dx	12-26-19	12-27-19	
Lube Oil Range Organics	0.31	0.20	NWTPH-Dx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	97	50-150				

Client ID:	FMW-144-122619					
Laboratory ID:	12-256-05					
Diesel Range Organics	ND	0.20	NWTPH-Dx	12-26-19	12-27-19	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	90	50-150				



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

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

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1226W1					
Diesel Range Organics	ND	0.20	NWTPH-Dx	12-26-19	12-27-19	
Lube Oil Range Organics	ND	0.20	NWTPH-Dx	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>90</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB1226W1							
	ORIG	DUP						
Diesel Fuel #2	0.509	0.494	NA	NA	NA	NA	3	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>98</i>	<i>96</i>	<i>50-150</i>		



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-149-122619					
Laboratory ID:	12-256-01					
Vinyl Chloride	ND	0.20	EPA 8260D	12-27-19	12-27-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
(cis) 1,2-Dichloroethene	0.21	0.20	EPA 8260D	12-27-19	12-27-19	
Trichloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
Tetrachloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>98</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>78-125</i>				



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-147-122619					
Laboratory ID:	12-256-02					
Vinyl Chloride	ND	0.20	EPA 8260D	12-27-19	12-27-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
Trichloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
Tetrachloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>105</i>	<i>78-125</i>				



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-146-122619					
Laboratory ID:	12-256-03					
Vinyl Chloride	ND	0.20	EPA 8260D	12-27-19	12-27-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
Trichloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
Tetrachloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>78-125</i>				



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-145-122619					
Laboratory ID:	12-256-04					
Vinyl Chloride	ND	0.20	EPA 8260D	12-27-19	12-27-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
Trichloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
Tetrachloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>94</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>78-125</i>				



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

VOLATILE ORGANICS EPA 8260D

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-144-122619					
Laboratory ID:	12-256-05					
Vinyl Chloride	ND	0.20	EPA 8260D	12-27-19	12-27-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
Trichloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
Tetrachloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>107</i>	<i>78-125</i>				



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1227W1					
Vinyl Chloride	ND	0.20	EPA 8260D	12-27-19	12-27-19	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
Trichloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
Tetrachloroethene	ND	0.20	EPA 8260D	12-27-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>103</i>	<i>75-127</i>				
<i>Toluene-d8</i>	<i>96</i>	<i>80-127</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>78-125</i>				



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB1227W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	11.0	10.1	10.0	10.0	110	101	63-130	9	17	
Benzene	10.3	10.0	10.0	10.0	103	100	76-125	3	19	
Trichloroethene	10.6	10.1	10.0	10.0	106	101	76-121	5	18	
Toluene	10.0	9.70	10.0	10.0	100	97	80-124	3	18	
Chlorobenzene	10.0	9.88	10.0	10.0	100	99	75-120	1	19	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					100	101	75-127			
<i>Toluene-d8</i>					97	98	80-127			
<i>4-Bromofluorobenzene</i>					110	106	78-125			



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-149-122619					
Laboratory ID:	12-256-01					
Naphthalene	0.15	0.094	EPA 8270E/SIM	12-26-19	12-27-19	
2-Methylnaphthalene	ND	0.094	EPA 8270E/SIM	12-26-19	12-27-19	
1-Methylnaphthalene	ND	0.094	EPA 8270E/SIM	12-26-19	12-27-19	
Benzo[a]anthracene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Chrysene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Benzo[b]fluoranthene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Benzo(j,k)fluoranthene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Benzo[a]pyrene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Dibenz[a,h]anthracene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>76</i>	<i>27 - 106</i>				
<i>Pyrene-d10</i>	<i>84</i>	<i>35 - 98</i>				
<i>Terphenyl-d14</i>	<i>84</i>	<i>41 - 129</i>				



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-147-122619					
Laboratory ID:	12-256-02					
Naphthalene	2.0	0.10	EPA 8270E/SIM	12-31-19	12-31-19	
2-Methylnaphthalene	0.57	0.10	EPA 8270E/SIM	12-31-19	12-31-19	
1-Methylnaphthalene	0.57	0.10	EPA 8270E/SIM	12-31-19	12-31-19	
Benzo[a]anthracene	0.042	0.010	EPA 8270E/SIM	12-31-19	12-31-19	
Chrysene	0.033	0.010	EPA 8270E/SIM	12-31-19	12-31-19	
Benzo[b]fluoranthene	0.031	0.010	EPA 8270E/SIM	12-31-19	12-31-19	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270E/SIM	12-31-19	12-31-19	
Benzo[a]pyrene	0.023	0.010	EPA 8270E/SIM	12-31-19	12-31-19	
Indeno(1,2,3-c,d)pyrene	0.014	0.010	EPA 8270E/SIM	12-31-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270E/SIM	12-31-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>47</i>	<i>27 - 106</i>				
<i>Pyrene-d10</i>	<i>85</i>	<i>35 - 98</i>				
<i>Terphenyl-d14</i>	<i>83</i>	<i>41 - 129</i>				



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-146-122619					
Laboratory ID:	12-256-03					
Naphthalene	15	0.94	EPA 8270E/SIM	12-26-20	12-27-19	
2-Methylnaphthalene	13	0.94	EPA 8270E/SIM	12-26-20	12-27-19	
1-Methylnaphthalene	9.2	0.94	EPA 8270E/SIM	12-26-20	12-27-19	
Benzo[a]anthracene	0.043	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Chrysene	0.036	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Benzo[b]fluoranthene	0.013	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Benzo(j,k)fluoranthene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Benzo[a]pyrene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Dibenz[a,h]anthracene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>101</i>	<i>27 - 106</i>				
<i>Pyrene-d10</i>	<i>103</i>	<i>35 - 98</i>				Q
<i>Terphenyl-d14</i>	<i>111</i>	<i>41 - 129</i>				



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-145-122619					
Laboratory ID:	12-256-04					
Naphthalene	ND	0.094	EPA 8270E/SIM	12-26-19	12-27-19	
2-Methylnaphthalene	ND	0.094	EPA 8270E/SIM	12-26-19	12-27-19	
1-Methylnaphthalene	ND	0.094	EPA 8270E/SIM	12-26-19	12-27-19	
Benzo[a]anthracene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Chrysene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Benzo[b]fluoranthene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Benzo(j,k)fluoranthene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Benzo[a]pyrene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Dibenz[a,h]anthracene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>96</i>	<i>27 - 106</i>				
<i>Pyrene-d10</i>	<i>97</i>	<i>35 - 98</i>				
<i>Terphenyl-d14</i>	<i>100</i>	<i>41 - 129</i>				



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-144-122619					
Laboratory ID:	12-256-05					
Naphthalene	ND	0.094	EPA 8270E/SIM	12-26-19	12-27-19	
2-Methylnaphthalene	ND	0.094	EPA 8270E/SIM	12-26-19	12-27-19	
1-Methylnaphthalene	ND	0.094	EPA 8270E/SIM	12-26-19	12-27-19	
Benzo[a]anthracene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Chrysene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Benzo[b]fluoranthene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Benzo(j,k)fluoranthene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Benzo[a]pyrene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Indeno(1,2,3-c,d)pyrene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
Dibenz[a,h]anthracene	ND	0.0094	EPA 8270E/SIM	12-26-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>87</i>	<i>27 - 106</i>				
<i>Pyrene-d10</i>	<i>96</i>	<i>35 - 98</i>				
<i>Terphenyl-d14</i>	<i>99</i>	<i>41 - 129</i>				



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1226W1					
Naphthalene	ND	0.10	EPA 8270E/SIM	12-26-19	12-26-19	
2-Methylnaphthalene	ND	0.10	EPA 8270E/SIM	12-26-19	12-26-19	
1-Methylnaphthalene	ND	0.10	EPA 8270E/SIM	12-26-19	12-26-19	
Benzo[a]anthracene	ND	0.010	EPA 8270E/SIM	12-26-19	12-26-19	
Chrysene	ND	0.010	EPA 8270E/SIM	12-26-19	12-26-19	
Benzo[b]fluoranthene	ND	0.010	EPA 8270E/SIM	12-26-19	12-26-19	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270E/SIM	12-26-19	12-26-19	
Benzo[a]pyrene	ND	0.010	EPA 8270E/SIM	12-26-19	12-26-19	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270E/SIM	12-26-19	12-26-19	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270E/SIM	12-26-19	12-26-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>94</i>	<i>27 - 106</i>				
<i>Pyrene-d10</i>	<i>95</i>	<i>35 - 98</i>				
<i>Terphenyl-d14</i>	<i>111</i>	<i>41 - 129</i>				



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1231W2					
Naphthalene	ND	0.10	EPA 8270E/SIM	12-31-19	12-31-19	
2-Methylnaphthalene	ND	0.10	EPA 8270E/SIM	12-31-19	12-31-19	
1-Methylnaphthalene	ND	0.10	EPA 8270E/SIM	12-31-19	12-31-19	
Benzo[a]anthracene	ND	0.010	EPA 8270E/SIM	12-31-19	12-31-19	
Chrysene	ND	0.010	EPA 8270E/SIM	12-31-19	12-31-19	
Benzo[b]fluoranthene	ND	0.010	EPA 8270E/SIM	12-31-19	12-31-19	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270E/SIM	12-31-19	12-31-19	
Benzo[a]pyrene	ND	0.010	EPA 8270E/SIM	12-31-19	12-31-19	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270E/SIM	12-31-19	12-31-19	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270E/SIM	12-31-19	12-31-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>64</i>	<i>27 - 106</i>				
<i>Pyrene-d10</i>	<i>94</i>	<i>35 - 98</i>				
<i>Terphenyl-d14</i>	<i>96</i>	<i>41 - 129</i>				



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	Limit			
SPIKE BLANKS										
Laboratory ID:	SB1226W1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.384	0.317	0.500	0.500	77	63	36 - 99	19	40	
Acenaphthylene	0.423	0.406	0.500	0.500	85	81	45 - 113	4	32	
Acenaphthene	0.414	0.399	0.500	0.500	83	80	43 - 119	4	33	
Fluorene	0.472	0.444	0.500	0.500	94	89	48 - 114	6	30	
Phenanthrene	0.496	0.463	0.500	0.500	99	93	49 - 113	7	24	
Anthracene	0.503	0.474	0.500	0.500	101	95	50 - 113	6	25	
Fluoranthene	0.557	0.494	0.500	0.500	111	99	57 - 118	12	22	
Pyrene	0.489	0.458	0.500	0.500	98	92	56 - 128	7	32	
Benzo[a]anthracene	0.592	0.549	0.500	0.500	118	110	59 - 127	8	24	
Chrysene	0.516	0.473	0.500	0.500	103	95	57 - 122	9	24	
Benzo[b]fluoranthene	0.536	0.485	0.500	0.500	107	97	58 - 123	10	26	
Benzo(j,k)fluoranthene	0.557	0.529	0.500	0.500	111	106	60 - 123	5	22	
Benzo[a]pyrene	0.545	0.502	0.500	0.500	109	100	54 - 121	8	24	
Indeno(1,2,3-c,d)pyrene	0.548	0.506	0.500	0.500	110	101	55 - 125	8	26	
Dibenz[a,h]anthracene	0.559	0.514	0.500	0.500	112	103	57 - 127	8	25	
Benzo[g,h,i]perylene	0.555	0.507	0.500	0.500	111	101	54 - 122	9	25	
<i>Surrogate:</i>										
2-Fluorobiphenyl					89	83	27 - 106			
Pyrene-d10					101	95	35 - 98			Q
Terphenyl-d14					116	109	41 - 129			



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB1231W2									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.343	0.327	0.500	0.500	69	65	36 - 99	5	40	
Acenaphthylene	0.462	0.459	0.500	0.500	92	92	45 - 113	1	32	
Acenaphthene	0.444	0.432	0.500	0.500	89	86	43 - 119	3	33	
Fluorene	0.457	0.457	0.500	0.500	91	91	48 - 114	0	30	
Phenanthrene	0.481	0.494	0.500	0.500	96	99	49 - 113	3	24	
Anthracene	0.521	0.526	0.500	0.500	104	105	50 - 113	1	25	
Fluoranthene	0.527	0.510	0.500	0.500	105	102	57 - 118	3	22	
Pyrene	0.522	0.491	0.500	0.500	104	98	56 - 128	6	32	
Benzo[a]anthracene	0.556	0.563	0.500	0.500	111	113	59 - 127	1	24	
Chrysene	0.520	0.517	0.500	0.500	104	103	57 - 122	1	24	
Benzo[b]fluoranthene	0.572	0.572	0.500	0.500	114	114	58 - 123	0	26	
Benzo(j,k)fluoranthene	0.540	0.543	0.500	0.500	108	109	60 - 123	1	22	
Benzo[a]pyrene	0.557	0.559	0.500	0.500	111	112	54 - 121	0	24	
Indeno(1,2,3-c,d)pyrene	0.569	0.569	0.500	0.500	114	114	55 - 125	0	26	
Dibenz[a,h]anthracene	0.550	0.554	0.500	0.500	110	111	57 - 127	1	25	
Benzo[g,h,i]perylene	0.544	0.547	0.500	0.500	109	109	54 - 122	1	25	
<i>Surrogate:</i>										
2-Fluorobiphenyl					68	67	27 - 106			
Pyrene-d10					96	99	35 - 98			Q
Terphenyl-d14					98	98	41 - 129			



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

PCBs EPA 8082A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: FMW-149-122619						
Laboratory ID: 12-256-01						
Aroclor 1016	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1221	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1232	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1242	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1248	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1254	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1260	ND	0.047	EPA 8082A	12-27-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>DCB</i>	76	50-153				
Client ID: FMW-147-122619						
Laboratory ID: 12-256-02						
Aroclor 1016	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1221	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1232	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1242	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1248	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1254	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1260	ND	0.047	EPA 8082A	12-27-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>DCB</i>	74	50-153				
Client ID: FMW-146-122619						
Laboratory ID: 12-256-03						
Aroclor 1016	ND	0.048	EPA 8082A	12-27-19	12-27-19	
Aroclor 1221	ND	0.048	EPA 8082A	12-27-19	12-27-19	
Aroclor 1232	ND	0.048	EPA 8082A	12-27-19	12-27-19	
Aroclor 1242	ND	0.048	EPA 8082A	12-27-19	12-27-19	
Aroclor 1248	ND	0.048	EPA 8082A	12-27-19	12-27-19	
Aroclor 1254	ND	0.048	EPA 8082A	12-27-19	12-27-19	
Aroclor 1260	ND	0.048	EPA 8082A	12-27-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>DCB</i>	43	50-153				

Q



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

PCBs EPA 8082A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	FMW-145-122619					
Laboratory ID:	12-256-04					
Aroclor 1016	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1221	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1232	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1242	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1248	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1254	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1260	ND	0.047	EPA 8082A	12-27-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
DCB	47	50-153				Q

Client ID:	FMW-144-122619					
Laboratory ID:	12-256-05					
Aroclor 1016	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1221	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1232	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1242	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1248	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1254	ND	0.047	EPA 8082A	12-27-19	12-27-19	
Aroclor 1260	ND	0.047	EPA 8082A	12-27-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
DCB	83	50-153				



Date of Report: January 2, 2020
 Samples Submitted: December 26, 2019
 Laboratory Reference: 1912-256
 Project: 397-019

**PCBs EPA 8082A
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1227W1					
Aroclor 1016	ND	0.050	EPA 8082A	12-27-19	12-27-19	
Aroclor 1221	ND	0.050	EPA 8082A	12-27-19	12-27-19	
Aroclor 1232	ND	0.050	EPA 8082A	12-27-19	12-27-19	
Aroclor 1242	ND	0.050	EPA 8082A	12-27-19	12-27-19	
Aroclor 1248	ND	0.050	EPA 8082A	12-27-19	12-27-19	
Aroclor 1254	ND	0.050	EPA 8082A	12-27-19	12-27-19	
Aroclor 1260	ND	0.050	EPA 8082A	12-27-19	12-27-19	
<i>Surrogate:</i>	<i>Percent Recovery</i>		<i>Control Limits</i>			
DCB	86		50-153			

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB1227W1										
	SB	SBD	SB	SBD		SB	SBD				
Aroclor 1260	0.500	0.476	0.500	0.500	N/A	100	95	70-129	5	12	
<i>Surrogate:</i>											
DCB						87	88	50-153			





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 gas.
 - 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 methods 8260 & 8270, 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.
 - T-- The sample chromatogram is not similar to a typical gas.
- ND - Not Detected at PQL
 PQL - Practical Quantitation Limit
 RPD - Relative Percent Difference





Mw Onsite Environmental Inc.

Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request (in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Laboratory Number: 12-256

Company: Favallan

Project Number: 397-019

Project Name: Block 38 West

Project Manager: Suzy Stumpf

Sampled by: Greg Peters

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	FMW-149-122619	12/26/19	709	Water	10
2	FMW-147-122619		1008	Water	
3	FMW-146-122619		854	Water	
4	FMW-145-122619		1117	Water	
5	FMW-144-122619		1226	Water	

Lab ID	Date	Time	Matrix	Number of Containers	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
1	12/26/19	1407	Water	10		X	X	X	X	X		X	X	X								
2		1407	Water			X	X	X	X	X		X	X	X								
3		1522	Water			X	X	X	X	X		X	X	X								
4		1522	Water			X	X	X	X	X		X	X	X								
5		16:41	Water			X	X	X	X	X		X	X	X								

Signature	Company	Date	Time	Comments/Special Instructions
	Favallan	12/26/19	1407	<p>Please contact project manager for sample analyses and turnaround time.</p> <p>* PCB, TOC, O15, SPANS-DCE, VC</p> <p>X-Added 12/26/19 1641. DB (SD)</p>
	Favallan	12/26/19	1407	
	Favallan	12/26/19	1522	
	ALPHA	12/26/19	16:41	
	ORTE	12/26/19	1641	

Received _____

Relinquished _____

Received _____

Relinquished _____

Received _____

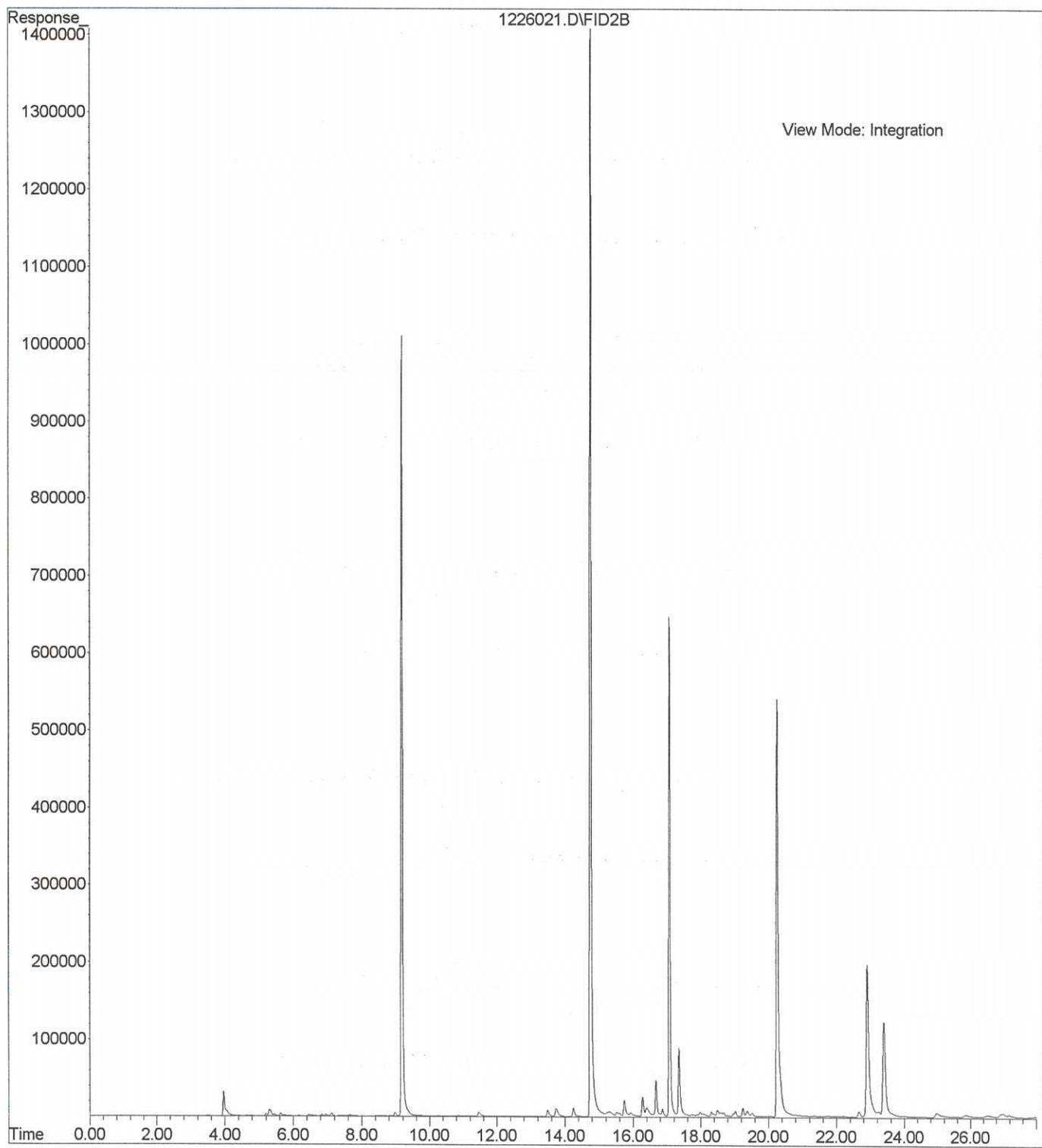
Relinquished _____

Reviewed/Date _____

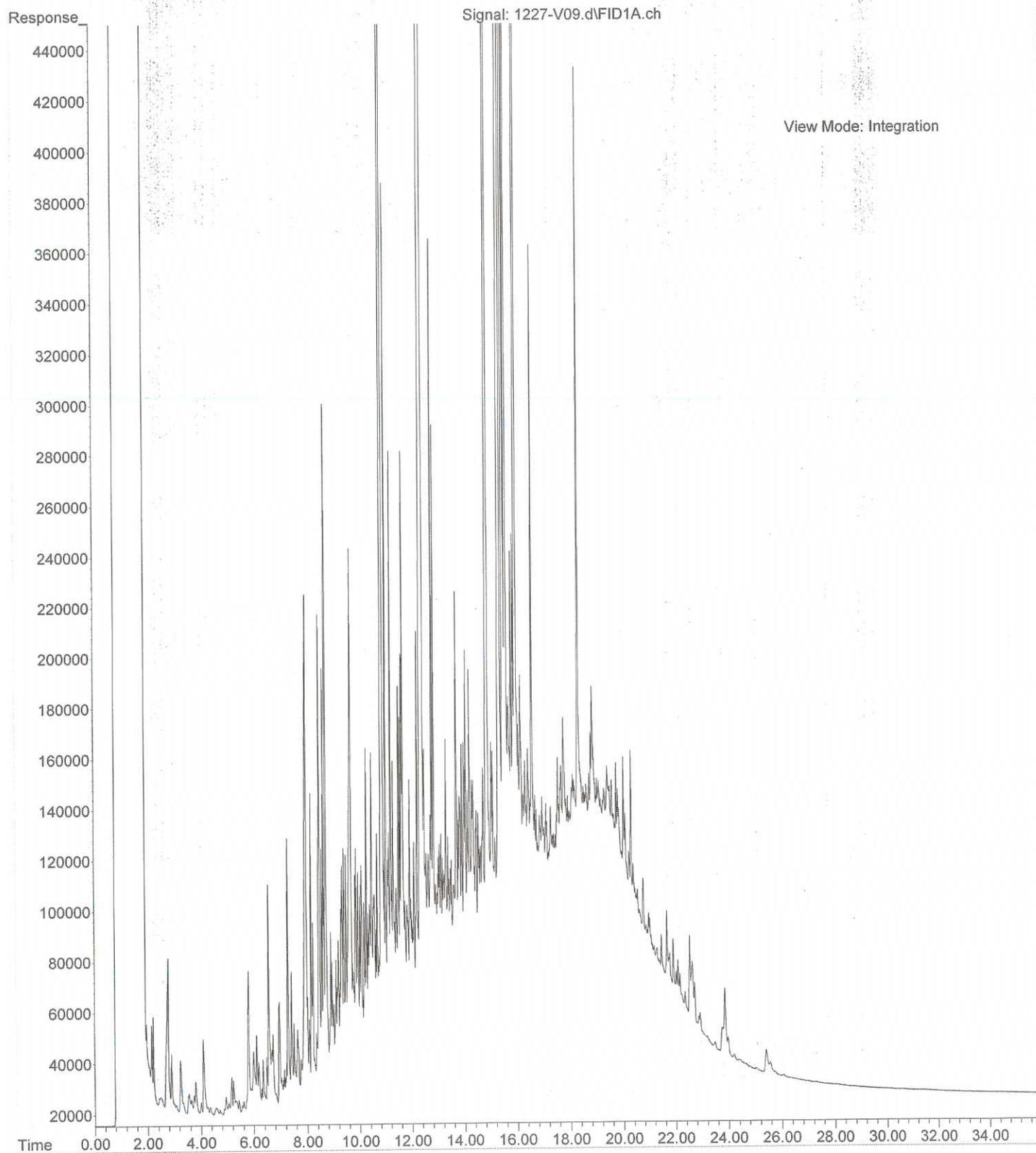
Reviewed/Date _____

Chromatograms with final report Electronic Data Deliverables (EDDs)

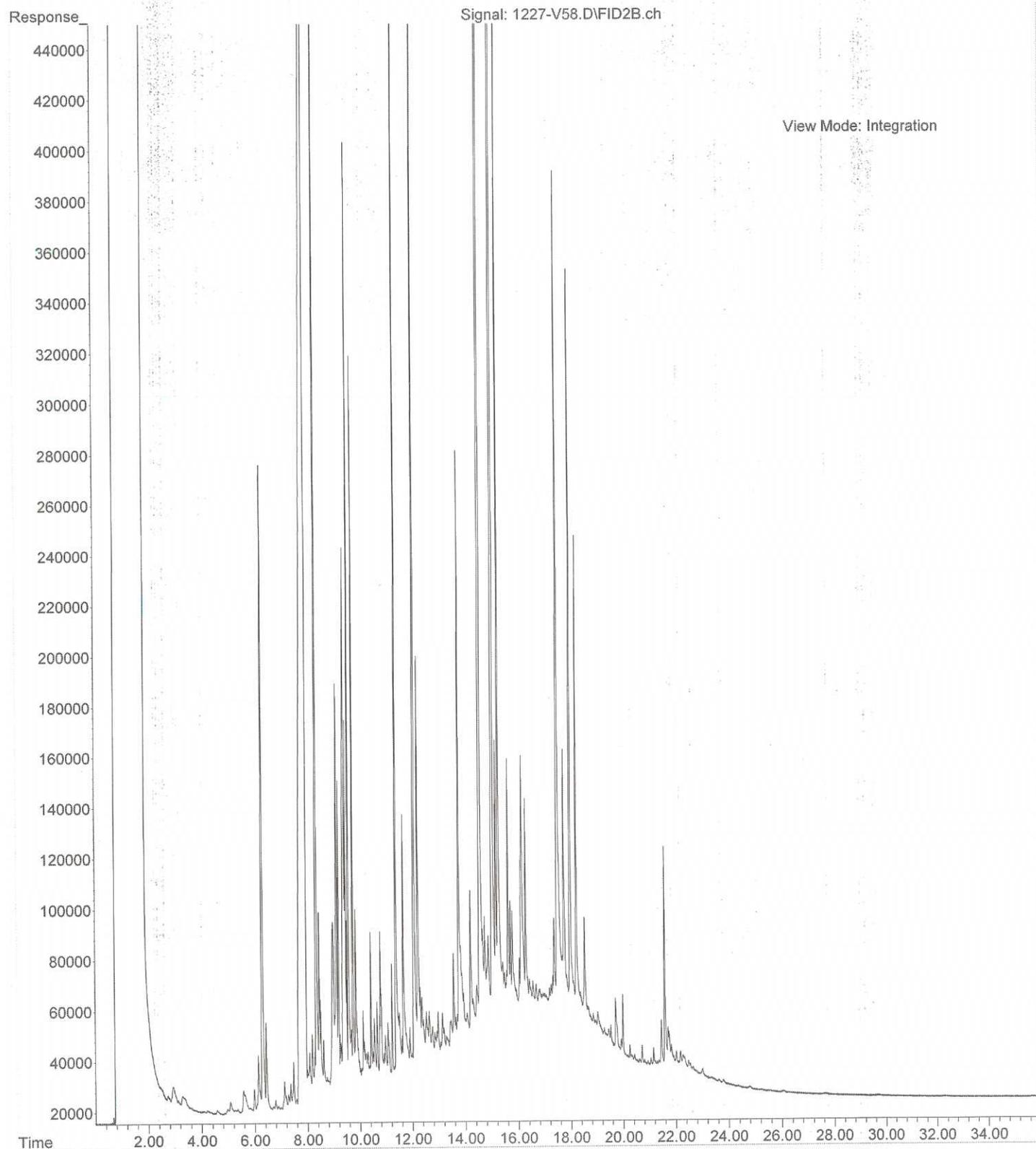
File : X:\BTEX\HOPE\DATA\H191226\1226021.D
Operator :
Acquired : 27 Dec 2019 00:36 using AcqMethod 191107B.M
Instrument : Hope
Sample Name: 12-256-03g
Misc Info :
Vial Number: 21



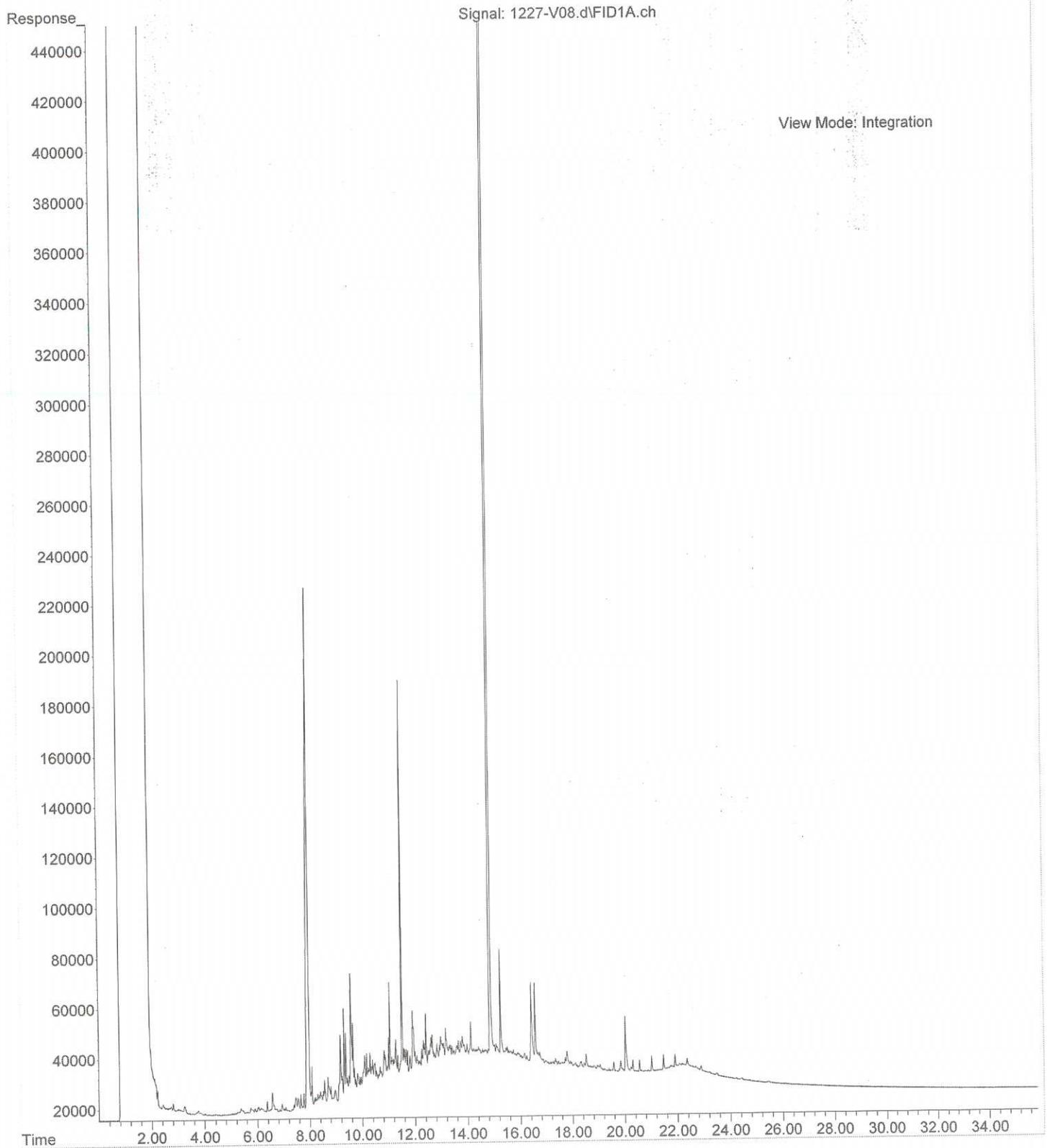
File : C:\msdchem\2\data\V191227\1227-V09.d
Operator : JT
Acquired : 27 Dec 2019 12:03 using AcqMethod V191206F.M
Instrument : Vigo
Sample Name: 12-256-02
Misc Info :
Vial Number: 9



File : C:\msdchem\2\data\V191227.SEC\1227-V58.D
Operator : JT
Acquired : 27 Dec 2019 11:23 using AcqMethod V191206F.M
Instrument : Vigo
Sample Name: 12-256-03
Misc Info :
Vial Number: 58



File :C:\msdchem\2\data\V191227\1227-V08.d
Operator : JT
Acquired : 27 Dec 2019 11:23 using AcqMethod V191206F.M
Instrument : Vigo
Sample Name: 12-256-04
Misc Info :
Vial Number: 8





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

January 28, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2001-112

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on January 10, 2020.

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 flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: January 28, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-112
Project: 397-019

Case Narrative

Samples were collected on January 9, 2020 and received by the laboratory on January 10, 2020. 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.



Date of Report: January 28, 2020
 Samples Submitted: January 10, 2020
 Laboratory Reference: 2001-112
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DW-4-15.0					
Laboratory ID:	01-112-03					
Benzene	ND	0.020	EPA 8021B	1-18-20	1-20-20	
Toluene	ND	0.079	EPA 8021B	1-18-20	1-20-20	
Ethyl Benzene	ND	0.079	EPA 8021B	1-18-20	1-20-20	
m,p-Xylene	ND	0.079	EPA 8021B	1-18-20	1-20-20	
o-Xylene	ND	0.079	EPA 8021B	1-18-20	1-20-20	
Gasoline	ND	7.9	NWTPH-Gx	1-18-20	1-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	105	58-129				
Client ID:	DW-4-20.0					
Laboratory ID:	01-112-04					
Benzene	ND	0.020	EPA 8021B	1-18-20	1-20-20	
Toluene	ND	0.070	EPA 8021B	1-18-20	1-20-20	
Ethyl Benzene	ND	0.070	EPA 8021B	1-18-20	1-20-20	
m,p-Xylene	ND	0.070	EPA 8021B	1-18-20	1-20-20	
o-Xylene	ND	0.070	EPA 8021B	1-18-20	1-20-20	
Gasoline	ND	7.0	NWTPH-Gx	1-18-20	1-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	102	58-129				



Date of Report: January 28, 2020
 Samples Submitted: January 10, 2020
 Laboratory Reference: 2001-112
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0118S3					
Benzene	ND	0.020	EPA 8021B	1-18-20	1-20-20	
Toluene	ND	0.050	EPA 8021B	1-18-20	1-20-20	
Ethyl Benzene	ND	0.050	EPA 8021B	1-18-20	1-20-20	
m,p-Xylene	ND	0.050	EPA 8021B	1-18-20	1-20-20	
o-Xylene	ND	0.050	EPA 8021B	1-18-20	1-20-20	
Gasoline	ND	5.0	NWTPH-Gx	1-18-20	1-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	91	58-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	01-112-04							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				102	99	58-129		

SPIKE BLANKS

Laboratory ID:	SB0118S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	0.944	0.981	1.00	1.00	94	98	69-109	4	10
Toluene	0.982	1.01	1.00	1.00	98	101	67-112	3	10
Ethyl Benzene	0.998	1.03	1.00	1.00	100	103	67-113	3	10
m,p-Xylene	0.976	1.01	1.00	1.00	98	101	66-114	3	11
o-Xylene	1.01	1.04	1.00	1.00	101	104	68-112	3	11
<i>Surrogate:</i>									
<i>Fluorobenzene</i>					94	97	58-129		



Date of Report: January 28, 2020
 Samples Submitted: January 10, 2020
 Laboratory Reference: 2001-112
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DW-4-15.0					
Laboratory ID:	01-112-03					
Diesel Range Organics	ND	35	NWTPH-Dx	1-20-20	1-20-20	
Lube Oil Range Organics	ND	69	NWTPH-Dx	1-20-20	1-20-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>70</i>	<i>50-150</i>				

Client ID:	DW-4-20.0					
Laboratory ID:	01-112-04					
Diesel Range Organics	ND	33	NWTPH-Dx	1-20-20	1-21-20	
Lube Oil Range Organics	ND	65	NWTPH-Dx	1-20-20	1-21-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>78</i>	<i>50-150</i>				



Date of Report: January 28, 2020
 Samples Submitted: January 10, 2020
 Laboratory Reference: 2001-112
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0120S2					
Diesel Range Organics	ND	25	NWTPH-Dx	1-20-20	1-20-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	1-20-20	1-20-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>71</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	01-176-02							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil	895	647	NA	NA	NA	NA	32	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				105	96	50-150		



Date of Report: January 28, 2020
 Samples Submitted: January 10, 2020
 Laboratory Reference: 2001-112
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	A3-Subslab-25-010920					
Laboratory ID:	01-112-08					
Diesel Range Organics	82	35	NWTPH-Dx	1-23-20	1-23-20	N
Lube Oil Range Organics	660	70	NWTPH-Dx	1-23-20	1-23-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	89	50-150				

Client ID:	A3-Subslab-22-010920					
Laboratory ID:	01-112-09					
Diesel Range Organics	ND	76	NWTPH-Dx	1-23-20	1-23-20	
Lube Oil Range Organics	ND	150	NWTPH-Dx	1-23-20	1-23-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	82	50-150				



Date of Report: January 28, 2020
 Samples Submitted: January 10, 2020
 Laboratory Reference: 2001-112
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0123S1					
Diesel Range Organics	ND	25	NWTPH-Dx	1-23-20	1-23-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	1-23-20	1-23-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>89</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0123S1							
	ORIG	DUP						
Diesel Fuel #2	82.1	78.6	NA	NA	NA	NA	4	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>86</i>	<i>89</i>	<i>50-150</i>		



Date of Report: January 28, 2020
Samples Submitted: January 10, 2020
Laboratory Reference: 2001-112
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
DW-4-15.0	01-112-03	28	1-20-20
DW-4-20.0	01-112-04	23	1-20-20
A3-Subslab-25-010920	01-112-08	28	1-23-20
A3-Subslab-22-010920	01-112-09	67	1-23-20





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 methods 8260 & 8270, 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





**OnSite
Environmental Inc.**

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

January 17, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2001-179

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on January 17, 2020.

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,

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: January 17, 2020
Samples Submitted: January 17, 2020
Laboratory Reference: 2001-179
Project: 397-019

Case Narrative

Samples were collected on January 17, 2020 and received by the laboratory on January 17, 2020. 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.



Date of Report: January 17, 2020
 Samples Submitted: January 17, 2020
 Laboratory Reference: 2001-179
 Project: 397-019

**HYDROCARBON IDENTIFICATION
 NWTPH-HCID**

Matrix: Product
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M1-24.5-Product					
Laboratory ID:	01-179-02					
Gasoline Range Organics	ND	9200	NWTPH-HCID	1-17-20	1-17-20	
Diesel Range Organics	Detected	23000	NWTPH-HCID	1-17-20	1-17-20	
Lube Oil Range Organics	Detected	46000	NWTPH-HCID	1-17-20	1-17-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	---	50-150				S



Date of Report: January 17, 2020
 Samples Submitted: January 17, 2020
 Laboratory Reference: 2001-179
 Project: 397-019

**HYDROCARBON IDENTIFICATION
 NWTPH-HCID
 QUALITY CONTROL**

Matrix: Product
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0117P1					
Gasoline Range Organics	ND	10	NWTPH-HCID	1-17-20	1-17-20	
Diesel Range Organics	ND	25	NWTPH-HCID	1-17-20	1-17-20	
Lube Oil Range Organics	ND	50	NWTPH-HCID	1-17-20	1-17-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>103</i>	<i>50-150</i>				





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 methods 8260 & 8270, 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





MVA Onsite Environmental Inc.

Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Laboratory Number: **01-179**

Company: Favallon

Project Number: 397-019

Project Name: Block 38 West

Project Manager: Suzy Stumpf

Sampled by: Greg Peters

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	M1-24.5	11/7/20	1020	Soil	1
2	M1-24.5-Product	11/7/20	1025	Product	1

Number of Containers	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
1																		
1	X																	

Signature	Company	Date	Time	Comments/Special Instructions
	Favallon	11/7/20	1040	Please hold Soil sample pending results of HClD analysis.
	Favallon	11/7/20	1040	
	Favallon	11/7/20	1135	
	Favallon	11/7/20	1135	

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

January 23, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2001-199

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on January 21, 2020.

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 flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: January 23, 2020
Samples Submitted: January 21, 2020
Laboratory Reference: 2001-199
Project: 397-019

Case Narrative

Samples were collected on January 21, 2020 and received by the laboratory on January 21, 2020. 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.



Date of Report: January 23, 2020
 Samples Submitted: January 21, 2020
 Laboratory Reference: 2001-199
 Project: 397-019

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M1-Tank-24.5					
Laboratory ID:	01-199-01					
Gasoline	ND	59	NWTPH-Gx	1-21-20	1-21-20	U1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>117</i>	<i>58-129</i>				



Date of Report: January 23, 2020
 Samples Submitted: January 21, 2020
 Laboratory Reference: 2001-199
 Project: 397-019

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0121S1					
Gasoline	ND	5.0	NWTPH-Gx	1-21-20	1-21-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>86</i>	<i>58-129</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	01-194-01							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				76	93	58-129		



Date of Report: January 23, 2020
 Samples Submitted: January 21, 2020
 Laboratory Reference: 2001-199
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M1-Tank-24.5					
Laboratory ID:	01-199-01					
Diesel Range Organics	850	150	NWTPH-Dx	1-21-20	1-21-20	N
Lube Oil Range Organics	2500	310	NWTPH-Dx	1-21-20	1-21-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>93</i>	<i>50-150</i>				



Date of Report: January 23, 2020
 Samples Submitted: January 21, 2020
 Laboratory Reference: 2001-199
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0121S2					
Diesel Range Organics	ND	25	NWTPH-Dx	1-21-20	1-21-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	1-21-20	1-21-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	85	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0121S2							
	ORIG	DUP						
Diesel Fuel #2	86.9	79.6	NA	NA	NA	9	NA	
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				97	88	50-150		



Date of Report: January 23, 2020
 Samples Submitted: January 21, 2020
 Laboratory Reference: 2001-199
 Project: 397-019

VOLATILE ORGANICS EPA 8260D

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M1-Tank-24.5					
Laboratory ID:	01-199-01					
Vinyl Chloride	ND	0.00082	EPA 8260D	1-22-20	1-22-20	
(trans) 1,2-Dichloroethene	ND	0.00082	EPA 8260D	1-22-20	1-22-20	
Methyl t-Butyl Ether	ND	0.00082	EPA 8260D	1-22-20	1-22-20	
(cis) 1,2-Dichloroethene	ND	0.00082	EPA 8260D	1-22-20	1-22-20	
Benzene	ND	0.00082	EPA 8260D	1-22-20	1-22-20	
1,2-Dichloroethane	ND	0.00082	EPA 8260D	1-22-20	1-22-20	
Trichloroethene	ND	0.00082	EPA 8260D	1-22-20	1-22-20	
Toluene	ND	0.0041	EPA 8260D	1-22-20	1-22-20	
Tetrachloroethene	0.0041	0.00082	EPA 8260D	1-22-20	1-22-20	
1,2-Dibromoethane	ND	0.00082	EPA 8260D	1-22-20	1-22-20	
Ethylbenzene	0.00099	0.00082	EPA 8260D	1-22-20	1-22-20	
m,p-Xylene	0.0053	0.0016	EPA 8260D	1-22-20	1-22-20	
o-Xylene	0.0063	0.00082	EPA 8260D	1-22-20	1-22-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>105</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>94</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>106</i>	<i>71-130</i>				



Date of Report: January 23, 2020
 Samples Submitted: January 21, 2020
 Laboratory Reference: 2001-199
 Project: 397-019

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0122S2					
Vinyl Chloride	ND	0.0010	EPA 8260D	1-22-20	1-22-20	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	1-22-20	1-22-20	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260D	1-22-20	1-22-20	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	1-22-20	1-22-20	
Benzene	ND	0.0010	EPA 8260D	1-22-20	1-22-20	
1,2-Dichloroethane	ND	0.0010	EPA 8260D	1-22-20	1-22-20	
Trichloroethene	ND	0.0010	EPA 8260D	1-22-20	1-22-20	
Toluene	ND	0.0050	EPA 8260D	1-22-20	1-22-20	
Tetrachloroethene	ND	0.0010	EPA 8260D	1-22-20	1-22-20	
1,2-Dibromoethane	ND	0.0010	EPA 8260D	1-22-20	1-22-20	
Ethylbenzene	ND	0.0010	EPA 8260D	1-22-20	1-22-20	
m,p-Xylene	ND	0.0020	EPA 8260D	1-22-20	1-22-20	
o-Xylene	ND	0.0010	EPA 8260D	1-22-20	1-22-20	
<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>96</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>114</i>	<i>71-130</i>				



Date of Report: January 23, 2020
 Samples Submitted: January 21, 2020
 Laboratory Reference: 2001-199
 Project: 397-019

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0122S2									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0551	0.0591	0.0500	0.0500	110	118	57-133	7	18	
Benzene	0.0483	0.0506	0.0500	0.0500	97	101	71-129	5	16	
Trichloroethene	0.0535	0.0575	0.0500	0.0500	107	115	71-122	7	16	
Toluene	0.0498	0.0527	0.0500	0.0500	100	105	74-125	6	15	
Chlorobenzene	0.0480	0.0514	0.0500	0.0500	96	103	72-120	7	14	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					<i>97</i>	<i>98</i>	<i>76-131</i>			
<i>Toluene-d8</i>					<i>98</i>	<i>95</i>	<i>78-128</i>			
<i>4-Bromofluorobenzene</i>					<i>111</i>	<i>109</i>	<i>71-130</i>			



Date of Report: January 23, 2020
 Samples Submitted: January 21, 2020
 Laboratory Reference: 2001-199
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M1-Tank-24.5					
Laboratory ID:	01-199-01					
Naphthalene	1.8	0.082	EPA 8270E/SIM	1-22-20	1-22-20	
2-Methylnaphthalene	8.0	0.082	EPA 8270E/SIM	1-22-20	1-22-20	
1-Methylnaphthalene	5.1	0.082	EPA 8270E/SIM	1-22-20	1-22-20	
Benzo[a]anthracene	0.39	0.082	EPA 8270E/SIM	1-22-20	1-22-20	
Chrysene	0.54	0.082	EPA 8270E/SIM	1-22-20	1-22-20	
Benzo[b]fluoranthene	0.30	0.082	EPA 8270E/SIM	1-22-20	1-22-20	
Benzo(j,k)fluoranthene	ND	0.082	EPA 8270E/SIM	1-22-20	1-22-20	
Benzo[a]pyrene	0.29	0.082	EPA 8270E/SIM	1-22-20	1-22-20	
Indeno(1,2,3-c,d)pyrene	0.17	0.082	EPA 8270E/SIM	1-22-20	1-22-20	
Dibenz[a,h]anthracene	0.11	0.082	EPA 8270E/SIM	1-22-20	1-22-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>89</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>83</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>90</i>	<i>45 - 122</i>				



Date of Report: January 23, 2020
 Samples Submitted: January 21, 2020
 Laboratory Reference: 2001-199
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0122S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	1-22-20	1-22-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	1-22-20	1-22-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	1-22-20	1-22-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	1-22-20	1-22-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	1-22-20	1-22-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	1-22-20	1-22-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	1-22-20	1-22-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	1-22-20	1-22-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	1-22-20	1-22-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	1-22-20	1-22-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>84</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>83</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>101</i>	<i>45 - 122</i>				



Date of Report: January 23, 2020
 Samples Submitted: January 21, 2020
 Laboratory Reference: 2001-199
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0122S1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.0655	0.0666	0.0833	0.0833	79	80	57 - 109	2	15	
Acenaphthylene	0.0654	0.0650	0.0833	0.0833	79	78	60 - 121	1	15	
Acenaphthene	0.0680	0.0683	0.0833	0.0833	82	82	59 - 121	0	15	
Fluorene	0.0697	0.0737	0.0833	0.0833	84	88	63 - 119	6	15	
Phenanthrene	0.0709	0.0716	0.0833	0.0833	85	86	59 - 114	1	15	
Anthracene	0.0735	0.0744	0.0833	0.0833	88	89	63 - 119	1	15	
Fluoranthene	0.0741	0.0760	0.0833	0.0833	89	91	63 - 120	3	15	
Pyrene	0.0724	0.0721	0.0833	0.0833	87	87	62 - 119	0	15	
Benzo[a]anthracene	0.0773	0.0788	0.0833	0.0833	93	95	64 - 127	2	15	
Chrysene	0.0747	0.0771	0.0833	0.0833	90	93	63 - 121	3	15	
Benzo[b]fluoranthene	0.0799	0.0830	0.0833	0.0833	96	100	61 - 122	4	15	
Benzo(j,k)fluoranthene	0.0738	0.0743	0.0833	0.0833	89	89	64 - 123	1	15	
Benzo[a]pyrene	0.0738	0.0757	0.0833	0.0833	89	91	62 - 122	3	15	
Indeno(1,2,3-c,d)pyrene	0.0741	0.0746	0.0833	0.0833	89	90	59 - 124	1	15	
Dibenz[a,h]anthracene	0.0670	0.0686	0.0833	0.0833	80	82	61 - 123	2	15	
Benzo(g,h,i)perylene	0.0743	0.0765	0.0833	0.0833	89	92	61 - 119	3	15	
<i>Surrogate:</i>										
2-Fluorobiphenyl					81	81	40 - 111			
Pyrene-d10					84	85	40 - 110			
Terphenyl-d14					97	97	45 - 122			



Date of Report: January 23, 2020
 Samples Submitted: January 21, 2020
 Laboratory Reference: 2001-199
 Project: 397-019

PCBs EPA 8082A

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M1-Tank-24.5					
Laboratory ID:	01-199-01					
Aroclor 1016	ND	0.062	EPA 8082A	1-21-20	1-21-20	
Aroclor 1221	ND	0.062	EPA 8082A	1-21-20	1-21-20	
Aroclor 1232	ND	0.062	EPA 8082A	1-21-20	1-21-20	
Aroclor 1242	ND	0.062	EPA 8082A	1-21-20	1-21-20	
Aroclor 1248	ND	0.062	EPA 8082A	1-21-20	1-21-20	
Aroclor 1254	ND	0.062	EPA 8082A	1-21-20	1-21-20	
Aroclor 1260	ND	0.062	EPA 8082A	1-21-20	1-21-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>DCB</i>	78	37-122				



Date of Report: January 23, 2020
 Samples Submitted: January 21, 2020
 Laboratory Reference: 2001-199
 Project: 397-019

**PCBs EPA 8082A
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0121S1					
Aroclor 1016	ND	0.050	EPA 8082A	1-21-20	1-21-20	
Aroclor 1221	ND	0.050	EPA 8082A	1-21-20	1-21-20	
Aroclor 1232	ND	0.050	EPA 8082A	1-21-20	1-21-20	
Aroclor 1242	ND	0.050	EPA 8082A	1-21-20	1-21-20	
Aroclor 1248	ND	0.050	EPA 8082A	1-21-20	1-21-20	
Aroclor 1254	ND	0.050	EPA 8082A	1-21-20	1-21-20	
Aroclor 1260	ND	0.050	EPA 8082A	1-21-20	1-21-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>		<i>Control Limits</i>			
<i>DCB</i>	97		37-122			

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB0121S1										
	SB	SBD	SB	SBD		SB	SBD				
Aroclor 1260	0.498	0.503	0.500	0.500	N/A	100	101	49-125	1	18	
<i>Surrogate:</i>											
<i>DCB</i>						96	99	37-122			



Date of Report: January 23, 2020
Samples Submitted: January 21, 2020
Laboratory Reference: 2001-199
Project: 397-019

**TOTAL LEAD
EPA 6020B**

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M1-Tank-24.5					
Laboratory ID:	01-199-01					
Lead	46	6.2	EPA 6020B	1-21-20	1-22-20	



Date of Report: January 23, 2020
 Samples Submitted: January 21, 2020
 Laboratory Reference: 2001-199
 Project: 397-019

**TOTAL LEAD
 EPA 6020B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0121SM2					
Lead	ND	5.0	EPA 6020B	1-21-20	1-22-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	01-200-12							
	ORIG	DUP						
Lead	13.9	16.1	NA	NA	NA	NA	15	20

MATRIX SPIKES

Laboratory ID:	01-200-12									
	MS	MSD	MS	MSD	MS	MSD				
Lead	259	248	250	250	13.9	98	93	75-125	4	20



Date of Report: January 23, 2020
Samples Submitted: January 21, 2020
Laboratory Reference: 2001-199
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
M1-Tank-24.5	01-199-01	19	1-21-20





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 methods 8260 & 8270, 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





Onsite Environmental Inc.

Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3681 • www.onsite-env.com

Chain of Custody

Turnaround Request (in working days)

(Check One)

Same Day

2 Days

3 Days

Standard (7 Days)

_____ (other)

Laboratory Number: **01-199**

01-199

Company: Favallon

Project Number: 397-019

Project Name: Block 38 West

Project Manager: Suzanne Strumpf / Tawar K

Sampled by: Gres Peters

Date Sampled: 1/21/20 Time Sampled: 140 Matrix: Soil

Number of Containers: 5

Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Total Lead	EDB/EDC	MTBE	% Moisture
<u>5</u>		<u>X</u>		<u>X</u>		<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>								<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Total Lead	EDB/EDC	MTBE	% Moisture	
<u>1</u>	<u>M1-Tant-24.5</u>	<u>1/21/20</u>	<u>140</u>	<u>Soil</u>	<u>5</u>		<u>X</u>		<u>X</u>		<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>									<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>

Signature	Company	Date	Time	Comments/Special Instructions
<u>[Signature]</u>	<u>Favallon</u>	<u>1/21/20</u>	<u>1007</u>	<u>* OCE, TCE, cis-1,2 OCE, TRANS-1,2 OCE, Vinyl Chloride</u>
<u>[Signature]</u>	<u>Favallon</u>	<u>1/21/20</u>	<u>1207</u>	
<u>[Signature]</u>	<u>Favallon</u>	<u>1/21/20</u>	<u>1251</u>	
<u>[Signature]</u>	<u>OGE</u>	<u>1/21/20</u>	<u>1857</u>	
Received				
Relinquished				
Reviewed/Date				

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



**OnSite
Environmental Inc.**

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

January 29, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2001-279

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on January 28, 2020.

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,

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: January 29, 2020
Samples Submitted: January 28, 2020
Laboratory Reference: 2001-279
Project: 397-019

Case Narrative

Samples were collected on January 27, 2020 and received by the laboratory on January 28, 2020. 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.

Total Lead EPA 6010D Analysis

The duplicate RPD for Lead is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

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: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-279
 Project: 397-019

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST01-B-17					
Laboratory ID:	01-279-05					
Gasoline	ND	5.5	NWTPH-Gx	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>85</i>	<i>58-129</i>				



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-279
 Project: 397-019

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0128S1					
Gasoline	ND	5.0	NWTPH-Gx	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>92</i>	<i>58-129</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	01-279-05							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				<i>85</i>	<i>87</i>	<i>58-129</i>		



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-279
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST01-B-17					
Laboratory ID:	01-279-05					
Diesel Range Organics	37	27	NWTPH-Dx	1-28-20	1-28-20	
Lube Oil Range Organics	100	55	NWTPH-Dx	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	95	50-150				



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-279
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0128S1					
Diesel Range Organics	ND	25	NWTPH-Dx	1-28-20	1-28-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	93	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0128S1							
	ORIG	DUP						
Diesel Fuel #2	80.7	75.5	NA	NA	NA	7	NA	
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				87	92	50-150		



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-279
 Project: 397-019

VOLATILE ORGANICS EPA 8260D

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST01-B-17					
Laboratory ID:	01-279-05					
Vinyl Chloride	ND	0.00092	EPA 8260D	1-28-20	1-28-20	
(trans) 1,2-Dichloroethene	ND	0.00092	EPA 8260D	1-28-20	1-28-20	
Methyl t-Butyl Ether	ND	0.00092	EPA 8260D	1-28-20	1-28-20	
(cis) 1,2-Dichloroethene	ND	0.00092	EPA 8260D	1-28-20	1-28-20	
Benzene	ND	0.00092	EPA 8260D	1-28-20	1-28-20	
1,2-Dichloroethane	ND	0.00092	EPA 8260D	1-28-20	1-28-20	
Trichloroethene	ND	0.00092	EPA 8260D	1-28-20	1-28-20	
Toluene	ND	0.0046	EPA 8260D	1-28-20	1-28-20	
Tetrachloroethene	ND	0.00092	EPA 8260D	1-28-20	1-28-20	
1,2-Dibromoethane	ND	0.00092	EPA 8260D	1-28-20	1-28-20	
Ethylbenzene	ND	0.00092	EPA 8260D	1-28-20	1-28-20	
m,p-Xylene	ND	0.0018	EPA 8260D	1-28-20	1-28-20	
o-Xylene	ND	0.00092	EPA 8260D	1-28-20	1-28-20	
<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>98</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>89</i>	<i>71-130</i>				



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-279
 Project: 397-019

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0128S1					
Vinyl Chloride	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
Benzene	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
1,2-Dichloroethane	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
Trichloroethene	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
Toluene	ND	0.0050	EPA 8260D	1-28-20	1-28-20	
Tetrachloroethene	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
1,2-Dibromoethane	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
Ethylbenzene	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
m,p-Xylene	ND	0.0020	EPA 8260D	1-28-20	1-28-20	
o-Xylene	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
<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>98</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>71-130</i>				



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-279
 Project: 397-019

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0128S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0472	0.0476	0.0500	0.0500	94	95	57-133	1	18	
Benzene	0.0438	0.0452	0.0500	0.0500	88	90	71-129	3	16	
Trichloroethene	0.0480	0.0483	0.0500	0.0500	96	97	71-122	1	16	
Toluene	0.0458	0.0469	0.0500	0.0500	92	94	74-125	2	15	
Chlorobenzene	0.0455	0.0501	0.0500	0.0500	91	100	72-120	10	14	
<i>Surrogate:</i>										
Dibromofluoromethane					97	94	76-131			
Toluene-d8					101	96	78-128			
4-Bromofluorobenzene					99	100	71-130			



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-279
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST01-B-17					
Laboratory ID:	01-279-05					
Naphthalene	0.029	0.0073	EPA 8270E/SIM	1-28-20	1-28-20	
2-Methylnaphthalene	0.055	0.0073	EPA 8270E/SIM	1-28-20	1-28-20	
1-Methylnaphthalene	0.041	0.0073	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[a]anthracene	0.011	0.0073	EPA 8270E/SIM	1-28-20	1-28-20	
Chrysene	0.014	0.0073	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[b]fluoranthene	0.010	0.0073	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo(j,k)fluoranthene	ND	0.0073	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[a]pyrene	0.011	0.0073	EPA 8270E/SIM	1-28-20	1-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0073	EPA 8270E/SIM	1-28-20	1-28-20	
Dibenz[a,h]anthracene	ND	0.0073	EPA 8270E/SIM	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>63</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>61</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>65</i>	<i>45 - 122</i>				



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-279
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0128S2					
Naphthalene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>81</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>90</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>100</i>	<i>45 - 122</i>				



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-279
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0128S2									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.0631	0.0698	0.0833	0.0833	76	84	57 - 109	10	15	
Acenaphthylene	0.0663	0.0723	0.0833	0.0833	80	87	60 - 121	9	15	
Acenaphthene	0.0665	0.0723	0.0833	0.0833	80	87	59 - 121	8	15	
Fluorene	0.0703	0.0697	0.0833	0.0833	84	84	63 - 119	1	15	
Phenanthrene	0.0669	0.0677	0.0833	0.0833	80	81	59 - 114	1	15	
Anthracene	0.0734	0.0724	0.0833	0.0833	88	87	63 - 119	1	15	
Fluoranthene	0.0796	0.0786	0.0833	0.0833	96	94	63 - 120	1	15	
Pyrene	0.0749	0.0762	0.0833	0.0833	90	91	62 - 119	2	15	
Benzo[a]anthracene	0.0763	0.0757	0.0833	0.0833	92	91	64 - 127	1	15	
Chrysene	0.0732	0.0739	0.0833	0.0833	88	89	63 - 121	1	15	
Benzo[b]fluoranthene	0.0704	0.0695	0.0833	0.0833	85	83	61 - 122	1	15	
Benzo(j,k)fluoranthene	0.0745	0.0746	0.0833	0.0833	89	90	64 - 123	0	15	
Benzo[a]pyrene	0.0742	0.0736	0.0833	0.0833	89	88	62 - 122	1	15	
Indeno(1,2,3-c,d)pyrene	0.0788	0.0786	0.0833	0.0833	95	94	59 - 124	0	15	
Dibenz[a,h]anthracene	0.0778	0.0791	0.0833	0.0833	93	95	61 - 123	2	15	
Benzo[g,h,i]perylene	0.0780	0.0802	0.0833	0.0833	94	96	61 - 119	3	15	
<i>Surrogate:</i>										
2-Fluorobiphenyl					74	81	40 - 111			
Pyrene-d10					84	85	40 - 110			
Terphenyl-d14					92	93	45 - 122			



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-279
 Project: 397-019

PCBs EPA 8082A

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST01-B-17					
Laboratory ID:	01-279-05					
Aroclor 1016	ND	0.055	EPA 8082A	1-28-20	1-29-20	
Aroclor 1221	ND	0.055	EPA 8082A	1-28-20	1-29-20	
Aroclor 1232	ND	0.055	EPA 8082A	1-28-20	1-29-20	
Aroclor 1242	ND	0.055	EPA 8082A	1-28-20	1-29-20	
Aroclor 1248	ND	0.055	EPA 8082A	1-28-20	1-29-20	
Aroclor 1254	ND	0.055	EPA 8082A	1-28-20	1-29-20	
Aroclor 1260	ND	0.055	EPA 8082A	1-28-20	1-29-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>DCB</i>	<i>84</i>	<i>37-122</i>				



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-279
 Project: 397-019

**PCBs EPA 8082A
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0128S1					
Aroclor 1016	ND	0.050	EPA 8082A	1-28-20	1-28-20	
Aroclor 1221	ND	0.050	EPA 8082A	1-28-20	1-28-20	
Aroclor 1232	ND	0.050	EPA 8082A	1-28-20	1-28-20	
Aroclor 1242	ND	0.050	EPA 8082A	1-28-20	1-28-20	
Aroclor 1248	ND	0.050	EPA 8082A	1-28-20	1-28-20	
Aroclor 1254	ND	0.050	EPA 8082A	1-28-20	1-28-20	
Aroclor 1260	ND	0.050	EPA 8082A	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>		<i>Control Limits</i>			
<i>DCB</i>	101		37-122			

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB0128S1										
	SB	SBD	SB	SBD		SB	SBD				
Aroclor 1260	0.528	0.565	0.500	0.500	N/A	106	113	49-125	7	18	
<i>Surrogate:</i>											
<i>DCB</i>						93	105	37-122			



Date of Report: January 29, 2020
Samples Submitted: January 28, 2020
Laboratory Reference: 2001-279
Project: 397-019

**TOTAL LEAD
EPA 6010D**

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST01-B-17					
Laboratory ID:	01-279-05					
Lead	13	5.5	EPA 6010D	1-28-20	1-28-20	



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-279
 Project: 397-019

**TOTAL LEAD
 EPA 6010D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0128SM3					
Lead	ND	5.0	EPA 6010D	1-28-20	1-28-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags	
DUPLICATE									
Laboratory ID:	01-282-02								
	ORIG	DUP							
Lead	39.1	28.0	NA	NA	NA	NA	33	20	K

MATRIX SPIKES

Laboratory ID:	01-282-02									
	MS	MSD	MS	MSD	MS	MSD				
Lead	278	262	250	250	39.1	96	89	75-125	6	20



Date of Report: January 29, 2020
Samples Submitted: January 28, 2020
Laboratory Reference: 2001-279
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
UST01-B-17	01-279-05	9	1-28-20





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 methods 8260 & 8270, 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





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

January 29, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2001-280

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on January 28, 2020.

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 flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: January 29, 2020
Samples Submitted: January 28, 2020
Laboratory Reference: 2001-280
Project: 397-019

Case Narrative

Samples were collected on January 27, 2020 and received by the laboratory on January 28, 2020. 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.

Total Lead EPA 6010D Analysis

The duplicate RPD for Lead is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

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: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-280
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST01-S1-19					
Laboratory ID:	01-280-01					
Diesel Range Organics	ND	28	NWTPH-Dx	1-28-20	1-28-20	
Lube Oil Range Organics	ND	55	NWTPH-Dx	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	88	50-150				

Client ID:	UST01-N1-19					
Laboratory ID:	01-280-02					
Diesel Range Organics	ND	30	NWTPH-Dx	1-28-20	1-28-20	
Lube Oil Range Organics	ND	60	NWTPH-Dx	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	79	50-150				

Client ID:	UST01-W1-19					
Laboratory ID:	01-280-03					
Diesel Range Organics	ND	30	NWTPH-Dx	1-28-20	1-28-20	
Lube Oil Range Organics	ND	61	NWTPH-Dx	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	81	50-150				

Client ID:	UST01-E1-19					
Laboratory ID:	01-280-04					
Diesel Range Organics	ND	29	NWTPH-Dx	1-28-20	1-28-20	
Lube Oil Range Organics	ND	58	NWTPH-Dx	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	76	50-150				



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-280
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0128S1					
Diesel Range Organics	ND	25	NWTPH-Dx	1-28-20	1-28-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	93	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0128S1							
	ORIG	DUP						
Diesel Fuel #2	80.7	75.5	NA	NA	NA	7	NA	
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				87	92	50-150		



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-280
 Project: 397-019

VOLATILE ORGANICS EPA 8260D

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST01-S1-19					
Laboratory ID:	01-280-01					
Vinyl Chloride	ND	0.00084	EPA 8260D	1-28-20	1-28-20	
(trans) 1,2-Dichloroethene	ND	0.00084	EPA 8260D	1-28-20	1-28-20	
(cis) 1,2-Dichloroethene	ND	0.00084	EPA 8260D	1-28-20	1-28-20	
Benzene	ND	0.00084	EPA 8260D	1-28-20	1-28-20	
Trichloroethene	ND	0.00084	EPA 8260D	1-28-20	1-28-20	
Toluene	ND	0.0042	EPA 8260D	1-28-20	1-28-20	
Tetrachloroethene	ND	0.00084	EPA 8260D	1-28-20	1-28-20	
Ethylbenzene	ND	0.00084	EPA 8260D	1-28-20	1-28-20	
m,p-Xylene	ND	0.0017	EPA 8260D	1-28-20	1-28-20	
o-Xylene	ND	0.00084	EPA 8260D	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>87</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>71-130</i>				



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-280
 Project: 397-019

VOLATILE ORGANICS EPA 8260D

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST01-N1-19					
Laboratory ID:	01-280-02					
Vinyl Chloride	ND	0.00094	EPA 8260D	1-28-20	1-28-20	
(trans) 1,2-Dichloroethene	ND	0.00094	EPA 8260D	1-28-20	1-28-20	
(cis) 1,2-Dichloroethene	ND	0.00094	EPA 8260D	1-28-20	1-28-20	
Benzene	ND	0.00094	EPA 8260D	1-28-20	1-28-20	
Trichloroethene	ND	0.00094	EPA 8260D	1-28-20	1-28-20	
Toluene	ND	0.0047	EPA 8260D	1-28-20	1-28-20	
Tetrachloroethene	ND	0.00094	EPA 8260D	1-28-20	1-28-20	
Ethylbenzene	ND	0.00094	EPA 8260D	1-28-20	1-28-20	
m,p-Xylene	ND	0.0019	EPA 8260D	1-28-20	1-28-20	
o-Xylene	ND	0.00094	EPA 8260D	1-28-20	1-28-20	
<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>101</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>71-130</i>				



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-280
 Project: 397-019

VOLATILE ORGANICS EPA 8260D

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST01-W1-19					
Laboratory ID:	01-280-03					
Vinyl Chloride	ND	0.00098	EPA 8260D	1-28-20	1-28-20	
(trans) 1,2-Dichloroethene	ND	0.00098	EPA 8260D	1-28-20	1-28-20	
(cis) 1,2-Dichloroethene	ND	0.00098	EPA 8260D	1-28-20	1-28-20	
Benzene	ND	0.00098	EPA 8260D	1-28-20	1-28-20	
Trichloroethene	ND	0.00098	EPA 8260D	1-28-20	1-28-20	
Toluene	ND	0.0049	EPA 8260D	1-28-20	1-28-20	
Tetrachloroethene	ND	0.00098	EPA 8260D	1-28-20	1-28-20	
Ethylbenzene	ND	0.00098	EPA 8260D	1-28-20	1-28-20	
m,p-Xylene	ND	0.0020	EPA 8260D	1-28-20	1-28-20	
o-Xylene	ND	0.00098	EPA 8260D	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>92</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>71-130</i>				



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-280
 Project: 397-019

VOLATILE ORGANICS EPA 8260D

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST01-E1-19					
Laboratory ID:	01-280-04					
Vinyl Chloride	ND	0.00083	EPA 8260D	1-28-20	1-28-20	
(trans) 1,2-Dichloroethene	ND	0.00083	EPA 8260D	1-28-20	1-28-20	
(cis) 1,2-Dichloroethene	ND	0.00083	EPA 8260D	1-28-20	1-28-20	
Benzene	ND	0.00083	EPA 8260D	1-28-20	1-28-20	
Trichloroethene	ND	0.00083	EPA 8260D	1-28-20	1-28-20	
Toluene	ND	0.0042	EPA 8260D	1-28-20	1-28-20	
Tetrachloroethene	ND	0.00083	EPA 8260D	1-28-20	1-28-20	
Ethylbenzene	ND	0.00083	EPA 8260D	1-28-20	1-28-20	
m,p-Xylene	ND	0.0017	EPA 8260D	1-28-20	1-28-20	
o-Xylene	ND	0.00083	EPA 8260D	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>93</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>71-130</i>				



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-280
 Project: 397-019

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0128S1					
Vinyl Chloride	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
Benzene	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
Trichloroethene	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
Toluene	ND	0.0050	EPA 8260D	1-28-20	1-28-20	
Tetrachloroethene	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
Ethylbenzene	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
m,p-Xylene	ND	0.0020	EPA 8260D	1-28-20	1-28-20	
o-Xylene	ND	0.0010	EPA 8260D	1-28-20	1-28-20	
<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>98</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>71-130</i>				



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-280
 Project: 397-019

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0128S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0472	0.0476	0.0500	0.0500	94	95	57-133	1	18	
Benzene	0.0438	0.0452	0.0500	0.0500	88	90	71-129	3	16	
Trichloroethene	0.0480	0.0483	0.0500	0.0500	96	97	71-122	1	16	
Toluene	0.0458	0.0469	0.0500	0.0500	92	94	74-125	2	15	
Chlorobenzene	0.0455	0.0501	0.0500	0.0500	91	100	72-120	10	14	
<i>Surrogate:</i>										
Dibromofluoromethane					97	94	76-131			
Toluene-d8					101	96	78-128			
4-Bromofluorobenzene					99	100	71-130			



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-280
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST01-S1-19					
Laboratory ID:	01-280-01					
Naphthalene	ND	0.0074	EPA 8270E/SIM	1-28-20	1-28-20	
2-Methylnaphthalene	ND	0.0074	EPA 8270E/SIM	1-28-20	1-28-20	
1-Methylnaphthalene	ND	0.0074	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[a]anthracene	0.0090	0.0074	EPA 8270E/SIM	1-28-20	1-28-20	
Chrysene	0.0097	0.0074	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[b]fluoranthene	0.0096	0.0074	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo(j,k)fluoranthene	ND	0.0074	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[a]pyrene	0.010	0.0074	EPA 8270E/SIM	1-28-20	1-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0074	EPA 8270E/SIM	1-28-20	1-28-20	
Dibenz[a,h]anthracene	ND	0.0074	EPA 8270E/SIM	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>70</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>70</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>81</i>	<i>45 - 122</i>				



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-280
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST01-N1-19					
Laboratory ID:	01-280-02					
Naphthalene	ND	0.0080	EPA 8270E/SIM	1-28-20	1-28-20	
2-Methylnaphthalene	ND	0.0080	EPA 8270E/SIM	1-28-20	1-28-20	
1-Methylnaphthalene	ND	0.0080	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[a]anthracene	ND	0.0080	EPA 8270E/SIM	1-28-20	1-28-20	
Chrysene	ND	0.0080	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[b]fluoranthene	ND	0.0080	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo(j,k)fluoranthene	ND	0.0080	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[a]pyrene	ND	0.0080	EPA 8270E/SIM	1-28-20	1-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0080	EPA 8270E/SIM	1-28-20	1-28-20	
Dibenz[a,h]anthracene	ND	0.0080	EPA 8270E/SIM	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>65</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>70</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>75</i>	<i>45 - 122</i>				



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-280
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST01-W1-19					
Laboratory ID:	01-280-03					
Naphthalene	ND	0.0081	EPA 8270E/SIM	1-28-20	1-28-20	
2-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	1-28-20	1-28-20	
1-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[a]anthracene	ND	0.0081	EPA 8270E/SIM	1-28-20	1-28-20	
Chrysene	ND	0.0081	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[b]fluoranthene	ND	0.0081	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo(j,k)fluoranthene	ND	0.0081	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[a]pyrene	ND	0.0081	EPA 8270E/SIM	1-28-20	1-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0081	EPA 8270E/SIM	1-28-20	1-28-20	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270E/SIM	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>57</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>69</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>76</i>	<i>45 - 122</i>				



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-280
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST01-E1-19					
Laboratory ID:	01-280-04					
Naphthalene	ND	0.0078	EPA 8270E/SIM	1-28-20	1-28-20	
2-Methylnaphthalene	ND	0.0078	EPA 8270E/SIM	1-28-20	1-28-20	
1-Methylnaphthalene	ND	0.0078	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[a]anthracene	0.014	0.0078	EPA 8270E/SIM	1-28-20	1-28-20	
Chrysene	0.015	0.0078	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[b]fluoranthene	0.016	0.0078	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo(j,k)fluoranthene	ND	0.0078	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[a]pyrene	0.016	0.0078	EPA 8270E/SIM	1-28-20	1-28-20	
Indeno(1,2,3-c,d)pyrene	0.010	0.0078	EPA 8270E/SIM	1-28-20	1-28-20	
Dibenz[a,h]anthracene	ND	0.0078	EPA 8270E/SIM	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>69</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>75</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>76</i>	<i>45 - 122</i>				



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-280
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0128S2					
Naphthalene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	1-28-20	1-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>81</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>90</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>100</i>	<i>45 - 122</i>				



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-280
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0128S2									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.0631	0.0698	0.0833	0.0833	76	84	57 - 109	10	15	
Acenaphthylene	0.0663	0.0723	0.0833	0.0833	80	87	60 - 121	9	15	
Acenaphthene	0.0665	0.0723	0.0833	0.0833	80	87	59 - 121	8	15	
Fluorene	0.0703	0.0697	0.0833	0.0833	84	84	63 - 119	1	15	
Phenanthrene	0.0669	0.0677	0.0833	0.0833	80	81	59 - 114	1	15	
Anthracene	0.0734	0.0724	0.0833	0.0833	88	87	63 - 119	1	15	
Fluoranthene	0.0796	0.0786	0.0833	0.0833	96	94	63 - 120	1	15	
Pyrene	0.0749	0.0762	0.0833	0.0833	90	91	62 - 119	2	15	
Benzo[a]anthracene	0.0763	0.0757	0.0833	0.0833	92	91	64 - 127	1	15	
Chrysene	0.0732	0.0739	0.0833	0.0833	88	89	63 - 121	1	15	
Benzo[b]fluoranthene	0.0704	0.0695	0.0833	0.0833	85	83	61 - 122	1	15	
Benzo(j,k)fluoranthene	0.0745	0.0746	0.0833	0.0833	89	90	64 - 123	0	15	
Benzo[a]pyrene	0.0742	0.0736	0.0833	0.0833	89	88	62 - 122	1	15	
Indeno(1,2,3-c,d)pyrene	0.0788	0.0786	0.0833	0.0833	95	94	59 - 124	0	15	
Dibenz[a,h]anthracene	0.0778	0.0791	0.0833	0.0833	93	95	61 - 123	2	15	
Benzo[g,h,i]perylene	0.0780	0.0802	0.0833	0.0833	94	96	61 - 119	3	15	
<i>Surrogate:</i>										
2-Fluorobiphenyl					74	81	40 - 111			
Pyrene-d10					84	85	40 - 110			
Terphenyl-d14					92	93	45 - 122			



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-280
 Project: 397-019

**TOTAL LEAD
 EPA 6010D**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST01-S1-19					
Laboratory ID:	01-280-01					
Lead	13	5.5	EPA 6010D	1-28-20	1-28-20	

Client ID:	UST01-N1-19					
Laboratory ID:	01-280-02					
Lead	8.1	6.0	EPA 6010D	1-28-20	1-28-20	

Client ID:	UST01-W1-19					
Laboratory ID:	01-280-03					
Lead	14	6.0	EPA 6010D	1-28-20	1-28-20	

Client ID:	UST01-E1-19					
Laboratory ID:	01-280-04					
Lead	25	5.8	EPA 6010D	1-28-20	1-28-20	



Date of Report: January 29, 2020
 Samples Submitted: January 28, 2020
 Laboratory Reference: 2001-280
 Project: 397-019

**TOTAL LEAD
 EPA 6010D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0128SM3					
Lead	ND	5.0	EPA 6010D	1-28-20	1-28-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	01-282-02							
	ORIG	DUP						
Lead	39.1	28.0	NA	NA	NA	NA	33	20

MATRIX SPIKES

Laboratory ID:	01-282-02								
	MS	MSD	MS	MSD	MS	MSD			
Lead	278	262	250	250	39.1	96	89	75-125	6



Date of Report: January 29, 2020
Samples Submitted: January 28, 2020
Laboratory Reference: 2001-280
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
UST01-S1-19	01-280-01	10	1-28-20
UST01-N1-19	01-280-02	16	1-28-20
UST01-W1-19	01-280-03	17	1-28-20
UST01-E1-19	01-280-04	14	1-28-20





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 methods 8260 & 8270, 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





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

February 10, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2001-348

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 3, 2020.

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 "D. Baumeister", with a long horizontal stroke extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: February 10, 2020
Samples Submitted: February 3, 2020
Laboratory Reference: 2001-348
Project: 397-019

Case Narrative

Samples were collected on January 31, 2020 and received by the laboratory on February 3, 2020. 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.



Date of Report: February 10, 2020
 Samples Submitted: February 3, 2020
 Laboratory Reference: 2001-348
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N3-NSW2-22.0					
Laboratory ID:	01-348-01					
Diesel Range Organics	ND	30	NWTPH-Dx	2-4-20	2-5-20	
Lube Oil Range Organics	ND	60	NWTPH-Dx	2-4-20	2-5-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	65	50-150				

Client ID:	N3-NSW-22.0					
Laboratory ID:	01-348-02					
Diesel Range Organics	ND	30	NWTPH-Dx	2-4-20	2-5-20	
Lube Oil Range Organics	ND	59	NWTPH-Dx	2-4-20	2-5-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	57	50-150				

Client ID:	N2-NSW-22.0					
Laboratory ID:	01-348-03					
Diesel Range Organics	ND	29	NWTPH-Dx	2-4-20	2-5-20	
Lube Oil	83	59	NWTPH-Dx	2-4-20	2-5-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	58	50-150				

Client ID:	N1-NSW-22.0					
Laboratory ID:	01-348-04					
Diesel Range Organics	ND	30	NWTPH-Dx	2-4-20	2-5-20	
Lube Oil Range Organics	ND	61	NWTPH-Dx	2-4-20	2-5-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	73	50-150				



Date of Report: February 10, 2020
 Samples Submitted: February 3, 2020
 Laboratory Reference: 2001-348
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0204S1					
Diesel Range Organics	ND	25	NWTPH-Dx	2-4-20	2-4-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-4-20	2-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	82	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-002-03							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				54	73	50-150		



Date of Report: February 10, 2020
 Samples Submitted: February 3, 2020
 Laboratory Reference: 2001-348
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N3-NSW2-22.0					
Laboratory ID:	01-348-01					
Naphthalene	0.0088	0.0080	EPA 8270E/SIM	2-5-20	2-5-20	
2-Methylnaphthalene	0.017	0.0080	EPA 8270E/SIM	2-5-20	2-5-20	
1-Methylnaphthalene	0.0094	0.0080	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo[a]anthracene	0.011	0.0080	EPA 8270E/SIM	2-5-20	2-5-20	
Chrysene	0.012	0.0080	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo[b]fluoranthene	0.018	0.0080	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo(j,k)fluoranthene	ND	0.0080	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo[a]pyrene	0.019	0.0080	EPA 8270E/SIM	2-5-20	2-5-20	
Indeno(1,2,3-c,d)pyrene	0.015	0.0080	EPA 8270E/SIM	2-5-20	2-5-20	
Dibenz[a,h]anthracene	ND	0.0080	EPA 8270E/SIM	2-5-20	2-5-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>93</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>91</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>98</i>	<i>45 - 122</i>				



Date of Report: February 10, 2020
 Samples Submitted: February 3, 2020
 Laboratory Reference: 2001-348
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N3-NSW-22.0					
Laboratory ID:	01-348-02					
Naphthalene	ND	0.0079	EPA 8270E/SIM	2-5-20	2-5-20	
2-Methylnaphthalene	ND	0.0079	EPA 8270E/SIM	2-5-20	2-5-20	
1-Methylnaphthalene	ND	0.0079	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo[a]anthracene	ND	0.0079	EPA 8270E/SIM	2-5-20	2-5-20	
Chrysene	ND	0.0079	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo[b]fluoranthene	ND	0.0079	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo(j,k)fluoranthene	ND	0.0079	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo[a]pyrene	ND	0.0079	EPA 8270E/SIM	2-5-20	2-5-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0079	EPA 8270E/SIM	2-5-20	2-5-20	
Dibenz[a,h]anthracene	ND	0.0079	EPA 8270E/SIM	2-5-20	2-5-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorobiphenyl	86	40 - 111				
Pyrene-d10	83	40 - 110				
Terphenyl-d14	89	45 - 122				



Date of Report: February 10, 2020
 Samples Submitted: February 3, 2020
 Laboratory Reference: 2001-348
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N2-NSW-22.0					
Laboratory ID:	01-348-03					
Naphthalene	0.014	0.0078	EPA 8270E/SIM	2-5-20	2-7-20	
2-Methylnaphthalene	0.0091	0.0078	EPA 8270E/SIM	2-5-20	2-7-20	
1-Methylnaphthalene	ND	0.0078	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo[a]anthracene	0.025	0.0078	EPA 8270E/SIM	2-5-20	2-7-20	
Chrysene	0.025	0.0078	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo[b]fluoranthene	0.040	0.0078	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo(j,k)fluoranthene	0.012	0.0078	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo[a]pyrene	0.053	0.0078	EPA 8270E/SIM	2-5-20	2-7-20	
Indeno(1,2,3-c,d)pyrene	0.074	0.0078	EPA 8270E/SIM	2-5-20	2-7-20	
Dibenz[a,h]anthracene	0.0090	0.0078	EPA 8270E/SIM	2-5-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>80</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>80</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>84</i>	<i>45 - 122</i>				



Date of Report: February 10, 2020
 Samples Submitted: February 3, 2020
 Laboratory Reference: 2001-348
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N1-NSW-22.0					
Laboratory ID:	01-348-04					
Naphthalene	0.013	0.0081	EPA 8270E/SIM	2-5-20	2-5-20	
2-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	2-5-20	2-5-20	
1-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo[a]anthracene	0.062	0.0081	EPA 8270E/SIM	2-5-20	2-5-20	
Chrysene	0.066	0.0081	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo[b]fluoranthene	0.075	0.0081	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo(j,k)fluoranthene	0.022	0.0081	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo[a]pyrene	0.070	0.0081	EPA 8270E/SIM	2-5-20	2-5-20	
Indeno(1,2,3-c,d)pyrene	0.043	0.0081	EPA 8270E/SIM	2-5-20	2-5-20	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270E/SIM	2-5-20	2-5-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>87</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>89</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>92</i>	<i>45 - 122</i>				



Date of Report: February 10, 2020
 Samples Submitted: February 3, 2020
 Laboratory Reference: 2001-348
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0205S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	92	40 - 111				
<i>Pyrene-d10</i>	96	40 - 110				
<i>Terphenyl-d14</i>	105	45 - 122				



Date of Report: February 10, 2020
 Samples Submitted: February 3, 2020
 Laboratory Reference: 2001-348
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
	SB	SBD	SB	SBD	SB	SBD				
SPIKE BLANKS										
Laboratory ID:	SB0205S2									
Naphthalene	0.0736	0.0752	0.0833	0.0833	88	90	57 - 109	2	15	
Acenaphthylene	0.0775	0.0765	0.0833	0.0833	93	92	60 - 121	1	15	
Acenaphthene	0.0761	0.0785	0.0833	0.0833	91	94	59 - 121	3	15	
Fluorene	0.0761	0.0766	0.0833	0.0833	91	92	63 - 119	1	15	
Phenanthrene	0.0748	0.0749	0.0833	0.0833	90	90	59 - 114	0	15	
Anthracene	0.0787	0.0804	0.0833	0.0833	94	97	63 - 119	2	15	
Fluoranthene	0.0781	0.0785	0.0833	0.0833	94	94	63 - 120	1	15	
Pyrene	0.0783	0.0809	0.0833	0.0833	94	97	62 - 119	3	15	
Benzo[a]anthracene	0.0765	0.0773	0.0833	0.0833	92	93	64 - 127	1	15	
Chrysene	0.0779	0.0796	0.0833	0.0833	94	96	63 - 121	2	15	
Benzo[b]fluoranthene	0.0759	0.0800	0.0833	0.0833	91	96	61 - 122	5	15	
Benzo(j,k)fluoranthene	0.0657	0.0722	0.0833	0.0833	79	87	64 - 123	9	15	
Benzo[a]pyrene	0.0762	0.0768	0.0833	0.0833	91	92	62 - 122	1	15	
Indeno(1,2,3-c,d)pyrene	0.0713	0.0744	0.0833	0.0833	86	89	59 - 124	4	15	
Dibenz[a,h]anthracene	0.0713	0.0734	0.0833	0.0833	86	88	61 - 123	3	15	
Benzo[g,h,i]perylene	0.0750	0.0750	0.0833	0.0833	90	90	61 - 119	0	15	
<i>Surrogate:</i>										
2-Fluorobiphenyl					93	93	40 - 111			
Pyrene-d10					95	95	40 - 110			
Terphenyl-d14					93	99	45 - 122			



Date of Report: February 10, 2020
Samples Submitted: February 3, 2020
Laboratory Reference: 2001-348
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
N3-NSW2-22.0	01-348-01	16	2-4-20
N3-NSW-22.0	01-348-02	16	2-4-20
N2-NSW-22.0	01-348-03	15	2-4-20
N1-NSW-22.0	01-348-04	17	2-4-20





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 methods 8260 & 8270, 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





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

February 12, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2001-349

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on January 31, 2020.

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



OnSite Environmental, Inc. 14648 NE 95th 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: February 12, 2020
Samples Submitted: January 31, 2020
Laboratory Reference: 2001-349
Project: 397-019

Case Narrative

Samples were collected on January 31, 2020 and received by the laboratory on January 31, 2020. 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.

PAHs EPA 8270E/SIM Analysis

Sample UST-01-line-21.0 had one surrogate recovery out of control limits. This is within allowance of our standard operating procedure as long as the recovery is above 10%.

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: February 12, 2020
 Samples Submitted: January 31, 2020
 Laboratory Reference: 2001-349
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST-01-line-21.0					
Laboratory ID:	01-349-01					
Diesel Fuel #2	3400	300	NWTPH-Dx	2-4-20	2-7-20	
Lube Oil	3100	600	NWTPH-Dx	2-4-20	2-7-20	N1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	---	50-150				S



Date of Report: February 12, 2020
 Samples Submitted: January 31, 2020
 Laboratory Reference: 2001-349
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0204S1					
Diesel Range Organics	ND	25	NWTPH-Dx	2-4-20	2-4-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-4-20	2-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	82	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-002-03							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	N1
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				54	73	50-150		



Date of Report: February 12, 2020
 Samples Submitted: January 31, 2020
 Laboratory Reference: 2001-349
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST-01-line-21.0					
Laboratory ID:	01-349-01					
Naphthalene	0.90	0.080	EPA 8270E/SIM	2-5-20	2-7-20	
2-Methylnaphthalene	7.2	0.080	EPA 8270E/SIM	2-5-20	2-7-20	
1-Methylnaphthalene	8.5	0.080	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo[a]anthracene	0.53	0.080	EPA 8270E/SIM	2-5-20	2-7-20	
Chrysene	1.2	0.080	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo[b]fluoranthene	0.32	0.080	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo(j,k)fluoranthene	ND	0.080	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo[a]pyrene	0.33	0.080	EPA 8270E/SIM	2-5-20	2-7-20	
Indeno(1,2,3-c,d)pyrene	0.16	0.080	EPA 8270E/SIM	2-5-20	2-7-20	
Dibenz[a,h]anthracene	ND	0.080	EPA 8270E/SIM	2-5-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>116</i>	<i>40 - 111</i>				<i>Q</i>
<i>Pyrene-d10</i>	<i>82</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>83</i>	<i>45 - 122</i>				



Date of Report: February 12, 2020
 Samples Submitted: January 31, 2020
 Laboratory Reference: 2001-349
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0205S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	92	40 - 111				
<i>Pyrene-d10</i>	96	40 - 110				
<i>Terphenyl-d14</i>	105	45 - 122				



Date of Report: February 12, 2020
 Samples Submitted: January 31, 2020
 Laboratory Reference: 2001-349
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
	SB	SBD	SB	SBD	SB	SBD				
SPIKE BLANKS										
Laboratory ID:	SB0205S2									
Naphthalene	0.0736	0.0752	0.0833	0.0833	88	90	57 - 109	2	15	
Acenaphthylene	0.0775	0.0765	0.0833	0.0833	93	92	60 - 121	1	15	
Acenaphthene	0.0761	0.0785	0.0833	0.0833	91	94	59 - 121	3	15	
Fluorene	0.0761	0.0766	0.0833	0.0833	91	92	63 - 119	1	15	
Phenanthrene	0.0748	0.0749	0.0833	0.0833	90	90	59 - 114	0	15	
Anthracene	0.0787	0.0804	0.0833	0.0833	94	97	63 - 119	2	15	
Fluoranthene	0.0781	0.0785	0.0833	0.0833	94	94	63 - 120	1	15	
Pyrene	0.0783	0.0809	0.0833	0.0833	94	97	62 - 119	3	15	
Benzo[a]anthracene	0.0765	0.0773	0.0833	0.0833	92	93	64 - 127	1	15	
Chrysene	0.0779	0.0796	0.0833	0.0833	94	96	63 - 121	2	15	
Benzo[b]fluoranthene	0.0759	0.0800	0.0833	0.0833	91	96	61 - 122	5	15	
Benzo(j,k)fluoranthene	0.0657	0.0722	0.0833	0.0833	79	87	64 - 123	9	15	
Benzo[a]pyrene	0.0762	0.0768	0.0833	0.0833	91	92	62 - 122	1	15	
Indeno(1,2,3-c,d)pyrene	0.0713	0.0744	0.0833	0.0833	86	89	59 - 124	4	15	
Dibenz[a,h]anthracene	0.0713	0.0734	0.0833	0.0833	86	88	61 - 123	3	15	
Benzo[g,h,i]perylene	0.0750	0.0750	0.0833	0.0833	90	90	61 - 119	0	15	
<i>Surrogate:</i>										
2-Fluorobiphenyl					93	93	40 - 111			
Pyrene-d10					95	95	40 - 110			
Terphenyl-d14					93	99	45 - 122			



Date of Report: February 12, 2020
Samples Submitted: January 31, 2020
Laboratory Reference: 2001-349
Project: 397-019

**TOTAL LEAD
EPA 6010D**

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST-01-line-21.0					
Laboratory ID:	01-349-01					
Lead	100	6.0	EPA 6010D	2-4-20	2-4-20	



Date of Report: February 12, 2020
 Samples Submitted: January 31, 2020
 Laboratory Reference: 2001-349
 Project: 397-019

**TOTAL LEAD
 EPA 6010D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0204SM2					
Lead	ND	5.0	EPA 6010D	2-4-20	2-4-20	

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-001-03							
	ORIG	DUP						
Lead	ND	ND	NA	NA	NA	NA	20	

MATRIX SPIKES

Laboratory ID:	02-001-03									
	MS	MSD	MS	MSD		MS	MSD			
Lead	219	223	250	250	ND	88	89	75-125	2	20



Date of Report: February 12, 2020
Samples Submitted: January 31, 2020
Laboratory Reference: 2001-349
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
UST-01-line-21.0	01-349-01	16	2-4-20





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 methods 8260 & 8270, 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





OnSite Environmental Inc.

Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)
(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Laboratory Number: **01-349**

Company: Farallon
Project Number: 397-019
Project Name: Block 38
Project Manager: Suzzy Stumpf
Sampled by: G. Peters

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	UST-01-Line1-21.0	1-31-20	14:25	soil	6

Analysis	Result
NWTPH-HCID	
NWTPH-Gx/BTEX	
NWTPH-Gx	
NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	0
Volatiles 8260C	
Halogenated Volatiles 8260C	
EDB EPA 8011 (Waters Only)	
Semivolatiles 8270D/SIM (with low level PAHs) CPAHs + Naphthalene	0
PAHs 8270D/SIM (low-level)	
PCBs 8082A	
Organochlorine Pesticides 8081B	
Organophosphorus Pesticides 8270D/SIM	
Chlorinated Acid Herbicides 8151A	
Total RCRA Metals	
Total MTCA Metals	
TCLP Metals	
HEM (oil and grease) 1664A	
Hold	X
Pb by 6010	0
% Moisture	0

Signature	Company	Date	Time	Comments/Special Instructions
<i>[Signature]</i>	Farallon	1-31-20	15:35	hold - contact PM for analysis & turnaround time - Added 2:420 STA TAT - W
<i>[Signature]</i>	ALPHA	1/31/20	15:35	
<i>[Signature]</i>	ALPHA	1/31/20	16:40	

Received _____
Relinquished _____
Received _____
Relinquished _____
Received _____
Relinquished _____
Reviewed/Date _____

Reviewed/Date _____

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

February 10, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-014

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 4, 2020.

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 "D. Baumeister", with a long horizontal stroke extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: February 10, 2020
Samples Submitted: February 4, 2020
Laboratory Reference: 2002-014
Project: 397-019

Case Narrative

Samples were collected on February 3, 2020 and received by the laboratory on February 4, 2020. 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.



Date of Report: February 10, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-014
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N1-WSW-20.0					
Laboratory ID:	02-014-01					
Diesel Range Organics	280	150	NWTPH-Dx	2-5-20	2-5-20	N
Lube Oil Range Organics	1400	300	NWTPH-Dx	2-5-20	2-5-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	84	50-150				

Client ID:	M1-WSW-20.0					
Laboratory ID:	02-014-02					
Diesel Range Organics	200	30	NWTPH-Dx	2-5-20	2-5-20	
Lube Oil Range Organics	220	60	NWTPH-Dx	2-5-20	2-5-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	78	50-150				

Client ID:	M1-WSW2-20.0					
Laboratory ID:	02-014-03					
Diesel Range Organics	ND	30	NWTPH-Dx	2-5-20	2-5-20	
Lube Oil Range Organics	ND	61	NWTPH-Dx	2-5-20	2-5-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	75	50-150				

Client ID:	L1-WSW-20.0					
Laboratory ID:	02-014-04					
Diesel Range Organics	ND	31	NWTPH-Dx	2-5-20	2-5-20	
Lube Oil Range Organics	180	62	NWTPH-Dx	2-5-20	2-5-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	79	50-150				



Date of Report: February 10, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-014
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0205S1					
Diesel Range Organics	ND	25	NWTPH-Dx	2-5-20	2-5-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-5-20	2-5-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	85	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-027-02							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				82	75	50-150		



Date of Report: February 10, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-014
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N1-WSW-20.0					
Laboratory ID:	02-014-01					
Naphthalene	0.094	0.079	EPA 8270E/SIM	2-5-20	2-7-20	
2-Methylnaphthalene	0.38	0.079	EPA 8270E/SIM	2-5-20	2-7-20	
1-Methylnaphthalene	0.20	0.079	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo[a]anthracene	ND	0.079	EPA 8270E/SIM	2-5-20	2-7-20	
Chrysene	ND	0.079	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo[b]fluoranthene	ND	0.079	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo(j,k)fluoranthene	ND	0.079	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo[a]pyrene	ND	0.079	EPA 8270E/SIM	2-5-20	2-7-20	
Indeno(1,2,3-c,d)pyrene	ND	0.079	EPA 8270E/SIM	2-5-20	2-7-20	
Dibenz[a,h]anthracene	ND	0.079	EPA 8270E/SIM	2-5-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>77</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>79</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>82</i>	<i>45 - 122</i>				



Date of Report: February 10, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-014
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M1-WSW-20.0					
Laboratory ID:	02-014-02					
Naphthalene	0.25	0.0079	EPA 8270E/SIM	2-5-20	2-7-20	
2-Methylnaphthalene	1.4	0.040	EPA 8270E/SIM	2-5-20	2-27-20	
1-Methylnaphthalene	1.2	0.040	EPA 8270E/SIM	2-5-20	2-27-20	
Benzo[a]anthracene	0.30	0.0079	EPA 8270E/SIM	2-5-20	2-7-20	
Chrysene	0.34	0.0079	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo[b]fluoranthene	0.38	0.0079	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo(j,k)fluoranthene	0.11	0.0079	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo[a]pyrene	0.40	0.0079	EPA 8270E/SIM	2-5-20	2-7-20	
Indeno(1,2,3-c,d)pyrene	0.27	0.0079	EPA 8270E/SIM	2-5-20	2-7-20	
Dibenz[a,h]anthracene	0.041	0.0079	EPA 8270E/SIM	2-5-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>87</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>85</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>91</i>	<i>45 - 122</i>				



Date of Report: February 10, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-014
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M1-WSW2-20.0					
Laboratory ID:	02-014-03					
Naphthalene	0.015	0.0081	EPA 8270E/SIM	2-5-20	2-6-20	
2-Methylnaphthalene	0.018	0.0081	EPA 8270E/SIM	2-5-20	2-6-20	
1-Methylnaphthalene	0.022	0.0081	EPA 8270E/SIM	2-5-20	2-6-20	
Benzo[a]anthracene	0.022	0.0081	EPA 8270E/SIM	2-5-20	2-6-20	
Chrysene	0.031	0.0081	EPA 8270E/SIM	2-5-20	2-6-20	
Benzo[b]fluoranthene	0.039	0.0081	EPA 8270E/SIM	2-5-20	2-6-20	
Benzo(j,k)fluoranthene	0.012	0.0081	EPA 8270E/SIM	2-5-20	2-6-20	
Benzo[a]pyrene	0.028	0.0081	EPA 8270E/SIM	2-5-20	2-6-20	
Indeno(1,2,3-c,d)pyrene	0.023	0.0081	EPA 8270E/SIM	2-5-20	2-6-20	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270E/SIM	2-5-20	2-6-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>64</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>66</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>68</i>	<i>45 - 122</i>				



Date of Report: February 10, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-014
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	L1-WSW-20.0					
Laboratory ID:	02-014-04					
Naphthalene	0.087	0.0083	EPA 8270E/SIM	2-5-20	2-7-20	
2-Methylnaphthalene	0.079	0.0083	EPA 8270E/SIM	2-5-20	2-7-20	
1-Methylnaphthalene	0.071	0.0083	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo[a]anthracene	0.073	0.0083	EPA 8270E/SIM	2-5-20	2-7-20	
Chrysene	0.077	0.0083	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo[b]fluoranthene	0.10	0.0083	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo(j,k)fluoranthene	0.030	0.0083	EPA 8270E/SIM	2-5-20	2-7-20	
Benzo[a]pyrene	0.076	0.0083	EPA 8270E/SIM	2-5-20	2-7-20	
Indeno(1,2,3-c,d)pyrene	0.054	0.0083	EPA 8270E/SIM	2-5-20	2-7-20	
Dibenz[a,h]anthracene	0.011	0.0083	EPA 8270E/SIM	2-5-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>90</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>86</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>92</i>	<i>45 - 122</i>				



Date of Report: February 10, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-014
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0205S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-5-20	2-5-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	92	40 - 111				
<i>Pyrene-d10</i>	96	40 - 110				
<i>Terphenyl-d14</i>	105	45 - 122				



Date of Report: February 10, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-014
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
	SB	SBD	SB	SBD	SB	SBD				
SPIKE BLANKS										
Laboratory ID:	SB0205S2									
Naphthalene	0.0736	0.0752	0.0833	0.0833	88	90	57 - 109	2	15	
Acenaphthylene	0.0775	0.0765	0.0833	0.0833	93	92	60 - 121	1	15	
Acenaphthene	0.0761	0.0785	0.0833	0.0833	91	94	59 - 121	3	15	
Fluorene	0.0761	0.0766	0.0833	0.0833	91	92	63 - 119	1	15	
Phenanthrene	0.0748	0.0749	0.0833	0.0833	90	90	59 - 114	0	15	
Anthracene	0.0787	0.0804	0.0833	0.0833	94	97	63 - 119	2	15	
Fluoranthene	0.0781	0.0785	0.0833	0.0833	94	94	63 - 120	1	15	
Pyrene	0.0783	0.0809	0.0833	0.0833	94	97	62 - 119	3	15	
Benzo[a]anthracene	0.0765	0.0773	0.0833	0.0833	92	93	64 - 127	1	15	
Chrysene	0.0779	0.0796	0.0833	0.0833	94	96	63 - 121	2	15	
Benzo[b]fluoranthene	0.0759	0.0800	0.0833	0.0833	91	96	61 - 122	5	15	
Benzo(j,k)fluoranthene	0.0657	0.0722	0.0833	0.0833	79	87	64 - 123	9	15	
Benzo[a]pyrene	0.0762	0.0768	0.0833	0.0833	91	92	62 - 122	1	15	
Indeno(1,2,3-c,d)pyrene	0.0713	0.0744	0.0833	0.0833	86	89	59 - 124	4	15	
Dibenz[a,h]anthracene	0.0713	0.0734	0.0833	0.0833	86	88	61 - 123	3	15	
Benzo[g,h,i]perylene	0.0750	0.0750	0.0833	0.0833	90	90	61 - 119	0	15	
<i>Surrogate:</i>										
2-Fluorobiphenyl					93	93	40 - 111			
Pyrene-d10					95	95	40 - 110			
Terphenyl-d14					93	99	45 - 122			



Date of Report: February 10, 2020
Samples Submitted: February 4, 2020
Laboratory Reference: 2002-014
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
N1-WSW-20.0	02-014-01	15	2-5-20
M1-WSW-20.0	02-014-02	16	2-5-20
M1-WSW2-20.0	02-014-03	18	2-5-20
L1-WSW-20.0	02-014-04	20	2-5-20





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 methods 8260 & 8270, 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





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

February 25, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-032B

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 4, 2020.

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 "D. Baumeister", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: February 25, 2020
Samples Submitted: February 4, 2020
Laboratory Reference: 2002-032B
Project: 397-019

Case Narrative

Samples were collected on February 4, 2020 and received by the laboratory on February 4, 2020. 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.

NWTPH-Gx Analysis

The client requested the analysis of samples H4-ESW-20.0 and H4-ESW2-20.0 after the holding time had expired.

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: February 25, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-032B
 Project: 397-019

**GASOLINE RANGE ORGANICS
 NWTPH-Gx**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H4-ESW-20.0					
Laboratory ID:	02-032-08					
Gasoline	ND	11	NWTPH-Gx	2-24-20	2-24-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	65	58-129				
Client ID:	H4-ESW2-20.0					
Laboratory ID:	02-032-09					
Gasoline	ND	5.5	NWTPH-Gx	2-24-20	2-24-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	88	58-129				



Date of Report: February 25, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-032B
 Project: 397-019

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0224S2					
Gasoline	ND	5.0	NWTPH-Gx	2-24-20	2-24-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	86	58-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-224-02							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				92	92	58-129		





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 methods 8260 & 8270, 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





MVA Onsite Environmental Inc.
 Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

(other) _____

Laboratory Number: **102-032**

Company: Favallan
 Project Number: 397-019
 Project Name: Block 38 West
 Project Manager: Suzzy Stumpf
 Sampled by: Gary Peters

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	K1-Sidewalk-20.0 <u>WSW</u> <u>K1-WSW-20.0</u>	<u>2/4/20</u>	<u>0915</u>	<u>Soil</u>	<u>6</u>
2	<u>TP-11-20.0</u>		<u>0930</u>		
3	<u>TP-11-15.0</u>		<u>0940</u>		
4	<u>TP-11-10.0</u> <u>DB</u>		<u>0945</u>		
5	K4-Sidewalk-20.0 <u>K4-ESW-20.0</u>		<u>1200</u>		
6	I4-Sidewalk-20.0 <u>I4-ESW-20.0</u>		<u>1215</u>		
7	I4-Sidewalk-20.0 <u>I4-ESW-20.0</u>		<u>1220</u>		
8	H4-Sidewalk-20.0 <u>H4-ESW-20.0</u>		<u>1210</u>		
9	H4-Sidewalk-20.0 <u>H4-ESW-20.0</u>		<u>1210</u>		

Parameter	1	2	3	4	5	6	7	8	9
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 RCRA Metals									
Total MTCA Metals									
TCLP Metals									
HEM (oil and grease) 1664A									
% Moisture									

Naphthalene only
CPAHs

Hold

Relinquished	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished	<u>Gary Peters</u>	<u>Favallan</u>	<u>2/4/20</u>	<u>1522</u>	
Received	<u>[Signature]</u>	<u>[Signature]</u>	<u>2/4/20</u>	<u>1522</u>	
Relinquished					
Received					
Relinquished					
Received					
Relinquished					

Please continue sample analysis with project manager. Also turnaround time. DB

X- Added 2/6/20. DB (STA)
Added 2/12/20. PB (STA)
 Data Package: Standard Level III Level IV

Reviewed/Date _____ Reviewed/Date _____

0- Added 2/24/20. DB 3 day TAT

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

February 20, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-032

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 4, 2020.

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



OnSite Environmental, Inc. 14648 NE 95th 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: February 20, 2020
Samples Submitted: February 4, 2020
Laboratory Reference: 2002-032
Project: 397-019

Case Narrative

Samples were collected on February 4, 2020 and received by the laboratory on February 4, 2020. 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.



Date of Report: February 20, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-032
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	K1-WSW-20.0					
Laboratory ID:	02-032-01					
Diesel Range Organics	58	29	NWTPH-Dx	2-7-20	2-7-20	N
Lube Oil Range Organics	270	58	NWTPH-Dx	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	66	50-150				

Client ID:	K4-ESW-20.0					
Laboratory ID:	02-032-05					
Diesel Range Organics	290	36	NWTPH-Dx	2-7-20	2-7-20	N
Lube Oil Range Organics	960	72	NWTPH-Dx	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	71	50-150				

Client ID:	J4-ESW-20.0					
Laboratory ID:	02-032-06					
Diesel Range Organics	1800	150	NWTPH-Dx	2-7-20	2-7-20	N
Lube Oil Range Organics	4600	300	NWTPH-Dx	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	96	50-150				

Client ID:	I4-ESW-20.0					
Laboratory ID:	02-032-07					
Diesel Range Organics	500	160	NWTPH-Dx	2-7-20	2-7-20	N
Lube Oil Range Organics	1800	320	NWTPH-Dx	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	93	50-150				

Client ID:	H4-ESW-20.0					
Laboratory ID:	02-032-08					
Diesel Range Organics	730	40	NWTPH-Dx	2-7-20	2-7-20	N
Lube Oil Range Organics	2900	79	NWTPH-Dx	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	85	50-150				

Client ID:	H4-ESW2-20.0					
Laboratory ID:	02-032-09					
Diesel Range Organics	99	30	NWTPH-Dx	2-7-20	2-7-20	N
Lube Oil Range Organics	180	61	NWTPH-Dx	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	63	50-150				



Date of Report: February 20, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-032
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0207S2					
Diesel Range Organics	ND	25	NWTPH-Dx	2-7-20	2-7-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	90	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-013-02							
	ORIG	DUP						
Diesel Fuel #2	199	96.5	NA	NA	NA	NA	69	NA N
Lube Oil	512	285	NA	NA	NA	NA	57	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				88	81	50-150		



Date of Report: February 20, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-032
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	K4-ESW-20.0					
Laboratory ID:	02-032-05					
Naphthalene	0.46	0.19	EPA 8270E/SIM	2-7-20	2-7-20	
2-Methylnaphthalene	0.49	0.19	EPA 8270E/SIM	2-7-20	2-7-20	
1-Methylnaphthalene	0.45	0.19	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo[a]anthracene	1.9	0.19	EPA 8270E/SIM	2-7-20	2-7-20	
Chrysene	1.9	0.19	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo[b]fluoranthene	2.3	0.19	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo(j,k)fluoranthene	0.68	0.19	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo[a]pyrene	2.4	0.19	EPA 8270E/SIM	2-7-20	2-7-20	
Indeno(1,2,3-c,d)pyrene	1.4	0.19	EPA 8270E/SIM	2-7-20	2-7-20	
Dibenz[a,h]anthracene	0.23	0.19	EPA 8270E/SIM	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>68</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>74</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>79</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-032
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	J4-ESW-20.0					
Laboratory ID:	02-032-06					
Benzo[a]anthracene	14	0.80	EPA 8270E/SIM	2-7-20	2-7-20	
Chrysene	15	0.80	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo[b]fluoranthene	14	0.80	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo(j,k)fluoranthene	4.4	0.80	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo[a]pyrene	13	0.80	EPA 8270E/SIM	2-7-20	2-7-20	
Indeno(1,2,3-c,d)pyrene	7.1	0.80	EPA 8270E/SIM	2-7-20	2-7-20	
Dibenz[a,h]anthracene	1.3	0.80	EPA 8270E/SIM	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>51</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>60</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>67</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-032
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	I4-ESW-20.0					
Laboratory ID:	02-032-07					
Benzo[a]anthracene	27	1.7	EPA 8270E/SIM	2-7-20	2-7-20	
Chrysene	28	1.7	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo[b]fluoranthene	28	1.7	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo(j,k)fluoranthene	8.3	1.7	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo[a]pyrene	27	1.7	EPA 8270E/SIM	2-7-20	2-7-20	
Indeno(1,2,3-c,d)pyrene	16	1.7	EPA 8270E/SIM	2-7-20	2-7-20	
Dibenz[a,h]anthracene	2.6	1.7	EPA 8270E/SIM	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	---	40 - 111				S
<i>Pyrene-d10</i>	---	40 - 110				S
<i>Terphenyl-d14</i>	---	45 - 122				S



Date of Report: February 20, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-032
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H4-ESW-20.0					
Laboratory ID:	02-032-08					
Benzo[a]anthracene	2.0	0.21	EPA 8270E/SIM	2-7-20	2-7-20	
Chrysene	2.2	0.21	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo[b]fluoranthene	2.2	0.21	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo(j,k)fluoranthene	0.54	0.21	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo[a]pyrene	1.9	0.21	EPA 8270E/SIM	2-7-20	2-7-20	
Indeno(1,2,3-c,d)pyrene	1.2	0.21	EPA 8270E/SIM	2-7-20	2-7-20	
Dibenz[a,h]anthracene	0.22	0.21	EPA 8270E/SIM	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>49</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>56</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>60</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-032
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H4-ESW2-20.0					
Laboratory ID:	02-032-09					
Benzo[a]anthracene	1.9	0.16	EPA 8270E/SIM	2-7-20	2-7-20	
Chrysene	2.0	0.16	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo[b]fluoranthene	1.9	0.16	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo(j,k)fluoranthene	0.58	0.16	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo[a]pyrene	1.9	0.16	EPA 8270E/SIM	2-7-20	2-7-20	
Indeno(1,2,3-c,d)pyrene	1.1	0.16	EPA 8270E/SIM	2-7-20	2-7-20	
Dibenz[a,h]anthracene	0.16	0.16	EPA 8270E/SIM	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>56</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>64</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>64</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-032
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0207S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>96</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>103</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>119</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-032
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:	SB0207S1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.0878	0.0869	0.0833	0.0833	105	104	57 - 109	1	15	
Acenaphthylene	0.0907	0.0953	0.0833	0.0833	109	114	60 - 121	5	15	
Acenaphthene	0.0886	0.0952	0.0833	0.0833	106	114	59 - 121	7	15	
Fluorene	0.0900	0.0910	0.0833	0.0833	108	109	63 - 119	1	15	
Phenanthrene	0.0900	0.0899	0.0833	0.0833	108	108	59 - 114	0	15	
Anthracene	0.0954	0.0958	0.0833	0.0833	115	115	63 - 119	0	15	
Fluoranthene	0.0908	0.0920	0.0833	0.0833	109	110	63 - 120	1	15	
Pyrene	0.0885	0.0909	0.0833	0.0833	106	109	62 - 119	3	15	
Benzo[a]anthracene	0.0990	0.0973	0.0833	0.0833	119	117	64 - 127	2	15	
Chrysene	0.0937	0.0923	0.0833	0.0833	112	111	63 - 121	2	15	
Benzo[b]fluoranthene	0.0922	0.0927	0.0833	0.0833	111	111	61 - 122	1	15	
Benzo(j,k)fluoranthene	0.0956	0.0914	0.0833	0.0833	115	110	64 - 123	4	15	
Benzo[a]pyrene	0.0978	0.0973	0.0833	0.0833	117	117	62 - 122	1	15	
Indeno(1,2,3-c,d)pyrene	0.0952	0.0947	0.0833	0.0833	114	114	59 - 124	1	15	
Dibenz[a,h]anthracene	0.0953	0.0945	0.0833	0.0833	114	113	61 - 123	1	15	
Benzo[g,h,i]perylene	0.0947	0.0948	0.0833	0.0833	114	114	61 - 119	0	15	
<i>Surrogate:</i>										
2-Fluorobiphenyl					101	106	40 - 111			
Pyrene-d10					105	105	40 - 110			
Terphenyl-d14					110	106	45 - 122			



Date of Report: February 20, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-032
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-11-20.0					
Laboratory ID:	02-032-02					
Diesel Range Organics	ND	30	NWTPH-Dx	2-13-20	2-13-20	
Lube Oil Range Organics	190	61	NWTPH-Dx	2-13-20	2-13-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	79	50-150				

Client ID:	TP-11-15.0					
Laboratory ID:	02-032-03					
Diesel Range Organics	230	34	NWTPH-Dx	2-13-20	2-13-20	
Lube Oil Range Organics	680	68	NWTPH-Dx	2-13-20	2-13-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	77	50-150				

Client ID:	TP-11-10.0					
Laboratory ID:	02-032-04					
Diesel Range Organics	ND	36	NWTPH-Dx	2-13-20	2-13-20	
Lube Oil Range Organics	ND	71	NWTPH-Dx	2-13-20	2-13-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	73	50-150				



Date of Report: February 20, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-032
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0213S1					
Diesel Range Organics	ND	25	NWTPH-Dx	2-13-20	2-13-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-13-20	2-13-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>81</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0213S1							
	ORIG	DUP						
Diesel Fuel #2	87.5	82.2	NA	NA	NA	NA	6	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>88</i>	<i>91</i>	<i>50-150</i>		



Date of Report: February 20, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-032
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-11-15.0					
Laboratory ID:	02-032-03					
Naphthalene	0.35	0.091	EPA 8270E/SIM	2-18-20	2-18-20	
2-Methylnaphthalene	0.32	0.091	EPA 8270E/SIM	2-18-20	2-18-20	
1-Methylnaphthalene	0.32	0.091	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]anthracene	1.5	0.091	EPA 8270E/SIM	2-18-20	2-18-20	
Chrysene	1.4	0.091	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[b]fluoranthene	1.3	0.091	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo(j,k)fluoranthene	0.51	0.091	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]pyrene	1.5	0.091	EPA 8270E/SIM	2-18-20	2-18-20	
Indeno(1,2,3-c,d)pyrene	0.79	0.091	EPA 8270E/SIM	2-18-20	2-18-20	
Dibenz[a,h]anthracene	0.15	0.091	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>87</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>88</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>96</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-032
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-11-10.0					
Laboratory ID:	02-032-04					
Benzo[a]anthracene	ND	0.0095	EPA 8270E/SIM	2-18-20	2-18-20	
Chrysene	ND	0.0095	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[b]fluoranthene	ND	0.0095	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo(j,k)fluoranthene	ND	0.0095	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]pyrene	ND	0.0095	EPA 8270E/SIM	2-18-20	2-18-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0095	EPA 8270E/SIM	2-18-20	2-18-20	
Dibenz[a,h]anthracene	ND	0.0095	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>76</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>78</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>87</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-032
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0218S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>86</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>94</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>100</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 4, 2020
 Laboratory Reference: 2002-032
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
					Result	Recovery	Limits		RPD	Limit	
MATRIX SPIKES											
Laboratory ID:	02-081-13										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0613	0.0551	0.0833	0.0833	ND	74	66	44 - 111	11	21	
Acenaphthylene	0.0653	0.0582	0.0833	0.0833	ND	78	70	47 - 122	11	24	
Acenaphthene	0.0667	0.0609	0.0833	0.0833	ND	80	73	46 - 122	9	24	
Fluorene	0.0679	0.0651	0.0833	0.0833	ND	82	78	53 - 118	4	23	
Phenanthrene	0.0724	0.0695	0.0833	0.0833	ND	87	83	41 - 124	4	24	
Anthracene	0.0727	0.0708	0.0833	0.0833	ND	87	85	53 - 119	3	21	
Fluoranthene	0.0803	0.0790	0.0833	0.0833	ND	96	95	39 - 135	2	32	
Pyrene	0.0745	0.0739	0.0833	0.0833	ND	89	89	39 - 134	1	34	
Benzo[a]anthracene	0.0767	0.0787	0.0833	0.0833	ND	92	94	53 - 131	3	23	
Chrysene	0.0700	0.0696	0.0833	0.0833	ND	84	84	46 - 126	1	24	
Benzo[b]fluoranthene	0.0705	0.0735	0.0833	0.0833	ND	85	88	45 - 127	4	25	
Benzo(j,k)fluoranthene	0.0728	0.0683	0.0833	0.0833	ND	87	82	52 - 122	6	21	
Benzo[a]pyrene	0.0748	0.0752	0.0833	0.0833	ND	90	90	51 - 126	1	24	
Indeno(1,2,3-c,d)pyrene	0.0700	0.0697	0.0833	0.0833	ND	84	84	48 - 127	0	23	
Dibenz[a,h]anthracene	0.0728	0.0724	0.0833	0.0833	ND	87	87	51 - 124	1	22	
Benzo[g,h,i]perylene	0.0709	0.0702	0.0833	0.0833	ND	85	84	50 - 120	1	22	
<i>Surrogate:</i>											
2-Fluorobiphenyl						75	65	40 - 111			
Pyrene-d10						83	85	40 - 110			
Terphenyl-d14						79	84	45 - 122			



Date of Report: February 20, 2020
Samples Submitted: February 4, 2020
Laboratory Reference: 2002-032
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
K1-WSW-20.0	02-032-01	13	2-7-20
TP-11-20.0	02-032-02	17	2-13-20
TP-11-15.0	02-032-03	27	2-13-20
TP-11-10.0	02-032-04	30	2-13-20
K4-ESW-20.0	02-032-05	30	2-7-20
J4-ESW-20.0	02-032-06	16	2-7-20
I4-ESW-20.0	02-032-07	21	2-7-20
H4-ESW-20.0	02-032-08	37	2-7-20
H4-ESW2-20.0	02-032-09	17	2-7-20





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 methods 8260 & 8270, 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





OnSite Environmental Inc.
 Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
 (in working days)
 (Check One)

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

Laboratory Number: 102-032

Company: Favallan
 Project Number: 397-019
 Project Name: Block 38 West
 Project Manager: Suzzy Stumpf
 Sampled by: Greg Peters

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	K1-Sidewalk-20.0 <u>WSW K1-WSW-20.0</u>	<u>2/4/20</u>	<u>0915</u>	<u>Soil</u>	<u>6</u>
2	<u>TP-11-20.0</u>		<u>0930</u>		
3	<u>TP-11-15.0</u>		<u>0940</u>		
4	<u>TP-11-10.0</u>		<u>0945</u>		
5	K4-Sidewalk-20.0 <u>K4-ESW-20.0</u>		<u>1200</u>		
6	I4-Sidewalk-20.0 <u>I4-ESW-20.0</u>		<u>1215</u>		
7	I4-Sidewalk-20.0 <u>I4-ESW-20.0</u>		<u>1220</u>		
8	H4-Sidewalk-20.0 <u>H4-ESW-20.0</u>		<u>1210</u>		
9	H4-Sidewalk-20.0 <u>H4-ESW2-20.0</u>		<u>1210</u>		

Date	Time	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
<u>2/4/20</u>	<u>1522</u>				<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								<u>Hold</u>	<input checked="" type="checkbox"/>
				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>
				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>
				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>
				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>
				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>

Signature: [Signature] Company: Favallan Date: 2/4/20 Time: 1522

Relinquished Received Relinquished Received Relinquished Received Relinquished Received

Reviewed/Date: _____

Comments/Special Instructions:
 Please continue sample analysis with project number. Also forward five. D3
 X-Added 2/6/20. JB (STA)
 Data Package: Standard Level Level II Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

February 10, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-043

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 5, 2020.

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 "D. Baumeister", with a long horizontal stroke extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: February 10, 2020
Samples Submitted: February 5, 2020
Laboratory Reference: 2002-043
Project: 397-019

Case Narrative

Samples were collected on February 5, 2020 and received by the laboratory on February 5, 2020. 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.



Date of Report: February 10, 2020
 Samples Submitted: February 5, 2020
 Laboratory Reference: 2002-043
 Project: 397-019

**HYDROCARBON IDENTIFICATION
 NWTPH-HCID**

Matrix: Product
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST-02-Product					
Laboratory ID:	02-043-01					
Gasoline Range Organics	ND	41000	NWTPH-HCID	2-6-20	2-6-20	U1
Diesel Range Organics	Detected	96000	NWTPH-HCID	2-6-20	2-6-20	
Lube Oil Range Organics	Detected	190000	NWTPH-HCID	2-6-20	2-6-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	---	50-150				S



Date of Report: February 10, 2020
 Samples Submitted: February 5, 2020
 Laboratory Reference: 2002-043
 Project: 397-019

**HYDROCARBON IDENTIFICATION
 NWTPH-HCID
 QUALITY CONTROL**

Matrix: Product
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0205P1					
Gasoline Range Organics	ND	10	NWTPH-HCID	2-6-20	2-6-20	
Diesel Range Organics	ND	25	NWTPH-HCID	2-6-20	2-6-20	
Lube Oil Range Organics	ND	50	NWTPH-HCID	2-6-20	2-6-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	104	50-150				



Date of Report: February 10, 2020
 Samples Submitted: February 5, 2020
 Laboratory Reference: 2002-043
 Project: 397-019

**GASOLINE RANGE ORGANICS
 NWTPH-Gx**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST-02-N					
Laboratory ID:	02-043-02					
Gasoline	ND	59	NWTPH-Gx	2-6-20	2-6-20	U1
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	93	58-129				
Client ID:	UST-02-E					
Laboratory ID:	02-043-03					
Gasoline	79	12	NWTPH-Gx	2-6-20	2-6-20	O
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	102	58-129				



Date of Report: February 10, 2020
 Samples Submitted: February 5, 2020
 Laboratory Reference: 2002-043
 Project: 397-019

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0206S2					
Gasoline	ND	5.0	NWTPH-Gx	2-6-20	2-6-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	92	58-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-049-02							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				89	90	58-129		



Date of Report: February 10, 2020
 Samples Submitted: February 5, 2020
 Laboratory Reference: 2002-043
 Project: 397-019

VOLATILE ORGANICS EPA 8260D

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST-02-N					
Laboratory ID:	02-043-02					
Benzene	ND	0.00091	EPA 8260D	2-7-20	2-7-20	
Toluene	ND	0.0045	EPA 8260D	2-7-20	2-7-20	
Ethylbenzene	ND	0.00091	EPA 8260D	2-7-20	2-7-20	
m,p-Xylene	ND	0.0018	EPA 8260D	2-7-20	2-7-20	
o-Xylene	ND	0.00091	EPA 8260D	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>104</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>99</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>90</i>	<i>71-130</i>				



Date of Report: February 10, 2020
 Samples Submitted: February 5, 2020
 Laboratory Reference: 2002-043
 Project: 397-019

VOLATILE ORGANICS EPA 8260D

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST-02-E					
Laboratory ID:	02-043-03					
Benzene	0.0033	0.0020	EPA 8260D	2-6-20	2-6-20	
Toluene	0.018	0.010	EPA 8260D	2-6-20	2-6-20	
Ethylbenzene	0.0075	0.0020	EPA 8260D	2-6-20	2-6-20	
m,p-Xylene	0.034	0.0041	EPA 8260D	2-6-20	2-6-20	
o-Xylene	0.014	0.0020	EPA 8260D	2-6-20	2-6-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>105</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>71-130</i>				



Date of Report: February 10, 2020
 Samples Submitted: February 5, 2020
 Laboratory Reference: 2002-043
 Project: 397-019

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0206S1					
Benzene	ND	0.0010	EPA 8260D	2-6-20	2-6-20	
Toluene	ND	0.0050	EPA 8260D	2-6-20	2-6-20	
Ethylbenzene	ND	0.0010	EPA 8260D	2-6-20	2-6-20	
m,p-Xylene	ND	0.0020	EPA 8260D	2-6-20	2-6-20	
o-Xylene	ND	0.0010	EPA 8260D	2-6-20	2-6-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>103</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>71-130</i>				
Laboratory ID:	MB0207S1					
Benzene	ND	0.0010	EPA 8260D	2-7-20	2-7-20	
Toluene	ND	0.0050	EPA 8260D	2-7-20	2-7-20	
Ethylbenzene	ND	0.0010	EPA 8260D	2-7-20	2-7-20	
m,p-Xylene	ND	0.0020	EPA 8260D	2-7-20	2-7-20	
o-Xylene	ND	0.0010	EPA 8260D	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>105</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>71-130</i>				



Date of Report: February 10, 2020
 Samples Submitted: February 5, 2020
 Laboratory Reference: 2002-043
 Project: 397-019

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					SB	SBD	Limits	RPD	Limit	
SPIKE BLANKS										
Laboratory ID:		SB0206S1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0515	0.0503	0.0500	0.0500	103	101	57-133	2	18	
Benzene	0.0501	0.0495	0.0500	0.0500	100	99	71-129	1	16	
Trichloroethene	0.0527	0.0551	0.0500	0.0500	105	110	71-122	4	16	
Toluene	0.0513	0.0529	0.0500	0.0500	103	106	74-125	3	15	
Chlorobenzene	0.0516	0.0540	0.0500	0.0500	103	108	72-120	5	14	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					98	97	76-131			
<i>Toluene-d8</i>					98	98	78-128			
<i>4-Bromofluorobenzene</i>					95	98	71-130			
Laboratory ID:		SB0207S1								
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0514	0.0487	0.0500	0.0500	103	97	57-133	5	18	
Benzene	0.0504	0.0475	0.0500	0.0500	101	95	71-129	6	16	
Trichloroethene	0.0541	0.0535	0.0500	0.0500	108	107	71-122	1	16	
Toluene	0.0524	0.0505	0.0500	0.0500	105	101	74-125	4	15	
Chlorobenzene	0.0529	0.0513	0.0500	0.0500	106	103	72-120	3	14	
<i>Surrogate:</i>										
<i>Dibromofluoromethane</i>					102	97	76-131			
<i>Toluene-d8</i>					98	98	78-128			
<i>4-Bromofluorobenzene</i>					97	95	71-130			



Date of Report: February 10, 2020
 Samples Submitted: February 5, 2020
 Laboratory Reference: 2002-043
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST-02-N					
Laboratory ID:	02-043-02					
Diesel Fuel #2	630	32	NWTPH-Dx	2-7-20	2-7-20	
Lube Oil	1300	63	NWTPH-Dx	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	87	50-150				
Client ID:	UST-02-E					
Laboratory ID:	02-043-03					
Diesel Fuel #2	370	43	NWTPH-Dx	2-7-20	2-7-20	
Lube Oil	850	87	NWTPH-Dx	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	81	50-150				



Date of Report: February 10, 2020
 Samples Submitted: February 5, 2020
 Laboratory Reference: 2002-043
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0207S1					
Diesel Range Organics	ND	25	NWTPH-Dx	2-7-20	2-7-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	81	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0207S1							
	ORIG	DUP						
Diesel Fuel #2	86.3	80.8	NA	NA	NA	NA	7	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				94	87	50-150		



Date of Report: February 10, 2020
 Samples Submitted: February 5, 2020
 Laboratory Reference: 2002-043
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST-02-N					
Laboratory ID:	02-043-02					
Naphthalene	0.031	0.0084	EPA 8270E/SIM	2-7-20	2-7-20	
2-Methylnaphthalene	0.043	0.0084	EPA 8270E/SIM	2-7-20	2-7-20	
1-Methylnaphthalene	0.062	0.0084	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo[a]anthracene	0.029	0.0084	EPA 8270E/SIM	2-7-20	2-7-20	
Chrysene	0.081	0.0084	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo[b]fluoranthene	0.015	0.0084	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo(j,k)fluoranthene	ND	0.0084	EPA 8270E/SIM	2-7-20	2-7-20	
Benzo[a]pyrene	0.019	0.0084	EPA 8270E/SIM	2-7-20	2-7-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0084	EPA 8270E/SIM	2-7-20	2-7-20	
Dibenz[a,h]anthracene	ND	0.0084	EPA 8270E/SIM	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>65</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>61</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>64</i>	<i>45 - 122</i>				



Date of Report: February 10, 2020
 Samples Submitted: February 5, 2020
 Laboratory Reference: 2002-043
 Project: 397-019

cPAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST-02-E					
Laboratory ID:	02-043-03					
Naphthalene	0.12	0.012	EPA 8270E/SIM	2-7-20	2-8-20	
2-Methylnaphthalene	0.21	0.012	EPA 8270E/SIM	2-7-20	2-8-20	
1-Methylnaphthalene	0.13	0.012	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo[a]anthracene	0.034	0.012	EPA 8270E/SIM	2-7-20	2-8-20	
Chrysene	0.034	0.012	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo[b]fluoranthene	0.034	0.012	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo(j,k)fluoranthene	ND	0.012	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo[a]pyrene	0.039	0.012	EPA 8270E/SIM	2-7-20	2-8-20	
Indeno(1,2,3-c,d)pyrene	0.023	0.012	EPA 8270E/SIM	2-7-20	2-8-20	
Dibenz[a,h]anthracene	ND	0.012	EPA 8270E/SIM	2-7-20	2-8-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>75</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>82</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>85</i>	<i>45 - 122</i>				



Date of Report: February 10, 2020
 Samples Submitted: February 5, 2020
 Laboratory Reference: 2002-043
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0207S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	96	40 - 111				
<i>Pyrene-d10</i>	103	40 - 110				
<i>Terphenyl-d14</i>	119	45 - 122				



Date of Report: February 10, 2020
 Samples Submitted: February 5, 2020
 Laboratory Reference: 2002-043
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
	SB	SBD	SB	SBD	SB	SBD				
SPIKE BLANKS										
Laboratory ID:	SB0207S1									
Naphthalene	0.0878	0.0869	0.0833	0.0833	105	104	57 - 109	1	15	
Acenaphthylene	0.0907	0.0953	0.0833	0.0833	109	114	60 - 121	5	15	
Acenaphthene	0.0886	0.0952	0.0833	0.0833	106	114	59 - 121	7	15	
Fluorene	0.0900	0.0910	0.0833	0.0833	108	109	63 - 119	1	15	
Phenanthrene	0.0900	0.0899	0.0833	0.0833	108	108	59 - 114	0	15	
Anthracene	0.0954	0.0958	0.0833	0.0833	115	115	63 - 119	0	15	
Fluoranthene	0.0908	0.0920	0.0833	0.0833	109	110	63 - 120	1	15	
Pyrene	0.0885	0.0909	0.0833	0.0833	106	109	62 - 119	3	15	
Benzo[a]anthracene	0.0990	0.0973	0.0833	0.0833	119	117	64 - 127	2	15	
Chrysene	0.0937	0.0923	0.0833	0.0833	112	111	63 - 121	2	15	
Benzo[b]fluoranthene	0.0922	0.0927	0.0833	0.0833	111	111	61 - 122	1	15	
Benzo(j,k)fluoranthene	0.0956	0.0914	0.0833	0.0833	115	110	64 - 123	4	15	
Benzo[a]pyrene	0.0978	0.0973	0.0833	0.0833	117	117	62 - 122	1	15	
Indeno(1,2,3-c,d)pyrene	0.0952	0.0947	0.0833	0.0833	114	114	59 - 124	1	15	
Dibenz[a,h]anthracene	0.0953	0.0945	0.0833	0.0833	114	113	61 - 123	1	15	
Benzo[g,h,i]perylene	0.0947	0.0948	0.0833	0.0833	114	114	61 - 119	0	15	
<i>Surrogate:</i>										
2-Fluorobiphenyl					101	106	40 - 111			
Pyrene-d10					105	105	40 - 110			
Terphenyl-d14					110	106	45 - 122			



Date of Report: February 10, 2020
 Samples Submitted: February 5, 2020
 Laboratory Reference: 2002-043
 Project: 397-019

PCBs EPA 8082A

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST-02-N					
Laboratory ID:	02-043-02					
Aroclor 1016	ND	0.063	EPA 8082A	2-7-20	2-7-20	
Aroclor 1221	ND	0.063	EPA 8082A	2-7-20	2-7-20	
Aroclor 1232	ND	0.063	EPA 8082A	2-7-20	2-7-20	
Aroclor 1242	ND	0.063	EPA 8082A	2-7-20	2-7-20	
Aroclor 1248	ND	0.063	EPA 8082A	2-7-20	2-7-20	
Aroclor 1254	ND	0.063	EPA 8082A	2-7-20	2-7-20	
Aroclor 1260	ND	0.063	EPA 8082A	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
DCB	75	37-122				

Client ID:	UST-02-E					
Laboratory ID:	02-043-03					
Aroclor 1016	ND	0.087	EPA 8082A	2-7-20	2-7-20	
Aroclor 1221	ND	0.087	EPA 8082A	2-7-20	2-7-20	
Aroclor 1232	ND	0.087	EPA 8082A	2-7-20	2-7-20	
Aroclor 1242	ND	0.087	EPA 8082A	2-7-20	2-7-20	
Aroclor 1248	ND	0.087	EPA 8082A	2-7-20	2-7-20	
Aroclor 1254	ND	0.087	EPA 8082A	2-7-20	2-7-20	
Aroclor 1260	ND	0.087	EPA 8082A	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
DCB	75	37-122				



Date of Report: February 10, 2020
 Samples Submitted: February 5, 2020
 Laboratory Reference: 2002-043
 Project: 397-019

**PCBs EPA 8082A
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0207S1					
Aroclor 1016	ND	0.050	EPA 8082A	2-7-20	2-7-20	
Aroclor 1221	ND	0.050	EPA 8082A	2-7-20	2-7-20	
Aroclor 1232	ND	0.050	EPA 8082A	2-7-20	2-7-20	
Aroclor 1242	ND	0.050	EPA 8082A	2-7-20	2-7-20	
Aroclor 1248	ND	0.050	EPA 8082A	2-7-20	2-7-20	
Aroclor 1254	ND	0.050	EPA 8082A	2-7-20	2-7-20	
Aroclor 1260	ND	0.050	EPA 8082A	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>		<i>Control Limits</i>			
DCB	86		37-122			

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	01-330-16										
	MS	MSD	MS	MSD		MS	MSD				
Aroclor 1260	NA	NA	0.500	0.500	NA	NA	NA	38-120	NA	15	A
<i>Surrogate:</i>											
DCB						83	86	37-122			



Date of Report: February 10, 2020
Samples Submitted: February 5, 2020
Laboratory Reference: 2002-043
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
UST-02-N	02-043-02	21	2-6-20
UST-02-E	02-043-03	42	2-6-20





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 methods 8260 & 8270, 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





**OnSite
Environmental Inc.**

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

February 27, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-069B

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 7, 2020.

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,

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: February 27, 2020
Samples Submitted: February 7, 2020
Laboratory Reference: 2002-069B
Project: 397-019

Case Narrative

Samples were collected on February 6, 2020 and received by the laboratory on February 7, 2020. 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.

PAHs EPA 8270D/SIM Analysis

The client requested the analysis of sample N2-B-20.0 after the holding time had expired.

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: February 27, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069B
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N2-B-20.0					
Laboratory ID:	02-069-04					
Benzo[a]anthracene	0.13	0.0082	EPA 8270E/SIM	2-25-20	2-26-20	
Chrysene	0.13	0.0082	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[b]fluoranthene	0.13	0.0082	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo(j,k)fluoranthene	0.052	0.0082	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[a]pyrene	0.15	0.0082	EPA 8270E/SIM	2-25-20	2-26-20	
Indeno(1,2,3-c,d)pyrene	0.084	0.0082	EPA 8270E/SIM	2-25-20	2-26-20	
Dibenz[a,h]anthracene	0.013	0.0082	EPA 8270E/SIM	2-25-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>75</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>82</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>89</i>	<i>45 - 122</i>				



Date of Report: February 27, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069B
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0225S1					
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Benzo[j,k]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>77</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>77</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>80</i>	<i>45 - 122</i>				



Date of Report: February 27, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069B
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
					Result	Recovery	Limits			Limit	
MATRIX SPIKES											
Laboratory ID:	02-208-02										
	MS	MSD	MS	MSD		MS	MSD				
Benzo[a]anthracene	0.0878	0.0844	0.0833	0.0833	ND	105	101	53 - 131	4	23	
Chrysene	0.0788	0.0759	0.0833	0.0833	ND	95	91	46 - 126	4	24	
Benzo[b]fluoranthene	0.0826	0.0731	0.0833	0.0833	ND	99	88	45 - 127	12	25	
Benzo(j,k)fluoranthene	0.0691	0.0727	0.0833	0.0833	ND	83	87	52 - 122	5	21	
Benzo[a]pyrene	0.0764	0.0731	0.0833	0.0833	ND	92	88	51 - 126	4	24	
Indeno(1,2,3-c,d)pyrene	0.0701	0.0684	0.0833	0.0833	ND	84	82	48 - 127	2	23	
Dibenz[a,h]anthracene	0.0716	0.0693	0.0833	0.0833	ND	86	83	51 - 124	3	22	
<i>Surrogate:</i>											
2-Fluorobiphenyl						79	77	40 - 111			
Pyrene-d10						83	80	40 - 110			
Terphenyl-d14						89	88	45 - 122			





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 methods 8260 & 8270, 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





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

February 20, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-069

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 7, 2020.

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



OnSite Environmental, Inc. 14648 NE 95th 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: February 20, 2020
Samples Submitted: February 7, 2020
Laboratory Reference: 2002-069
Project: 397-019

Case Narrative

Samples were collected on February 6, 2020 and received by the laboratory on February 7, 2020. 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.

BTEX by Method 8021B Analysis

The MTCA Method A cleanup level of 0.030 ppm for Benzene is not achievable for sample K2-B-20.0 due to the low dry weight of the sample.

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: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	K2-B-20.0					
Laboratory ID:	02-069-07					
Diesel Range Organics	ND	56	NWTPH-Dx	2-7-20	2-10-20	
Lube Oil Range Organics	280	110	NWTPH-Dx	2-7-20	2-10-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>81</i>	<i>50-150</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0207S1					
Diesel Range Organics	ND	25	NWTPH-Dx	2-7-20	2-7-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-7-20	2-7-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>81</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0207S1							
	ORIG	DUP						
Diesel Fuel #2	86.3	80.8	NA	NA	NA	7	NA	
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>94</i>	<i>87</i>	<i>50-150</i>		



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N4-ESW-20.0					
Laboratory ID:	02-069-01					
Benzo[a]anthracene	ND	0.0077	EPA 8270E/SIM	2-7-20	2-8-20	
Chrysene	ND	0.0077	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo[b]fluoranthene	ND	0.0077	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo(j,k)fluoranthene	ND	0.0077	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo[a]pyrene	ND	0.0077	EPA 8270E/SIM	2-7-20	2-8-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0077	EPA 8270E/SIM	2-7-20	2-8-20	
Dibenz[a,h]anthracene	ND	0.0077	EPA 8270E/SIM	2-7-20	2-8-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>75</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>88</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>90</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M4-ESW-20.0					
Laboratory ID:	02-069-02					
Benzo[a]anthracene	0.010	0.0081	EPA 8270E/SIM	2-7-20	2-8-20	
Chrysene	0.015	0.0081	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo[b]fluoranthene	0.016	0.0081	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo(j,k)fluoranthene	ND	0.0081	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo[a]pyrene	0.012	0.0081	EPA 8270E/SIM	2-7-20	2-8-20	
Indeno(1,2,3-c,d)pyrene	0.0089	0.0081	EPA 8270E/SIM	2-7-20	2-8-20	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270E/SIM	2-7-20	2-8-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>76</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>88</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>88</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N4-NSW-20.0					
Laboratory ID:	02-069-03					
Benzo[a]anthracene	0.024	0.0080	EPA 8270E/SIM	2-7-20	2-8-20	
Chrysene	0.027	0.0080	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo[b]fluoranthene	0.039	0.0080	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo(j,k)fluoranthene	0.011	0.0080	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo[a]pyrene	0.034	0.0080	EPA 8270E/SIM	2-7-20	2-8-20	
Indeno(1,2,3-c,d)pyrene	0.038	0.0080	EPA 8270E/SIM	2-7-20	2-8-20	
Dibenz[a,h]anthracene	ND	0.0080	EPA 8270E/SIM	2-7-20	2-8-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>86</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>89</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>97</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	K2-B-20.0					
Laboratory ID:	02-069-07					
Naphthalene	4.0	0.60	EPA 8270E/SIM	2-7-20	2-10-20	
2-Methylnaphthalene	5.6	0.60	EPA 8270E/SIM	2-7-20	2-10-20	
1-Methylnaphthalene	4.6	0.60	EPA 8270E/SIM	2-7-20	2-10-20	
Benzo[a]anthracene	11	0.60	EPA 8270E/SIM	2-7-20	2-10-20	
Chrysene	10	0.60	EPA 8270E/SIM	2-7-20	2-10-20	
Benzo[b]fluoranthene	12	0.60	EPA 8270E/SIM	2-7-20	2-10-20	
Benzo(j,k)fluoranthene	3.4	0.60	EPA 8270E/SIM	2-7-20	2-10-20	
Benzo[a]pyrene	12	0.60	EPA 8270E/SIM	2-7-20	2-10-20	
Indeno(1,2,3-c,d)pyrene	6.7	0.60	EPA 8270E/SIM	2-7-20	2-10-20	
Dibenz[a,h]anthracene	0.96	0.60	EPA 8270E/SIM	2-7-20	2-10-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>73</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>75</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>76</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0207S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-7-20	2-8-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>96</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>103</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>119</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
					Result	Recovery	Limits		RPD	Limit	
MATRIX SPIKES											
Laboratory ID:	02-081-13										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0613	0.0551	0.0833	0.0833	ND	74	66	44 - 111	11	21	
Acenaphthylene	0.0653	0.0582	0.0833	0.0833	ND	78	70	47 - 122	11	24	
Acenaphthene	0.0667	0.0609	0.0833	0.0833	ND	80	73	46 - 122	9	24	
Fluorene	0.0679	0.0651	0.0833	0.0833	ND	82	78	53 - 118	4	23	
Phenanthrene	0.0724	0.0695	0.0833	0.0833	ND	87	83	41 - 124	4	24	
Anthracene	0.0727	0.0708	0.0833	0.0833	ND	87	85	53 - 119	3	21	
Fluoranthene	0.0803	0.0790	0.0833	0.0833	ND	96	95	39 - 135	2	32	
Pyrene	0.0745	0.0739	0.0833	0.0833	ND	89	89	39 - 134	1	34	
Benzo[a]anthracene	0.0767	0.0787	0.0833	0.0833	ND	92	94	53 - 131	3	23	
Chrysene	0.0700	0.0696	0.0833	0.0833	ND	84	84	46 - 126	1	24	
Benzo[b]fluoranthene	0.0705	0.0735	0.0833	0.0833	ND	85	88	45 - 127	4	25	
Benzo(j,k)fluoranthene	0.0728	0.0683	0.0833	0.0833	ND	87	82	52 - 122	6	21	
Benzo[a]pyrene	0.0748	0.0752	0.0833	0.0833	ND	90	90	51 - 126	1	24	
Indeno(1,2,3-c,d)pyrene	0.0700	0.0697	0.0833	0.0833	ND	84	84	48 - 127	0	23	
Dibenz[a,h]anthracene	0.0728	0.0724	0.0833	0.0833	ND	87	87	51 - 124	1	22	
Benzo[g,h,i]perylene	0.0709	0.0702	0.0833	0.0833	ND	85	84	50 - 120	1	22	
<i>Surrogate:</i>											
2-Fluorobiphenyl						75	65	40 - 111			
Pyrene-d10						83	85	40 - 110			
Terphenyl-d14						79	84	45 - 122			



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069
 Project: 397-019

**BTEX
 EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	K2-B-20.0					
Laboratory ID:	02-069-07					
Benzene	ND	0.037	EPA 8021B	2-10-20	2-10-20	
Toluene	ND	0.19	EPA 8021B	2-10-20	2-10-20	
Ethyl Benzene	ND	0.19	EPA 8021B	2-10-20	2-10-20	
m,p-Xylene	ND	0.19	EPA 8021B	2-10-20	2-10-20	
o-Xylene	ND	0.19	EPA 8021B	2-10-20	2-10-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>68</i>	<i>58-129</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069
 Project: 397-019

**BTEX
 EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0210S3					
Benzene	ND	0.020	EPA 8021B	2-10-20	2-10-20	
Toluene	ND	0.050	EPA 8021B	2-10-20	2-10-20	
Ethyl Benzene	ND	0.050	EPA 8021B	2-10-20	2-10-20	
m,p-Xylene	ND	0.050	EPA 8021B	2-10-20	2-10-20	
o-Xylene	ND	0.050	EPA 8021B	2-10-20	2-10-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>		<i>Control Limits</i>			
<i>Fluorobenzene</i>	107		58-129			

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-018-11							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				88	88	58-129		

SPIKE BLANKS

Laboratory ID:	SB0210S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	0.849	0.885	1.00	1.00	85	89	69-109	4	10
Toluene	0.896	0.934	1.00	1.00	90	93	67-112	4	10
Ethyl Benzene	0.902	0.942	1.00	1.00	90	94	67-113	4	10
m,p-Xylene	0.905	0.939	1.00	1.00	91	94	66-114	4	11
o-Xylene	0.920	0.952	1.00	1.00	92	95	68-112	3	11
<i>Surrogate:</i>									
<i>Fluorobenzene</i>					89	91	58-129		



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N4-ESW-20.0					
Laboratory ID:	02-069-01					
Diesel Range Organics	ND	29	NWTPH-Dx	2-10-20	2-10-20	
Lube Oil Range Organics	ND	58	NWTPH-Dx	2-10-20	2-10-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	64	50-150				

Client ID:	M4-ESW-20.0					
Laboratory ID:	02-069-02					
Diesel Range Organics	ND	30	NWTPH-Dx	2-10-20	2-10-20	
Lube Oil Range Organics	ND	61	NWTPH-Dx	2-10-20	2-10-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	70	50-150				

Client ID:	N4-NSW-20.0					
Laboratory ID:	02-069-03					
Diesel Range Organics	ND	30	NWTPH-Dx	2-10-20	2-10-20	
Lube Oil Range Organics	ND	60	NWTPH-Dx	2-10-20	2-10-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	68	50-150				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0210S3					
Diesel Range Organics	ND	25	NWTPH-Dx	2-10-20	2-10-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-10-20	2-10-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>94</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-081-08							
	ORIG	DUP						
Diesel Range Organics	99.3	47.4	NA	NA	NA	NA	71	NA N
Lube Oil Range Organics	271	141	NA	NA	NA	NA	63	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>83</i>	<i>70</i>	<i>50-150</i>		



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N2-B-20.0					
Laboratory ID:	02-069-04					
Diesel Range Organics	ND	31	NWTPH-Dx	2-13-20	2-13-20	
Lube Oil Range Organics	ND	61	NWTPH-Dx	2-13-20	2-13-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	79	50-150				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0213S1					
Diesel Range Organics	ND	25	NWTPH-Dx	2-13-20	2-13-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-13-20	2-13-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>81</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0213S1							
	ORIG	DUP						
Diesel Fuel #2	87.5	82.2	NA	NA	NA	NA	6	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>88</i>	<i>91</i>	<i>50-150</i>		



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M2-B-20.0					
Laboratory ID:	02-069-05					
Benzo[a]anthracene	0.14	0.077	EPA 8270E/SIM	2-18-20	2-18-20	
Chrysene	0.13	0.077	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[b]fluoranthene	0.11	0.077	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo(j,k)fluoranthene	ND	0.077	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]pyrene	0.14	0.077	EPA 8270E/SIM	2-18-20	2-18-20	
Indeno(1,2,3-c,d)pyrene	ND	0.077	EPA 8270E/SIM	2-18-20	2-18-20	
Dibenz[a,h]anthracene	ND	0.077	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>84</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>85</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>89</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	L2-B-20.0					
Laboratory ID:	02-069-06					
Naphthalene	0.41	0.21	EPA 8270E/SIM	2-18-20	2-18-20	
2-Methylnaphthalene	ND	0.21	EPA 8270E/SIM	2-18-20	2-18-20	
1-Methylnaphthalene	ND	0.21	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]anthracene	2.9	0.21	EPA 8270E/SIM	2-18-20	2-18-20	
Chrysene	2.4	0.21	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[b]fluoranthene	3.3	0.21	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo(j,k)fluoranthene	1.1	0.21	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]pyrene	3.0	0.21	EPA 8270E/SIM	2-18-20	2-18-20	
Indeno(1,2,3-c,d)pyrene	1.8	0.21	EPA 8270E/SIM	2-18-20	2-18-20	
Dibenz[a,h]anthracene	0.42	0.21	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>87</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>86</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>98</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0218S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>86</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>94</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>100</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-069
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
					Result	Recovery	Limits		RPD	Limit	
MATRIX SPIKES											
Laboratory ID:	02-081-13										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0613	0.0551	0.0833	0.0833	ND	74	66	44 - 111	11	21	
Acenaphthylene	0.0653	0.0582	0.0833	0.0833	ND	78	70	47 - 122	11	24	
Acenaphthene	0.0667	0.0609	0.0833	0.0833	ND	80	73	46 - 122	9	24	
Fluorene	0.0679	0.0651	0.0833	0.0833	ND	82	78	53 - 118	4	23	
Phenanthrene	0.0724	0.0695	0.0833	0.0833	ND	87	83	41 - 124	4	24	
Anthracene	0.0727	0.0708	0.0833	0.0833	ND	87	85	53 - 119	3	21	
Fluoranthene	0.0803	0.0790	0.0833	0.0833	ND	96	95	39 - 135	2	32	
Pyrene	0.0745	0.0739	0.0833	0.0833	ND	89	89	39 - 134	1	34	
Benzo[a]anthracene	0.0767	0.0787	0.0833	0.0833	ND	92	94	53 - 131	3	23	
Chrysene	0.0700	0.0696	0.0833	0.0833	ND	84	84	46 - 126	1	24	
Benzo[b]fluoranthene	0.0705	0.0735	0.0833	0.0833	ND	85	88	45 - 127	4	25	
Benzo(j,k)fluoranthene	0.0728	0.0683	0.0833	0.0833	ND	87	82	52 - 122	6	21	
Benzo[a]pyrene	0.0748	0.0752	0.0833	0.0833	ND	90	90	51 - 126	1	24	
Indeno(1,2,3-c,d)pyrene	0.0700	0.0697	0.0833	0.0833	ND	84	84	48 - 127	0	23	
Dibenz[a,h]anthracene	0.0728	0.0724	0.0833	0.0833	ND	87	87	51 - 124	1	22	
Benzo[g,h,i]perylene	0.0709	0.0702	0.0833	0.0833	ND	85	84	50 - 120	1	22	
<i>Surrogate:</i>											
2-Fluorobiphenyl						75	65	40 - 111			
Pyrene-d10						83	85	40 - 110			
Terphenyl-d14						79	84	45 - 122			



Date of Report: February 20, 2020
Samples Submitted: February 7, 2020
Laboratory Reference: 2002-069
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
N4-ESW-20.0	02-069-01	13	2-7-20
M4-ESW-20.0	02-069-02	18	2-7-20
N4-NSW-20.0	02-069-03	16	2-7-20
N2-B-20.0	02-069-04	18	2-13-20
M2-B-20.0	02-069-05	13	2-13-20
L2-B-20.0	02-069-06	37	2-13-20
K2-B-20.0	02-069-07	55	2-7-20





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 methods 8260 & 8270, 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





MVA Onsite Environmental Inc.

Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request (in working days) (Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days) K2

(other)

Laboratory Number: 02-069

Company: Favallon
Project Number: 397-019
Project Name: Block 38
Project Manager: S. Stumpf
Sampled by: G. Peters

Lab ID	Sample Identification	Date Sampled	Time Sampled	Soil Matrix	Number of Containers
1	NH-ESW-20.0	2/16/20	0940	Soil	5
2	NH-ESW-20.0		0945		
3	NH-NSW-20.0		0950		
4	N2-B-20.0		1400		
5	M2-B-20.0		1415		
6	L2-B-20.0		1420		
7	K2-B-20.0		1430		

Parameter	1	2	3	4	5	6	7
NWTPH-HCID							
NWTPH-Gx/BTEX							
NWTPH-Gx							
NWTPH-Dx (Acid / SG Clean-up)	X	X	X	X	X	X	X
Volatiles 8260C							
Halogenated Volatiles 8260C							
EDB EPA 8011 (Waters Only)							
Semivolatiles 8270D/SIM (with low-level PAHs)							
PAHs 8270D/SIM (low-level)							
CPAHs + Naphthalene							
PCBs 8082A							
Organochlorine Pesticides 8081B							
Organophosphorus Pesticides 8270D/SIM							
Chlorinated Acid Herbicides 8151A							
Total RCRA Metals							
Total MTCA Metals							
TCLP Metals							
HEM (oil and grease) 1664A							
Hold							
STANDARD TAT							
3 day TAT							
% Moisture							

Signature	Company	Date	Time	Comments/Special Instructions
[Signature]	Favallon	2/17/20	0955	Hold for GKO, BTEX, naphthalene (NH, MH) hold for OKO10K0, Naph, PAHs (N2, M2, L2)
[Signature]	SPERRY	2/17/20	0940	Run Naph on K2 only.
[Signature]	SPERRY	2/17/20	1040	K2 - 3 day TAT

Received _____

Received _____

Received _____

Received _____

Received _____

Reviewed/Date _____

Reviewed/Date _____

Reviewed/Date _____

Chromatograms with final report Electronic Data Deliverables (EDDs)



**OnSite
Environmental Inc.**

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

February 20, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-081

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 7, 2020.

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,

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: February 20, 2020
Samples Submitted: February 7, 2020
Laboratory Reference: 2002-081
Project: 397-019

Case Narrative

Samples were collected on February 7, 2020 and received by the laboratory on February 7, 2020. 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.

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: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-081
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST02-N1					
Laboratory ID:	02-081-08					
Diesel Range Organics	160	41	NWTPH-Dx	2-10-20	2-10-20	N
Lube Oil Range Organics	440	82	NWTPH-Dx	2-10-20	2-10-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>83</i>	<i>50-150</i>				

Client ID:	UST02-B1					
Laboratory ID:	02-081-09					
Diesel Range Organics	140	49	NWTPH-Dx	2-10-20	2-10-20	N
Lube Oil Range Organics	820	98	NWTPH-Dx	2-10-20	2-10-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>79</i>	<i>50-150</i>				

Client ID:	UST02-E1					
Laboratory ID:	02-081-10					
Diesel Range Organics	39	35	NWTPH-Dx	2-10-20	2-10-20	N
Lube Oil Range Organics	230	69	NWTPH-Dx	2-10-20	2-10-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>76</i>	<i>50-150</i>				

Client ID:	UST02-S					
Laboratory ID:	02-081-11					
Diesel Range Organics	ND	50	NWTPH-Dx	2-10-20	2-10-20	
Lube Oil Range Organics	200	100	NWTPH-Dx	2-10-20	2-10-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>79</i>	<i>50-150</i>				

Client ID:	UST02-W1					
Laboratory ID:	02-081-12					
Diesel Range Organics	64	33	NWTPH-Dx	2-10-20	2-10-20	N
Lube Oil Range Organics	310	66	NWTPH-Dx	2-10-20	2-10-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>73</i>	<i>50-150</i>				

Client ID:	UST02-B2					
Laboratory ID:	02-081-13					
Diesel Range Organics	160	150	NWTPH-Dx	2-10-20	2-10-20	N
Lube Oil Range Organics	1800	300	NWTPH-Dx	2-10-20	2-10-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>76</i>	<i>50-150</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-081
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0210S3					
Diesel Range Organics	ND	25	NWTPH-Dx	2-10-20	2-10-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-10-20	2-10-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>94</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-081-09							
	ORIG	DUP						
Diesel Range Organics	71.8	82.0	NA	NA	NA	NA	13	NA N
Lube Oil Range Organics	417	308	NA	NA	NA	NA	30	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>79</i>	<i>75</i>	<i>50-150</i>		



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-081
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-12-20.0					
Laboratory ID:	02-081-01					
Benzo[a]anthracene	19	0.89	EPA 8270E/SIM	2-18-20	2-18-20	
Chrysene	17	0.89	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[b]fluoranthene	14	0.89	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo(j,k)fluoranthene	5.7	0.89	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]pyrene	16	0.89	EPA 8270E/SIM	2-18-20	2-18-20	
Indeno(1,2,3-c,d)pyrene	8.4	0.89	EPA 8270E/SIM	2-18-20	2-18-20	
Dibenz[a,h]anthracene	1.6	0.89	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>78</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>82</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>94</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-081
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-12-15.0					
Laboratory ID:	02-081-02					
Benzo[a]anthracene	0.084	0.014	EPA 8270E/SIM	2-18-20	2-18-20	
Chrysene	0.078	0.014	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[b]fluoranthene	0.075	0.014	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo(j,k)fluoranthene	0.023	0.014	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]pyrene	0.083	0.014	EPA 8270E/SIM	2-18-20	2-18-20	
Indeno(1,2,3-c,d)pyrene	0.043	0.014	EPA 8270E/SIM	2-18-20	2-18-20	
Dibenz[a,h]anthracene	ND	0.014	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>62</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>77</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>78</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-081
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST02-N1					
Laboratory ID:	02-081-08					
Naphthalene	0.35	0.011	EPA 8270E/SIM	2-18-20	2-18-20	
2-Methylnaphthalene	0.39	0.011	EPA 8270E/SIM	2-18-20	2-18-20	
1-Methylnaphthalene	0.29	0.011	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]anthracene	0.071	0.011	EPA 8270E/SIM	2-18-20	2-18-20	
Chrysene	0.077	0.011	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[b]fluoranthene	0.075	0.011	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo(j,k)fluoranthene	0.024	0.011	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]pyrene	0.083	0.011	EPA 8270E/SIM	2-18-20	2-18-20	
Indeno(1,2,3-c,d)pyrene	0.058	0.011	EPA 8270E/SIM	2-18-20	2-18-20	
Dibenz[a,h]anthracene	ND	0.011	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>81</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>91</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>91</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-081
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST02-B1					
Laboratory ID:	02-081-09					
Naphthalene	0.18	0.065	EPA 8270E/SIM	2-18-20	2-18-20	
2-Methylnaphthalene	0.094	0.065	EPA 8270E/SIM	2-18-20	2-18-20	
1-Methylnaphthalene	0.31	0.065	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]anthracene	0.54	0.065	EPA 8270E/SIM	2-18-20	2-18-20	
Chrysene	0.48	0.065	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[b]fluoranthene	0.45	0.065	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo(j,k)fluoranthene	0.17	0.065	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]pyrene	0.55	0.065	EPA 8270E/SIM	2-18-20	2-18-20	
Indeno(1,2,3-c,d)pyrene	0.29	0.065	EPA 8270E/SIM	2-18-20	2-18-20	
Dibenz[a,h]anthracene	ND	0.065	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>65</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>83</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>90</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-081
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST02-E1					
Laboratory ID:	02-081-10					
Naphthalene	0.096	0.0092	EPA 8270E/SIM	2-18-20	2-19-20	
2-Methylnaphthalene	0.050	0.0092	EPA 8270E/SIM	2-18-20	2-19-20	
1-Methylnaphthalene	0.037	0.0092	EPA 8270E/SIM	2-18-20	2-19-20	
Benzo[a]anthracene	0.11	0.0092	EPA 8270E/SIM	2-18-20	2-19-20	
Chrysene	0.11	0.0092	EPA 8270E/SIM	2-18-20	2-19-20	
Benzo[b]fluoranthene	0.10	0.0092	EPA 8270E/SIM	2-18-20	2-19-20	
Benzo(j,k)fluoranthene	0.034	0.0092	EPA 8270E/SIM	2-18-20	2-19-20	
Benzo[a]pyrene	0.11	0.0092	EPA 8270E/SIM	2-18-20	2-19-20	
Indeno(1,2,3-c,d)pyrene	0.069	0.0092	EPA 8270E/SIM	2-18-20	2-19-20	
Dibenz[a,h]anthracene	0.011	0.0092	EPA 8270E/SIM	2-18-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>85</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>89</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>87</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-081
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST02-S					
Laboratory ID:	02-081-11					
Naphthalene	0.047	0.013	EPA 8270E/SIM	2-18-20	2-18-20	
2-Methylnaphthalene	0.015	0.013	EPA 8270E/SIM	2-18-20	2-18-20	
1-Methylnaphthalene	ND	0.013	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]anthracene	0.022	0.013	EPA 8270E/SIM	2-18-20	2-18-20	
Chrysene	0.022	0.013	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[b]fluoranthene	0.040	0.013	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo(j,k)fluoranthene	0.016	0.013	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]pyrene	0.039	0.013	EPA 8270E/SIM	2-18-20	2-18-20	
Indeno(1,2,3-c,d)pyrene	0.039	0.013	EPA 8270E/SIM	2-18-20	2-18-20	
Dibenz[a,h]anthracene	ND	0.013	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>79</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>79</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>88</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-081
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST02-W1					
Laboratory ID:	02-081-12					
Naphthalene	0.12	0.0088	EPA 8270E/SIM	2-18-20	2-18-20	
2-Methylnaphthalene	0.043	0.0088	EPA 8270E/SIM	2-18-20	2-18-20	
1-Methylnaphthalene	0.031	0.0088	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]anthracene	0.17	0.0088	EPA 8270E/SIM	2-18-20	2-18-20	
Chrysene	0.14	0.0088	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[b]fluoranthene	0.16	0.0088	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo(j,k)fluoranthene	0.062	0.0088	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]pyrene	0.19	0.0088	EPA 8270E/SIM	2-18-20	2-18-20	
Indeno(1,2,3-c,d)pyrene	0.11	0.0088	EPA 8270E/SIM	2-18-20	2-18-20	
Dibenz[a,h]anthracene	0.019	0.0088	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>81</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>88</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>91</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-081
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	UST02-B2					
Laboratory ID:	02-081-13					
Naphthalene	ND	0.040	EPA 8270E/SIM	2-18-20	2-18-20	
2-Methylnaphthalene	ND	0.040	EPA 8270E/SIM	2-18-20	2-18-20	
1-Methylnaphthalene	ND	0.040	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]anthracene	ND	0.040	EPA 8270E/SIM	2-18-20	2-18-20	
Chrysene	ND	0.040	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[b]fluoranthene	ND	0.040	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo(j,k)fluoranthene	ND	0.040	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]pyrene	ND	0.040	EPA 8270E/SIM	2-18-20	2-18-20	
Indeno(1,2,3-c,d)pyrene	ND	0.040	EPA 8270E/SIM	2-18-20	2-18-20	
Dibenz[a,h]anthracene	ND	0.040	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>66</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>80</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>84</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-081
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0218S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>86</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>94</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>100</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-081
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
					Result	Recovery	Limits		RPD	Limit	
MATRIX SPIKES											
Laboratory ID:	02-081-13										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0613	0.0551	0.0833	0.0833	ND	74	66	44 - 111	11	21	
Acenaphthylene	0.0653	0.0582	0.0833	0.0833	ND	78	70	47 - 122	11	24	
Acenaphthene	0.0667	0.0609	0.0833	0.0833	ND	80	73	46 - 122	9	24	
Fluorene	0.0679	0.0651	0.0833	0.0833	ND	82	78	53 - 118	4	23	
Phenanthrene	0.0724	0.0695	0.0833	0.0833	ND	87	83	41 - 124	4	24	
Anthracene	0.0727	0.0708	0.0833	0.0833	ND	87	85	53 - 119	3	21	
Fluoranthene	0.0803	0.0790	0.0833	0.0833	ND	96	95	39 - 135	2	32	
Pyrene	0.0745	0.0739	0.0833	0.0833	ND	89	89	39 - 134	1	34	
Benzo[a]anthracene	0.0767	0.0787	0.0833	0.0833	ND	92	94	53 - 131	3	23	
Chrysene	0.0700	0.0696	0.0833	0.0833	ND	84	84	46 - 126	1	24	
Benzo[b]fluoranthene	0.0705	0.0735	0.0833	0.0833	ND	85	88	45 - 127	4	25	
Benzo(j,k)fluoranthene	0.0728	0.0683	0.0833	0.0833	ND	87	82	52 - 122	6	21	
Benzo[a]pyrene	0.0748	0.0752	0.0833	0.0833	ND	90	90	51 - 126	1	24	
Indeno(1,2,3-c,d)pyrene	0.0700	0.0697	0.0833	0.0833	ND	84	84	48 - 127	0	23	
Dibenz[a,h]anthracene	0.0728	0.0724	0.0833	0.0833	ND	87	87	51 - 124	1	22	
Benzo[g,h,i]perylene	0.0709	0.0702	0.0833	0.0833	ND	85	84	50 - 120	1	22	
<i>Surrogate:</i>											
2-Fluorobiphenyl						75	65	40 - 111			
Pyrene-d10						83	85	40 - 110			
Terphenyl-d14						79	84	45 - 122			



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-081
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-13-20.0					
Laboratory ID:	02-081-05					
Benzo[a]anthracene	ND	0.0076	EPA 8270E/SIM	2-19-20	2-19-20	
Chrysene	ND	0.0076	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo[b]fluoranthene	ND	0.0076	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo(j,k)fluoranthene	ND	0.0076	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo[a]pyrene	ND	0.0076	EPA 8270E/SIM	2-19-20	2-19-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0076	EPA 8270E/SIM	2-19-20	2-19-20	
Dibenz[a,h]anthracene	ND	0.0076	EPA 8270E/SIM	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>86</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>91</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>89</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-081
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-13-15.0					
Laboratory ID:	02-081-06					
Benzo[a]anthracene	ND	0.0093	EPA 8270E/SIM	2-19-20	2-19-20	
Chrysene	ND	0.0093	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo[b]fluoranthene	ND	0.0093	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo(j,k)fluoranthene	ND	0.0093	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo[a]pyrene	ND	0.0093	EPA 8270E/SIM	2-19-20	2-19-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0093	EPA 8270E/SIM	2-19-20	2-19-20	
Dibenz[a,h]anthracene	ND	0.0093	EPA 8270E/SIM	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>69</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>66</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>75</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-081
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0219S1					
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo[j,k]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>91</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>92</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>98</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-081
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
					Result	Recovery	Limits		RPD	Limit	
MATRIX SPIKES											
Laboratory ID:	02-081-05										
	MS	MSD	MS	MSD		MS	MSD				
Benzo[a]anthracene	0.0800	0.0820	0.0833	0.0833	ND	96	98	53 - 131	2	23	
Chrysene	0.0748	0.0762	0.0833	0.0833	ND	90	91	46 - 126	2	24	
Benzo[b]fluoranthene	0.0708	0.0718	0.0833	0.0833	ND	85	86	45 - 127	1	25	
Benzo(j,k)fluoranthene	0.0724	0.0745	0.0833	0.0833	ND	87	89	52 - 122	3	21	
Benzo[a]pyrene	0.0735	0.0749	0.0833	0.0833	ND	88	90	51 - 126	2	24	
Indeno(1,2,3-c,d)pyrene	0.0713	0.0716	0.0833	0.0833	ND	86	86	48 - 127	0	23	
Dibenz[a,h]anthracene	0.0725	0.0732	0.0833	0.0833	ND	87	88	51 - 124	1	22	
<i>Surrogate:</i>											
2-Fluorobiphenyl						86	86	40 - 111			
Pyrene-d10						85	86	40 - 110			
Terphenyl-d14						89	89	45 - 122			



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-081
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-13-20.0					
Laboratory ID:	02-081-05					
Diesel Range Organics	ND	28	NWTPH-Dx	2-18-20	2-19-20	
Lube Oil Range Organics	ND	57	NWTPH-Dx	2-18-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>80</i>	<i>50-150</i>				
Client ID:	TP-13-15.0					
Laboratory ID:	02-081-06					
Diesel Range Organics	ND	35	NWTPH-Dx	2-18-20	2-19-20	
Lube Oil Range Organics	ND	70	NWTPH-Dx	2-18-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>65</i>	<i>50-150</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 7, 2020
 Laboratory Reference: 2002-081
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0218S3					
Diesel Range Organics	ND	25	NWTPH-Dx	2-18-20	2-18-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>89</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-081-05							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>80</i>	<i>78</i>	<i>50-150</i>		



Date of Report: February 20, 2020
Samples Submitted: February 7, 2020
Laboratory Reference: 2002-081
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
TP-12-20.0	02-081-01	25	2-14-20
TP-12-15.0	02-081-02	54	2-14-20
UST02-N1	02-081-08	39	2-10-20
UST02-B1	02-081-09	49	2-10-20
UST02-E1	02-081-10	28	2-10-20
UST02-S	02-081-11	50	2-10-20
UST02-W1	02-081-12	24	2-10-20
UST02-B2	02-081-13	83	2-10-20





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 methods 8260 & 8270, 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





MVA Onsite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)
(Check One)

Laboratory Number: **02-081**

02-081

Company: Favallan
Project Number: 397-019
Project Name: Block 38 West
Project Manager: Suzey Stumpf
Sampled by: Greg Peters

Same Day
 2 Days (16-13)
 3 Days
 Standard (7 Days) (12)
 (other) _____

Lab ID

Date Sampled

Time Sampled

Matrix

Number of Containers

% Moisture

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture	
1	TP-12-20.0	2/7/20	1600	Soil	5																			
2	TP-12-15.0																							
3	TP-12-10.0																							
4	TP-13-23.0																							
5	TP-13-20.0																							
6	TP-13-15.0																							
7	TP-13-10.0																							
8	UST02-N1																							
9	UST02-B1																							
10	UST02-E1																							

Signature: [Signature] Company: Favallan Date: 2/7/20 Time: 1732

Relinquished
Received
Relinquished
Received
Relinquished
Received
Reviewed/Date

Comments/Special Instructions:
- Please contact project manager for sample analyses for TP-12 and TP-13 samples.
- Please hold UST02-N1, B1, B2, E1 and W1's for CPHs, naphthalene, PCBs, BTEX and notify project manager if standard TAT impacts hold time for analyses on hold.
- Added 2/12/20. DB (STA)
Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)

0 - Added 2/12/2020. DB (STA)



Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Laboratory Number:

02-081

Company: Favallan
 Project Number: 397-019
 Project Name: Block 38 west
 Project Manager: Suzy Stumpf
 Sampled by: Greg Peters

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
11	UST02-S	2/7/20	1430	Soil	5
12	UST02-W1		1435	Soil	5
13	UST02-B2		1415	Soil	5
14	UST02-N2		1405	Soil	5
15	UST02-E2		1425	Soil	5
16	UST02-W2		1440	Soil	5

Analysis	11	12	13	14	15	16
NWTPH-HCID						
NWTPH-Gx/BTEX						
NWTPH-Gx						
NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	X	X	X			
Volatiles 8260C						
Halogenated Volatiles 8260C						
EDB EPA 8011 (Waters Only)						
Semivolatiles 8270D/SIM (with low-level PAHs)	X	X	X			
PAHs 8270D/SIM (low-level)	X	X	X			
PCBs 8082A						
Organochlorine Pesticides 8081B						
Organophosphorus Pesticides 8270D/SIM						
Chlorinated Acid Herbicides 8151A						
Total RCRA Metals						
Total MTCA Metals						
TCLP Metals						
HEM (oil and grease) 1664A						
% Moisture						

Relinquished Signature: [Signature] Company: Favallan Date: 2/7/20 Time: 1752
 Received Signature: [Signature] Date: 2/7/20 Time: 1732
 Relinquished
 Received
 Relinquished
 Received
 Relinquished
 Received
 Relinquished
 Reviewed/Date

Comments/Special Instructions: Please hold UST02-N2, E2 and W2 for DELOLORO, CPAHS, naphthalene, PCBs, BTEX.

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



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

February 18, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-097

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 12, 2020.

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



OnSite Environmental, Inc. 14648 NE 95th 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: February 18, 2020
Samples Submitted: February 12, 2020
Laboratory Reference: 2002-097
Project: 397-019

Case Narrative

Samples were collected on February 10, 2020 and received by the laboratory on February 11, 2020. 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.



Date of Report: February 18, 2020
 Samples Submitted: February 12, 2020
 Laboratory Reference: 2002-097
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N1-WSW-17.0					
Laboratory ID:	02-097-01					
Diesel Range Organics	4800	310	NWTPH-Dx	2-12-20	2-14-20	N
Lube Oil Range Organics	19000	620	NWTPH-Dx	2-12-20	2-14-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	---	50-150				S

Client ID:	M1-WSW-17.0					
Laboratory ID:	02-097-02					
Diesel Range Organics	ND	29	NWTPH-Dx	2-12-20	2-13-20	
Lube Oil	250	59	NWTPH-Dx	2-12-20	2-13-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	60	50-150				

Client ID:	L1-WSW-17.0					
Laboratory ID:	02-097-03					
Diesel Range Organics	250	41	NWTPH-Dx	2-12-20	2-13-20	N
Lube Oil Range Organics	1200	82	NWTPH-Dx	2-12-20	2-13-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	63	50-150				

Client ID:	L1-WSW2-17.0					
Laboratory ID:	02-097-04					
Diesel Range Organics	86	30	NWTPH-Dx	2-12-20	2-13-20	N
Lube Oil	740	61	NWTPH-Dx	2-12-20	2-13-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	83	50-150				



Date of Report: February 18, 2020
 Samples Submitted: February 12, 2020
 Laboratory Reference: 2002-097
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0212S3					
Diesel Range Organics	ND	25	NWTPH-Dx	2-12-20	2-13-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-12-20	2-13-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	69	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-097-01							
	ORIG	DUP						
Diesel Range Organics	3820	3310	NA	NA	NA	NA	14	NA N
Lube Oil Range Organics	15400	13100	NA	NA	NA	NA	16	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				---	---	50-150		S,S



Date of Report: February 18, 2020
Samples Submitted: February 12, 2020
Laboratory Reference: 2002-097
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
N1-WSW-17.0	02-097-01	20	2-12-20
M1-WSW-17.0	02-097-02	15	2-12-20
L1-WSW-17.0	02-097-03	39	2-12-20
L1-WSW2-17.0	02-097-04	18	2-12-20





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 methods 8260 & 8270, 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





MVA Onsite Environmental Inc.
 Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
 (in working days)
 (Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Laboratory Number: **02-097**

Company: **Favallon**
 Project Number: **397-019**
 Project Name: **Block 38 West**
 Project Manager: **Suzy Stumpf**
 Sampled by: **G. Peters**

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	N1-WSW-17.0	2/10/20	1100	Soil	5
2	M1-WSW-17.0	2/10/20	1110	Soil	5
3	L1-WSW-17.0	2/10/20	1120	Soil	5
4	L2-WSW2-17.0	2/10/20	1150	Soil	5

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture	
1	N1-WSW-17.0	2/10/20	1100	Soil	5				X															X
2	M1-WSW-17.0	2/10/20	1110	Soil	5				X															X
3	L1-WSW-17.0	2/10/20	1120	Soil	5				X															X
4	L2-WSW2-17.0	2/10/20	1150	Soil	5				X															X

Signature	Company	Date	Time	Comments/Special Instructions
<i>[Signature]</i>	Favallon	2/11/20	10:03	Contact PM for analyses and FAT.
<i>[Signature]</i>	SPEEDY	2/11/20	10:03	
<i>[Signature]</i>	SPEEDY	2/11/20	11:15	
<i>[Signature]</i>	OSE	2/11/20	11:15	

Relinquished
 Received
 Relinquished
 Received
 Relinquished
 Received
 Relinquished
 Received
 Reviewed/Date

Reviewed/Date

Reviewed/Date

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

February 20, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-115

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 12, 2020.

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 "D. Baumeister", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: February 20, 2020
Samples Submitted: February 12, 2020
Laboratory Reference: 2002-115
Project: 397-019

Case Narrative

Samples were collected on February 4, 2020 and received by the laboratory on February 12, 2020. 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.



Date of Report: February 20, 2020
 Samples Submitted: February 12, 2020
 Laboratory Reference: 2002-115
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-10-15.0					
Laboratory ID:	02-115-02					
Diesel Range Organics	ND	130	NWTPH-Dx	2-13-20	2-13-20	
Lube Oil Range Organics	370	260	NWTPH-Dx	2-13-20	2-13-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>64</i>	<i>50-150</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 12, 2020
 Laboratory Reference: 2002-115
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0213S1					
Diesel Range Organics	ND	25	NWTPH-Dx	2-13-20	2-13-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-13-20	2-13-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>81</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0213S1							
	ORIG	DUP						
Diesel Fuel #2	87.5	82.2	NA	NA	NA	NA	6	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>88</i>	<i>91</i>	<i>50-150</i>		



Date of Report: February 20, 2020
 Samples Submitted: February 12, 2020
 Laboratory Reference: 2002-115
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-10-15.0					
Laboratory ID:	02-115-02					
Naphthalene	ND	0.035	EPA 8270E/SIM	2-18-20	2-18-20	
2-Methylnaphthalene	ND	0.035	EPA 8270E/SIM	2-18-20	2-18-20	
1-Methylnaphthalene	ND	0.035	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]anthracene	ND	0.035	EPA 8270E/SIM	2-18-20	2-18-20	
Chrysene	ND	0.035	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[b]fluoranthene	ND	0.035	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo(j,k)fluoranthene	ND	0.035	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]pyrene	ND	0.035	EPA 8270E/SIM	2-18-20	2-18-20	
Indeno(1,2,3-c,d)pyrene	ND	0.035	EPA 8270E/SIM	2-18-20	2-18-20	
Dibenz[a,h]anthracene	ND	0.035	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>66</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>78</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>77</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 12, 2020
 Laboratory Reference: 2002-115
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-10-10.0					
Laboratory ID:	02-115-03					
Naphthalene	0.027	0.0081	EPA 8270E/SIM	2-18-20	2-18-20	
2-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	2-18-20	2-18-20	
1-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>67</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>69</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>69</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 12, 2020
 Laboratory Reference: 2002-115
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H1-WSW-20.0					
Laboratory ID:	02-115-04					
Benzo[a]anthracene	0.017	0.0086	EPA 8270E/SIM	2-18-20	2-18-20	
Chrysene	0.016	0.0086	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[b]fluoranthene	0.018	0.0086	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo(j,k)fluoranthene	ND	0.0086	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]pyrene	0.020	0.0086	EPA 8270E/SIM	2-18-20	2-18-20	
Indeno(1,2,3-c,d)pyrene	0.011	0.0086	EPA 8270E/SIM	2-18-20	2-18-20	
Dibenz[a,h]anthracene	ND	0.0086	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>85</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>86</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>86</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 12, 2020
 Laboratory Reference: 2002-115
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H1-B-20.0					
Laboratory ID:	02-115-05					
Benzo[a]anthracene	ND	0.013	EPA 8270E/SIM	2-18-20	2-18-20	
Chrysene	ND	0.013	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[b]fluoranthene	ND	0.013	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo(j,k)fluoranthene	ND	0.013	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]pyrene	ND	0.013	EPA 8270E/SIM	2-18-20	2-18-20	
Indeno(1,2,3-c,d)pyrene	ND	0.013	EPA 8270E/SIM	2-18-20	2-18-20	
Dibenz[a,h]anthracene	ND	0.013	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>71</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>81</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>81</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 12, 2020
 Laboratory Reference: 2002-115
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0218S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-18-20	2-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>86</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>94</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>100</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 12, 2020
 Laboratory Reference: 2002-115
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery		RPD	RPD	Limit	Flags
					Result	Recovery	Limits	RPD	Limit				
MATRIX SPIKES													
Laboratory ID:	02-081-13												
	MS	MSD	MS	MSD		MS	MSD						
Naphthalene	0.0613	0.0551	0.0833	0.0833	ND	74	66	44 - 111	11			21	
Acenaphthylene	0.0653	0.0582	0.0833	0.0833	ND	78	70	47 - 122	11			24	
Acenaphthene	0.0667	0.0609	0.0833	0.0833	ND	80	73	46 - 122	9			24	
Fluorene	0.0679	0.0651	0.0833	0.0833	ND	82	78	53 - 118	4			23	
Phenanthrene	0.0724	0.0695	0.0833	0.0833	ND	87	83	41 - 124	4			24	
Anthracene	0.0727	0.0708	0.0833	0.0833	ND	87	85	53 - 119	3			21	
Fluoranthene	0.0803	0.0790	0.0833	0.0833	ND	96	95	39 - 135	2			32	
Pyrene	0.0745	0.0739	0.0833	0.0833	ND	89	89	39 - 134	1			34	
Benzo[a]anthracene	0.0767	0.0787	0.0833	0.0833	ND	92	94	53 - 131	3			23	
Chrysene	0.0700	0.0696	0.0833	0.0833	ND	84	84	46 - 126	1			24	
Benzo[b]fluoranthene	0.0705	0.0735	0.0833	0.0833	ND	85	88	45 - 127	4			25	
Benzo(j,k)fluoranthene	0.0728	0.0683	0.0833	0.0833	ND	87	82	52 - 122	6			21	
Benzo[a]pyrene	0.0748	0.0752	0.0833	0.0833	ND	90	90	51 - 126	1			24	
Indeno(1,2,3-c,d)pyrene	0.0700	0.0697	0.0833	0.0833	ND	84	84	48 - 127	0			23	
Dibenz[a,h]anthracene	0.0728	0.0724	0.0833	0.0833	ND	87	87	51 - 124	1			22	
Benzo[g,h,i]perylene	0.0709	0.0702	0.0833	0.0833	ND	85	84	50 - 120	1			22	
<i>Surrogate:</i>													
2-Fluorobiphenyl						75	65	40 - 111					
Pyrene-d10						83	85	40 - 110					
Terphenyl-d14						79	84	45 - 122					



Date of Report: February 20, 2020
Samples Submitted: February 12, 2020
Laboratory Reference: 2002-115
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
H1-B-20.0	02-115-05	49	2-14-20





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 methods 8260 & 8270, 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





MVA OnSite Environmental Inc.

Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3981 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

(other)

Laboratory Number: **02-115**

Company: Favallon

Project Number: 397-019

Project Name: Block 38 west

Project Manager: Suzy Stumpf

Sampled by: Gary Peters

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	TP-10-20.0	2/12/20	0840	Soil	5
2	TP-10-15.0		0845		
3	TP-10-10.0		0850		
4	H1-WSW-20.0		1415		
5	H1-B-20.0		1430		

Method	Result
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)	CPAHs + Naphthalene
PCBs 8082A	
Organochlorine Pesticides 8081B	
Organophosphorus Pesticides 8270D/SIM	
Chlorinated Acid Herbicides 8151A	
Total RCRA Metals	
Total MTCA Metals	
TCLP Metals	
HEM (oil and grease) 1664A	<u>Hold</u>
% Moisture	<u>X</u>

Signature	Company	Date	Time	Comments/Special Instructions
	Favallon	02/11/20	1600	
	Favallon	2/11/20	1600	
	Favallon	2/12/20	1011	
	SPEEDY	2/12/20	1130	
	SPEEDY	2/12/20	1130	

Comments/Special Instructions

Please contact project manager ^{SD} for sample analysis and ~~parameters~~ ^{HI-B-20} No need to hold for other analyses. Continue to hold all samples for other analyses.

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

February 27, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-150B

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 13, 2020.

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



OnSite Environmental, Inc. 14648 NE 95th 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: February 27, 2020
Samples Submitted: February 13, 2020
Laboratory Reference: 2002-150B
Project: 397-019

Case Narrative

Samples were collected on February 13, 2020 and received by the laboratory on February 13, 2020. 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.



Date of Report: February 27, 2020
 Samples Submitted: February 13, 2020
 Laboratory Reference: 2002-150B
 Project: 397-019

cPAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-2-10.0					
Laboratory ID:	02-150-01					
Benzo[a]anthracene	ND	0.0089	EPA 8270E/SIM	2-26-20	2-27-20	
Chrysene	ND	0.0089	EPA 8270E/SIM	2-26-20	2-27-20	
Benzo[b]fluoranthene	ND	0.0089	EPA 8270E/SIM	2-26-20	2-27-20	
Benzo(j,k)fluoranthene	ND	0.0089	EPA 8270E/SIM	2-26-20	2-27-20	
Benzo[a]pyrene	ND	0.0089	EPA 8270E/SIM	2-26-20	2-27-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0089	EPA 8270E/SIM	2-26-20	2-27-20	
Dibenz[a,h]anthracene	ND	0.0089	EPA 8270E/SIM	2-26-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>59</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>59</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>68</i>	<i>45 - 122</i>				



Date of Report: February 27, 2020
 Samples Submitted: February 13, 2020
 Laboratory Reference: 2002-150B
 Project: 397-019

**cPAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0226S1					
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-26-20	2-26-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-26-20	2-26-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-26-20	2-26-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-26-20	2-26-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-26-20	2-26-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-26-20	2-26-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>92</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>94</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>102</i>	<i>45 - 122</i>				



Date of Report: February 27, 2020
 Samples Submitted: February 13, 2020
 Laboratory Reference: 2002-150B
 Project: 397-019

**cPAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
					Result	Recovery	Limits		RPD	Limit	
MATRIX SPIKES											
Laboratory ID:	02-133-02										
	MS	MSD	MS	MSD		MS	MSD				
Benzo[a]anthracene	0.0919	0.0864	0.0833	0.0833	ND	110	104	53 - 131	6	23	
Chrysene	0.0829	0.0810	0.0833	0.0833	ND	100	97	46 - 126	2	24	
Benzo[b]fluoranthene	0.0833	0.0799	0.0833	0.0833	ND	100	96	45 - 127	4	25	
Benzo(j,k)fluoranthene	0.0839	0.0795	0.0833	0.0833	ND	101	95	52 - 122	5	21	
Benzo[a]pyrene	0.0829	0.0793	0.0833	0.0833	ND	100	95	51 - 126	4	24	
Indeno(1,2,3-c,d)pyrene	0.0807	0.0769	0.0833	0.0833	ND	97	92	48 - 127	5	23	
Dibenz[a,h]anthracene	0.0828	0.0786	0.0833	0.0833	ND	99	94	51 - 124	5	22	
<i>Surrogate:</i>											
2-Fluorobiphenyl						86	86	40 - 111			
Pyrene-d10						87	88	40 - 110			
Terphenyl-d14						103	96	45 - 122			





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 methods 8260 & 8270, 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





Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3981 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)

(Check One)

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

Laboratory Number: **02-150**

Company: Favallion
 Project Number: 397-019
 Project Name: Block 38
 Project Manager: Suzey Struigt
 Sampled by: Gary Peters

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	TP-2-10.0	2/13/20	0810	Soil	6
2	TP-2-5.0		0815		6
3	TP-2-0.0		0820		6
4	K3-B-20.0		1250		5

Number of Containers	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
6			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								<u>1610</u>	<input checked="" type="checkbox"/>
6			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>														<input checked="" type="checkbox"/>
6			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>														<input checked="" type="checkbox"/>
5				<input checked="" type="checkbox"/>														<input checked="" type="checkbox"/>

Signature	Company	Date	Time	Comments/Special Instructions
<u>[Signature]</u>	Favallion	2/13/20	1607	Contact project manager for [unclear]
<u>[Signature]</u>	Alpha	2/13/20	16:08	Sample analysis and turnaround
<u>[Signature]</u>	Alpha	2/13/20	17:04	Final. X Added 2/14/2020. DG (STA)
<u>[Signature]</u>	Alpha	2/13/20	17:04	X Added 2/18/2020. DG (STA)
<u>[Signature]</u>	Alpha	2/13/20	17:04	X Added 2/26/2020. DG (STA)

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



**OnSite
Environmental Inc.**

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

February 24, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-150

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 13, 2020.

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,

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: February 24, 2020
Samples Submitted: February 13, 2020
Laboratory Reference: 2002-150
Project: 397-019

Case Narrative

Samples were collected on February 13, 2020 and received by the laboratory on February 13, 2020. 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.



Date of Report: February 24, 2020
 Samples Submitted: February 13, 2020
 Laboratory Reference: 2002-150
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-2-10.0					
Laboratory ID:	02-150-01					
Diesel Range Organics	ND	33	NWTPH-Dx	2-18-20	2-21-20	
Lube Oil Range Organics	ND	66	NWTPH-Dx	2-18-20	2-21-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	73	50-150				
Client ID:	TP-2-5.0					
Laboratory ID:	02-150-02					
Diesel Range Organics	ND	28	NWTPH-Dx	2-18-20	2-21-20	
Lube Oil Range Organics	ND	57	NWTPH-Dx	2-18-20	2-21-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	76	50-150				
Client ID:	K3-B-20.0					
Laboratory ID:	02-150-04					
Diesel Range Organics	2500	1000	NWTPH-Dx	2-18-20	2-23-20	N
Lube Oil Range Organics	9700	2000	NWTPH-Dx	2-18-20	2-23-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	---	50-150				S



Date of Report: February 24, 2020
 Samples Submitted: February 13, 2020
 Laboratory Reference: 2002-150
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0218S2					
Diesel Range Organics	ND	25	NWTPH-Dx	2-18-20	2-21-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-18-20	2-21-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	62	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-151-07							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				76	79	50-150		



Date of Report: February 24, 2020
 Samples Submitted: February 13, 2020
 Laboratory Reference: 2002-150
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	K3-B-20.0					
Laboratory ID:	02-150-04					
Naphthalene	22	2.7	EPA 8270E/SIM	2-19-20	2-20-20	
2-Methylnaphthalene	15	2.7	EPA 8270E/SIM	2-19-20	2-20-20	
1-Methylnaphthalene	14	2.7	EPA 8270E/SIM	2-19-20	2-20-20	
Benzo[a]anthracene	86	2.7	EPA 8270E/SIM	2-19-20	2-20-20	
Chrysene	72	2.7	EPA 8270E/SIM	2-19-20	2-20-20	
Benzo[b]fluoranthene	74	2.7	EPA 8270E/SIM	2-19-20	2-20-20	
Benzo(j,k)fluoranthene	23	2.7	EPA 8270E/SIM	2-19-20	2-20-20	
Benzo[a]pyrene	78	2.7	EPA 8270E/SIM	2-19-20	2-20-20	
Indeno(1,2,3-c,d)pyrene	43	2.7	EPA 8270E/SIM	2-19-20	2-20-20	
Dibenz[a,h]anthracene	7.8	2.7	EPA 8270E/SIM	2-19-20	2-20-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>75</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>83</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>121</i>	<i>45 - 122</i>				



Date of Report: February 24, 2020
 Samples Submitted: February 13, 2020
 Laboratory Reference: 2002-150
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0219S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>91</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>92</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>98</i>	<i>45 - 122</i>				



Date of Report: February 24, 2020
 Samples Submitted: February 13, 2020
 Laboratory Reference: 2002-150
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery		RPD	RPD	Flags
					Result	Recovery	Limits	RPD	Limit			
MATRIX SPIKES												
Laboratory ID:	02-081-05											
	MS	MSD	MS	MSD		MS	MSD					
Naphthalene	0.0742	0.0775	0.0833	0.0833	0.00818	79	83	44 - 111	4	21		
Acenaphthylene	0.0832	0.0855	0.0833	0.0833	ND	100	103	47 - 122	3	24		
Acenaphthene	0.0788	0.0820	0.0833	0.0833	ND	95	98	46 - 122	4	24		
Fluorene	0.0760	0.0780	0.0833	0.0833	ND	91	94	53 - 118	3	23		
Phenanthrene	0.0760	0.0787	0.0833	0.0833	ND	91	94	41 - 124	3	24		
Anthracene	0.0762	0.0765	0.0833	0.0833	ND	91	92	53 - 119	0	21		
Fluoranthene	0.0798	0.0830	0.0833	0.0833	ND	96	100	39 - 135	4	32		
Pyrene	0.0781	0.0801	0.0833	0.0833	ND	94	96	39 - 134	3	34		
Benzo[a]anthracene	0.0800	0.0820	0.0833	0.0833	ND	96	98	53 - 131	2	23		
Chrysene	0.0748	0.0762	0.0833	0.0833	ND	90	91	46 - 126	2	24		
Benzo[b]fluoranthene	0.0708	0.0718	0.0833	0.0833	ND	85	86	45 - 127	1	25		
Benzo(j,k)fluoranthene	0.0724	0.0745	0.0833	0.0833	ND	87	89	52 - 122	3	21		
Benzo[a]pyrene	0.0735	0.0749	0.0833	0.0833	ND	88	90	51 - 126	2	24		
Indeno(1,2,3-c,d)pyrene	0.0713	0.0716	0.0833	0.0833	ND	86	86	48 - 127	0	23		
Dibenz[a,h]anthracene	0.0725	0.0732	0.0833	0.0833	ND	87	88	51 - 124	1	22		
Benzo[g,h,i]perylene	0.0727	0.0735	0.0833	0.0833	ND	87	88	50 - 120	1	22		
<i>Surrogate:</i>												
2-Fluorobiphenyl						86	86	40 - 111				
Pyrene-d10						85	86	40 - 110				
Terphenyl-d14						89	89	45 - 122				



Date of Report: February 24, 2020
 Samples Submitted: February 13, 2020
 Laboratory Reference: 2002-150
 Project: 397-019

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-2-10.0					
Laboratory ID:	02-150-01					
Gasoline	ND	6.8	NWTPH-Gx	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	99	58-129				
Client ID:	TP-2-5.0					
Laboratory ID:	02-150-02					
Gasoline	ND	4.9	NWTPH-Gx	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	85	58-129				



Date of Report: February 24, 2020
 Samples Submitted: February 13, 2020
 Laboratory Reference: 2002-150
 Project: 397-019

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0219S1					
Gasoline	ND	5.0	NWTPH-Gx	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>88</i>	<i>58-129</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-150-01							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				99	96	58-129		



Date of Report: February 24, 2020
Samples Submitted: February 13, 2020
Laboratory Reference: 2002-150
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
TP-2-10.0	02-150-01	25	2-18-20
TP-2-5.0	02-150-02	12	2-18-20
K3-B-20.0	02-150-04	50	2-18-20





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 methods 8260 & 8270, 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





**OnSite
Environmental Inc.**

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

February 20, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-163

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 14, 2020.

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,

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: February 20, 2020
Samples Submitted: February 14, 2020
Laboratory Reference: 2002-163
Project: 397-019

Case Narrative

Samples were collected on February 14, 2020 and received by the laboratory on February 14, 2020. 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.



Date of Report: February 20, 2020
 Samples Submitted: February 14, 2020
 Laboratory Reference: 2002-163
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-14-20.0					
Laboratory ID:	02-163-01					
Diesel Range Organics	ND	95	NWTPH-Dx	2-19-20	2-19-20	
Lube Oil Range Organics	410	190	NWTPH-Dx	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	77	50-150				

Client ID:	TP-14-15.0					
Laboratory ID:	02-163-02					
Diesel Range Organics	120	64	NWTPH-Dx	2-19-20	2-19-20	N
Lube Oil Range Organics	640	130	NWTPH-Dx	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	71	50-150				

Client ID:	TP-14-10.0					
Laboratory ID:	02-163-03					
Diesel Range Organics	ND	33	NWTPH-Dx	2-19-20	2-19-20	
Lube Oil Range Organics	ND	67	NWTPH-Dx	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	79	50-150				

Client ID:	TP-15-20.0					
Laboratory ID:	02-163-04					
Diesel Range Organics	ND	97	NWTPH-Dx	2-19-20	2-19-20	
Lube Oil Range Organics	700	190	NWTPH-Dx	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	80	50-150				

Client ID:	TP-15-15.0					
Laboratory ID:	02-163-05					
Diesel Range Organics	95	77	NWTPH-Dx	2-19-20	2-19-20	N
Lube Oil Range Organics	490	150	NWTPH-Dx	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	76	50-150				

Client ID:	TP-15-10.0					
Laboratory ID:	02-163-06					
Diesel Range Organics	ND	32	NWTPH-Dx	2-19-20	2-19-20	
Lube Oil Range Organics	ND	65	NWTPH-Dx	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	79	50-150				



Date of Report: February 20, 2020
 Samples Submitted: February 14, 2020
 Laboratory Reference: 2002-163
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-16-20.0					
Laboratory ID:	02-163-07					
Diesel Range Organics	ND	65	NWTPH-Dx	2-19-20	2-19-20	
Lube Oil Range Organics	250	130	NWTPH-Dx	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	73	50-150				

Client ID:	TP-16-15.0					
Laboratory ID:	02-163-08					
Diesel Range Organics	88	87	NWTPH-Dx	2-19-20	2-19-20	N
Lube Oil Range Organics	400	180	NWTPH-Dx	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	76	50-150				

Client ID:	TP-16-10.0					
Laboratory ID:	02-163-09					
Diesel Range Organics	ND	32	NWTPH-Dx	2-19-20	2-19-20	
Lube Oil Range Organics	ND	64	NWTPH-Dx	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	81	50-150				

Client ID:	J2-B-20.0					
Laboratory ID:	02-163-10					
Diesel Range Organics	ND	29	NWTPH-Dx	2-19-20	2-19-20	
Lube Oil Range Organics	ND	58	NWTPH-Dx	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	86	50-150				



Date of Report: February 20, 2020
 Samples Submitted: February 14, 2020
 Laboratory Reference: 2002-163
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0219S1					
Diesel Range Organics	ND	25	NWTPH-Dx	2-19-20	2-19-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>94</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-163-03							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				79	79	50-150		



Date of Report: February 20, 2020
 Samples Submitted: February 14, 2020
 Laboratory Reference: 2002-163
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-16-20.0					
Laboratory ID:	02-163-07					
Benzo[a]anthracene	0.029	0.017	EPA 8270E/SIM	2-19-20	2-19-20	
Chrysene	0.029	0.017	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo[b]fluoranthene	0.029	0.017	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo(j,k)fluoranthene	ND	0.017	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo[a]pyrene	0.023	0.017	EPA 8270E/SIM	2-19-20	2-19-20	
Indeno(1,2,3-c,d)pyrene	ND	0.017	EPA 8270E/SIM	2-19-20	2-19-20	
Dibenz[a,h]anthracene	ND	0.017	EPA 8270E/SIM	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>64</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>71</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>78</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 14, 2020
 Laboratory Reference: 2002-163
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	J2-B-20.0					
Laboratory ID:	02-163-10					
Naphthalene	ND	0.0077	EPA 8270E/SIM	2-19-20	2-19-20	
2-Methylnaphthalene	0.0087	0.0077	EPA 8270E/SIM	2-19-20	2-19-20	
1-Methylnaphthalene	ND	0.0077	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo[a]anthracene	ND	0.0077	EPA 8270E/SIM	2-19-20	2-19-20	
Chrysene	ND	0.0077	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo[b]fluoranthene	ND	0.0077	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo(j,k)fluoranthene	ND	0.0077	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo[a]pyrene	ND	0.0077	EPA 8270E/SIM	2-19-20	2-19-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0077	EPA 8270E/SIM	2-19-20	2-19-20	
Dibenz[a,h]anthracene	ND	0.0077	EPA 8270E/SIM	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>76</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>78</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>83</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 14, 2020
 Laboratory Reference: 2002-163
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0219S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>91</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>92</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>98</i>	<i>45 - 122</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 14, 2020
 Laboratory Reference: 2002-163
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	02-081-05										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0742	0.0775	0.0833	0.0833	0.00818	79	83	44 - 111	4	21	
Acenaphthylene	0.0832	0.0855	0.0833	0.0833	ND	100	103	47 - 122	3	24	
Acenaphthene	0.0788	0.0820	0.0833	0.0833	ND	95	98	46 - 122	4	24	
Fluorene	0.0760	0.0780	0.0833	0.0833	ND	91	94	53 - 118	3	23	
Phenanthrene	0.0760	0.0787	0.0833	0.0833	ND	91	94	41 - 124	3	24	
Anthracene	0.0762	0.0765	0.0833	0.0833	ND	91	92	53 - 119	0	21	
Fluoranthene	0.0798	0.0830	0.0833	0.0833	ND	96	100	39 - 135	4	32	
Pyrene	0.0781	0.0801	0.0833	0.0833	ND	94	96	39 - 134	3	34	
Benzo[a]anthracene	0.0800	0.0820	0.0833	0.0833	ND	96	98	53 - 131	2	23	
Chrysene	0.0748	0.0762	0.0833	0.0833	ND	90	91	46 - 126	2	24	
Benzo[b]fluoranthene	0.0708	0.0718	0.0833	0.0833	ND	85	86	45 - 127	1	25	
Benzo(j,k)fluoranthene	0.0724	0.0745	0.0833	0.0833	ND	87	89	52 - 122	3	21	
Benzo[a]pyrene	0.0735	0.0749	0.0833	0.0833	ND	88	90	51 - 126	2	24	
Indeno(1,2,3-c,d)pyrene	0.0713	0.0716	0.0833	0.0833	ND	86	86	48 - 127	0	23	
Dibenz[a,h]anthracene	0.0725	0.0732	0.0833	0.0833	ND	87	88	51 - 124	1	22	
Benzo[g,h,i]perylene	0.0727	0.0735	0.0833	0.0833	ND	87	88	50 - 120	1	22	
<i>Surrogate:</i>											
2-Fluorobiphenyl						86	86	40 - 111			
Pyrene-d10						85	86	40 - 110			
Terphenyl-d14						89	89	45 - 122			



Date of Report: February 20, 2020
 Samples Submitted: February 14, 2020
 Laboratory Reference: 2002-163
 Project: 397-019

VOLATILE ORGANICS EPA 8260D

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	J2-B-20.0					
Laboratory ID:	02-163-10					
Benzene	ND	0.00076	EPA 8260D	2-19-20	2-19-20	
Toluene	ND	0.0038	EPA 8260D	2-19-20	2-19-20	
Ethylbenzene	ND	0.00076	EPA 8260D	2-19-20	2-19-20	
m,p-Xylene	ND	0.0015	EPA 8260D	2-19-20	2-19-20	
o-Xylene	ND	0.00076	EPA 8260D	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>98</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>71-130</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 14, 2020
 Laboratory Reference: 2002-163
 Project: 397-019

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0219S2					
Benzene	ND	0.0010	EPA 8260D	2-19-20	2-19-20	
Toluene	ND	0.0050	EPA 8260D	2-19-20	2-19-20	
Ethylbenzene	ND	0.0010	EPA 8260D	2-19-20	2-19-20	
m,p-Xylene	ND	0.0020	EPA 8260D	2-19-20	2-19-20	
o-Xylene	ND	0.0010	EPA 8260D	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>101</i>	<i>76-131</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>78-128</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>71-130</i>				



Date of Report: February 20, 2020
 Samples Submitted: February 14, 2020
 Laboratory Reference: 2002-163
 Project: 397-019

**VOLATILE ORGANICS EPA 8260D
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0219S2									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0507	0.0473	0.0500	0.0500	101	95	57-133	7	18	
Benzene	0.0460	0.0435	0.0500	0.0500	92	87	71-129	6	16	
Trichloroethene	0.0513	0.0489	0.0500	0.0500	103	98	71-122	5	16	
Toluene	0.0480	0.0467	0.0500	0.0500	96	93	74-125	3	15	
Chlorobenzene	0.0457	0.0442	0.0500	0.0500	91	88	72-120	3	14	
<i>Surrogate:</i>										
Dibromofluoromethane					99	100	76-131			
Toluene-d8					97	99	78-128			
4-Bromofluorobenzene					98	100	71-130			



Date of Report: February 20, 2020
Samples Submitted: February 14, 2020
Laboratory Reference: 2002-163
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
TP-14-20.0	02-163-01	74	2-19-20
TP-14-15.0	02-163-02	61	2-19-20
TP-14-10.0	02-163-03	25	2-19-20
TP-15-20.0	02-163-04	74	2-19-20
TP-15-15.0	02-163-05	67	2-19-20
TP-15-10.0	02-163-06	22	2-19-20
TP-16-20.0	02-163-07	62	2-19-20
TP-16-15.0	02-163-08	71	2-19-20
TP-16-10.0	02-163-09	21	2-19-20
J2-B-20.0	02-163-10	14	2-19-20





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 methods 8260 & 8270, 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





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

February 20, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-174

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 19, 2020.

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 "D. Baumeister", with a long horizontal stroke extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: February 20, 2020
Samples Submitted: February 19, 2020
Laboratory Reference: 2002-174
Project: 397-019

Case Narrative

Samples were collected on February 18, 2020 and received by the laboratory on February 19, 2020. 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.



Date of Report: February 20, 2020
 Samples Submitted: February 19, 2020
 Laboratory Reference: 2002-174
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-17-20.0					
Laboratory ID:	02-174-01					
Diesel Range Organics	300	58	NWTPH-Dx	2-19-20	2-19-20	N
Lube Oil Range Organics	1700	120	NWTPH-Dx	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	82	50-150				



Date of Report: February 20, 2020
 Samples Submitted: February 19, 2020
 Laboratory Reference: 2002-174
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0219S1					
Diesel Range Organics	ND	25	NWTPH-Dx	2-19-20	2-19-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-19-20	2-19-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>94</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0219S1							
	ORIG	DUP						
Diesel Fuel #2	79.9	75.3	NA	NA	NA	NA	6	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				85	83	50-150		



Date of Report: February 20, 2020
Samples Submitted: February 19, 2020
Laboratory Reference: 2002-174
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
TP-17-20.0	02-174-01	57	2-19-20





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 methods 8260 & 8270, 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





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

February 27, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-199

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 20, 2020.

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



OnSite Environmental, Inc. 14648 NE 95th 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: February 27, 2020
Samples Submitted: February 20, 2020
Laboratory Reference: 2002-199
Project: 397-019

Case Narrative

Samples were collected on February 19, 2020 and received by the laboratory on February 20, 2020. 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.

NWTPH-Gx Analysis

The MTCA Method A cleanup level of 30.0 ppm for fresh gasoline is not achievable for samples H4-B-20.0 and H4-B-15.0 due to the low dry weight of the samples.

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: February 27, 2020
 Samples Submitted: February 20, 2020
 Laboratory Reference: 2002-199
 Project: 397-019

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H4-B-20.0					
Laboratory ID:	02-199-02					
Gasoline	ND	51	NWTPH-Gx	2-24-20	2-24-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	83	58-129				
Client ID:	H4-B-15.0					
Laboratory ID:	02-199-03					
Gasoline	ND	31	NWTPH-Gx	2-24-20	2-24-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	76	58-129				



Date of Report: February 27, 2020
 Samples Submitted: February 20, 2020
 Laboratory Reference: 2002-199
 Project: 397-019

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0224S2					
Gasoline	ND	5.0	NWTPH-Gx	2-24-20	2-24-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	86	58-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-224-02							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				92	92	58-129		



Date of Report: February 27, 2020
 Samples Submitted: February 20, 2020
 Laboratory Reference: 2002-199
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H4-B-20.0					
Laboratory ID:	02-199-02					
Benzo[a]anthracene	1.3	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Chrysene	1.1	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[b]fluoranthene	1.1	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo(j,k)fluoranthene	0.46	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[a]pyrene	1.1	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Indeno(1,2,3-c,d)pyrene	0.60	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Dibenz[a,h]anthracene	0.11	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>68</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>71</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>80</i>	<i>45 - 122</i>				



Date of Report: February 27, 2020
 Samples Submitted: February 20, 2020
 Laboratory Reference: 2002-199
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H4-B-15.0					
Laboratory ID:	02-199-03					
Benzo[a]anthracene	ND	0.024	EPA 8270E/SIM	2-25-20	2-26-20	
Chrysene	ND	0.024	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[b]fluoranthene	ND	0.024	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo(j,k)fluoranthene	ND	0.024	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[a]pyrene	ND	0.024	EPA 8270E/SIM	2-25-20	2-26-20	
Indeno(1,2,3-c,d)pyrene	ND	0.024	EPA 8270E/SIM	2-25-20	2-26-20	
Dibenz[a,h]anthracene	ND	0.024	EPA 8270E/SIM	2-25-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>72</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>78</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>87</i>	<i>45 - 122</i>				



Date of Report: February 27, 2020
 Samples Submitted: February 20, 2020
 Laboratory Reference: 2002-199
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0225S1					
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>77</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>77</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>80</i>	<i>45 - 122</i>				



Date of Report: February 27, 2020
 Samples Submitted: February 20, 2020
 Laboratory Reference: 2002-199
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery		RPD	RPD	Limit	Flags
					Result	Recovery	Limits	RPD	Limit				
MATRIX SPIKES													
Laboratory ID:	02-208-02												
	MS	MSD	MS	MSD		MS	MSD						
Benzo[a]anthracene	0.0878	0.0844	0.0833	0.0833	ND	105	101	53 - 131	4			23	
Chrysene	0.0788	0.0759	0.0833	0.0833	ND	95	91	46 - 126	4			24	
Benzo[b]fluoranthene	0.0826	0.0731	0.0833	0.0833	ND	99	88	45 - 127	12			25	
Benzo(j,k)fluoranthene	0.0691	0.0727	0.0833	0.0833	ND	83	87	52 - 122	5			21	
Benzo[a]pyrene	0.0764	0.0731	0.0833	0.0833	ND	92	88	51 - 126	4			24	
Indeno(1,2,3-c,d)pyrene	0.0701	0.0684	0.0833	0.0833	ND	84	82	48 - 127	2			23	
Dibenz[a,h]anthracene	0.0716	0.0693	0.0833	0.0833	ND	86	83	51 - 124	3			22	
<i>Surrogate:</i>													
2-Fluorobiphenyl						79	77	40 - 111					
Pyrene-d10						83	80	40 - 110					
Terphenyl-d14						89	88	45 - 122					



Date of Report: February 27, 2020
Samples Submitted: February 20, 2020
Laboratory Reference: 2002-199
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
H4-B-20.0	02-199-02	80	2-25-20
H4-B-15.0	02-199-03	72	2-25-20





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 methods 8260 & 8270, 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





MVA Onsite Environmental Inc.
 Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
 (in working days)
 (Check One)

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

Laboratory Number:

02-199

Company: **Foxallion**
 Project Number: **307-019**
 Project Name: **Block 38 West**
 Project Manager: **Suey Stumpf**
 Sampled by: **Greg Peters**

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	N1-WSW2-17.0	2/19/20	0830	Soil	5
2	HH-B-20.0		1100		
3	HH-B-15.0		1110		
4	HH-B-10.0		1120		
5	TP-18-20.0		1340		
6	TP-18-15.0		1345		
7	TP-18-10.0		1350		

Parameter	1	2	3	4	5	6	7
NWTPH-HCID							
NWTPH-Gx/BTEX							
NWTPH-Gx		X	X				
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)			X	X			
PAHs 8270D/SIM (low-level)			X				
PCBs 8082A							
Organochlorine Pesticides 8081B							
Organophosphorus Pesticides 8270D/SIM							
Chlorinated Acid Herbicides 8151A							
Total RCRA Metals							
Total MTCA Metals							
TCLP Metals							
HEM (oil and grease) 1664A							
% Moisture		X	X				

Signature	Company	Date	Time	Comments/Special Instructions
<i>[Signature]</i>	Foxallion	2-20-20	0916	contact m for analyses and turnaround time
<i>[Signature]</i>	SPEEDY	2/20/20	1035	
<i>[Signature]</i>	SPEEDY	2/20/20	1035	
<i>[Signature]</i>	OSE	2/20/20	1035	
<i>[Signature]</i>				
<i>[Signature]</i>				

Received _____
 Relinquished _____
 Received _____
 Relinquished _____
 Received _____
 Relinquished _____
 Received _____
 Relinquished _____
 Reviewed/Date _____

Reviewed/Date _____

Chromatograms with final report Electronic Data Deliverables (EDDs)

Data Package: Standard Level III Level IV



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

March 2, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-199B

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 20, 2020.

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 flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: March 2, 2020
Samples Submitted: February 20, 2020
Laboratory Reference: 2002-199B
Project: 397-019

Case Narrative

Samples were collected on February 19, 2020 and received by the laboratory on February 20, 2020. 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.



Date of Report: March 2, 2020
 Samples Submitted: February 20, 2020
 Laboratory Reference: 2002-199B
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H4-B-20.0					
Laboratory ID:	02-199-02					
Diesel Range Organics	140	130	NWTPH-Dx	3-1-20	3-1-20	N
Lube Oil Range Organics	970	260	NWTPH-Dx	3-1-20	3-1-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>69</i>	<i>50-150</i>				

Client ID:	H4-B-15.0					
Laboratory ID:	02-199-03					
Diesel Range Organics	ND	90	NWTPH-Dx	3-1-20	3-1-20	
Lube Oil Range Organics	500	180	NWTPH-Dx	3-1-20	3-1-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>69</i>	<i>50-150</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 20, 2020
 Laboratory Reference: 2002-199B
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0301S1					
Diesel Range Organics	ND	25	NWTPH-Dx	3-1-20	3-1-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	3-1-20	3-1-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>93</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0301S1							
	ORIG	DUP						
Diesel Fuel #2	87.1	79.1	NA	NA	NA	NA	10	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>89</i>	<i>83</i>	<i>50-150</i>		



Date of Report: March 2, 2020
 Samples Submitted: February 20, 2020
 Laboratory Reference: 2002-199B
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H4-B-20.0					
Laboratory ID:	02-199-02					
Naphthalene	0.26	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
2-Methylnaphthalene	0.070	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
1-Methylnaphthalene	0.041	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[a]anthracene	1.3	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Chrysene	1.1	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[b]fluoranthene	1.1	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo(j,k)fluoranthene	0.46	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[a]pyrene	1.1	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Indeno(1,2,3-c,d)pyrene	0.60	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Dibenz[a,h]anthracene	0.11	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>68</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>71</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>80</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 20, 2020
 Laboratory Reference: 2002-199B
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H4-B-15.0					
Laboratory ID:	02-199-03					
Naphthalene	ND	0.024	EPA 8270E/SIM	2-25-20	2-26-20	
2-Methylnaphthalene	ND	0.024	EPA 8270E/SIM	2-25-20	2-26-20	
1-Methylnaphthalene	ND	0.024	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[a]anthracene	ND	0.024	EPA 8270E/SIM	2-25-20	2-26-20	
Chrysene	ND	0.024	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[b]fluoranthene	ND	0.024	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo(j,k)fluoranthene	ND	0.024	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[a]pyrene	ND	0.024	EPA 8270E/SIM	2-25-20	2-26-20	
Indeno(1,2,3-c,d)pyrene	ND	0.024	EPA 8270E/SIM	2-25-20	2-26-20	
Dibenz[a,h]anthracene	ND	0.024	EPA 8270E/SIM	2-25-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>72</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>78</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>87</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 20, 2020
 Laboratory Reference: 2002-199B
 Project: 397-019

**SEMIVOLATILE ORGANICS EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0225S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>77</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>77</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>80</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 20, 2020
 Laboratory Reference: 2002-199B
 Project: 397-019

**SEMIVOLATILE ORGANICS EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent	Recovery	RPD		Flags
					Result	Recovery	Limits	RPD	Limit	
MATRIX SPIKES										
Laboratory ID:	02-208-02									
	MS	MSD	MS	MSD		MS	MSD			
Naphthalene	0.0776	0.0806	0.0833	0.0833	ND	93	97	44 - 111	4	21
Acenaphthylene	0.0724	0.0692	0.0833	0.0833	ND	87	83	47 - 122	5	24
Acenaphthene	0.0796	0.0764	0.0833	0.0833	ND	96	92	46 - 122	4	24
Fluorene	0.0817	0.0823	0.0833	0.0833	ND	98	99	53 - 118	1	23
Phenanthrene	0.106	0.101	0.0833	0.0833	0.0190	104	98	41 - 124	5	24
Anthracene	0.0773	0.0763	0.0833	0.0833	ND	93	92	53 - 119	1	21
Fluoranthene	0.0938	0.0834	0.0833	0.0833	0.0118	98	86	39 - 135	12	32
Pyrene	0.0920	0.0853	0.0833	0.0833	0.0137	94	86	39 - 134	8	34
Benzo[a]anthracene	0.0878	0.0844	0.0833	0.0833	ND	105	101	53 - 131	4	23
Chrysene	0.0788	0.0759	0.0833	0.0833	ND	95	91	46 - 126	4	24
Benzo[b]fluoranthene	0.0826	0.0731	0.0833	0.0833	ND	99	88	45 - 127	12	25
Benzo(j,k)fluoranthene	0.0691	0.0727	0.0833	0.0833	ND	83	87	52 - 122	5	21
Benzo[a]pyrene	0.0764	0.0731	0.0833	0.0833	ND	92	88	51 - 126	4	24
Indeno(1,2,3-c,d)pyrene	0.0701	0.0684	0.0833	0.0833	ND	84	82	48 - 127	2	23
Dibenz[a,h]anthracene	0.0716	0.0693	0.0833	0.0833	ND	86	83	51 - 124	3	22
Benzo[g,h,i]perylene	0.0737	0.0714	0.0833	0.0833	ND	88	86	50 - 120	3	22
<i>Surrogate:</i>										
2-Fluorobiphenyl						79	77	40 - 111		
Pyrene-d10						83	80	40 - 110		
Terphenyl-d14						89	88	45 - 122		





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 methods 8260 & 8270, 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





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

March 4, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-199C

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 20, 2020.

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



OnSite Environmental, Inc. 14648 NE 95th 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: March 4, 2020
Samples Submitted: February 20, 2020
Laboratory Reference: 2002-199C
Project: 397-019

Case Narrative

Samples were collected on February 19, 2020 and received by the laboratory on February 20, 2020. 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.



Date of Report: March 4, 2020
 Samples Submitted: February 20, 2020
 Laboratory Reference: 2002-199C
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-18-10.0					
Laboratory ID:	02-199-07					
Diesel Range Organics	ND	28	NWTPH-Dx	3-4-20	3-4-20	
Lube Oil Range Organics	ND	56	NWTPH-Dx	3-4-20	3-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	74	50-150				



Date of Report: March 4, 2020
 Samples Submitted: February 20, 2020
 Laboratory Reference: 2002-199C
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0304S1					
Diesel Range Organics	ND	25	NWTPH-Dx	3-4-20	3-4-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	3-4-20	3-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>100</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0304S1							
	ORIG	DUP						
Diesel Fuel #2	93.0	89.8	NA	NA	NA	NA	4	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				88	84	50-150		



Date of Report: March 4, 2020
Samples Submitted: February 20, 2020
Laboratory Reference: 2002-199C
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
TP-18-10.0	02-199-07	11	3-4-20





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 methods 8260 & 8270, 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





**OnSite
Environmental Inc.**

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

February 27, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-208

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 21, 2020.

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,

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: February 27, 2020
Samples Submitted: February 21, 2020
Laboratory Reference: 2002-208
Project: 397-019

Case Narrative

Samples were collected on February 20, 2020 and received by the laboratory on February 21, 2020. 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.



Date of Report: February 27, 2020
 Samples Submitted: February 21, 2020
 Laboratory Reference: 2002-208
 Project: 397-019

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H3-B-20					
Laboratory ID:	02-208-02					
Gasoline	ND	6.7	NWTPH-Gx	2-24-20	2-24-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>84</i>	<i>58-129</i>				



Date of Report: February 27, 2020
 Samples Submitted: February 21, 2020
 Laboratory Reference: 2002-208
 Project: 397-019

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0224S2					
Gasoline	ND	5.0	NWTPH-Gx	2-24-20	2-24-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	86	58-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-224-02							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				92	92	58-129		



Date of Report: February 27, 2020
 Samples Submitted: February 21, 2020
 Laboratory Reference: 2002-208
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H3-B-20					
Laboratory ID:	02-208-02					
Benzo[a]anthracene	ND	0.0079	EPA 8270E/SIM	2-25-20	2-26-20	
Chrysene	ND	0.0079	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[b]fluoranthene	ND	0.0079	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo(j,k)fluoranthene	ND	0.0079	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[a]pyrene	ND	0.0079	EPA 8270E/SIM	2-25-20	2-26-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0079	EPA 8270E/SIM	2-25-20	2-26-20	
Dibenz[a,h]anthracene	ND	0.0079	EPA 8270E/SIM	2-25-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>72</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>78</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>85</i>	<i>45 - 122</i>				



Date of Report: February 27, 2020
 Samples Submitted: February 21, 2020
 Laboratory Reference: 2002-208
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0225S1					
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Benzo[j,k]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>77</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>77</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>80</i>	<i>45 - 122</i>				



Date of Report: February 27, 2020
 Samples Submitted: February 21, 2020
 Laboratory Reference: 2002-208
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
					Result	Recovery	Limits			Limit	
MATRIX SPIKES											
Laboratory ID:	02-208-02										
	MS	MSD	MS	MSD		MS	MSD				
Benzo[a]anthracene	0.0878	0.0844	0.0833	0.0833	ND	105	101	53 - 131	4	23	
Chrysene	0.0788	0.0759	0.0833	0.0833	ND	95	91	46 - 126	4	24	
Benzo[b]fluoranthene	0.0826	0.0731	0.0833	0.0833	ND	99	88	45 - 127	12	25	
Benzo(j,k)fluoranthene	0.0691	0.0727	0.0833	0.0833	ND	83	87	52 - 122	5	21	
Benzo[a]pyrene	0.0764	0.0731	0.0833	0.0833	ND	92	88	51 - 126	4	24	
Indeno(1,2,3-c,d)pyrene	0.0701	0.0684	0.0833	0.0833	ND	84	82	48 - 127	2	23	
Dibenz[a,h]anthracene	0.0716	0.0693	0.0833	0.0833	ND	86	83	51 - 124	3	22	
<i>Surrogate:</i>											
2-Fluorobiphenyl						79	77	40 - 111			
Pyrene-d10						83	80	40 - 110			
Terphenyl-d14						89	88	45 - 122			



Date of Report: February 27, 2020
Samples Submitted: February 21, 2020
Laboratory Reference: 2002-208
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
H3-B-20	02-208-02	16	2-25-20





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 methods 8260 & 8270, 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





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

March 3, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-208B

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 21, 2020.

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



OnSite Environmental, Inc. 14648 NE 95th 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: March 3, 2020
Samples Submitted: February 21, 2020
Laboratory Reference: 2002-208B
Project: 397-019

Case Narrative

Samples were collected on February 20, 2020 and received by the laboratory on February 21, 2020. 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.



Date of Report: March 3, 2020
 Samples Submitted: February 21, 2020
 Laboratory Reference: 2002-208B
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H3-B-20					
Laboratory ID:	02-208-02					
Naphthalene	ND	0.0079	EPA 8270E/SIM	3-2-20	3-2-20	
2-Methylnaphthalene	ND	0.0079	EPA 8270E/SIM	3-2-20	3-2-20	
1-Methylnaphthalene	ND	0.0079	EPA 8270E/SIM	3-2-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>75</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>79</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>88</i>	<i>45 - 122</i>				



Date of Report: March 3, 2020
 Samples Submitted: February 21, 2020
 Laboratory Reference: 2002-208B
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	C3-B-20					
Laboratory ID:	02-208-03					
Naphthalene	0.46	0.011	EPA 8270E/SIM	3-2-20	3-2-20	
2-Methylnaphthalene	0.16	0.011	EPA 8270E/SIM	3-2-20	3-2-20	
1-Methylnaphthalene	0.12	0.011	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[a]anthracene	0.32	0.011	EPA 8270E/SIM	3-2-20	3-2-20	
Chrysene	0.27	0.011	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[b]fluoranthene	0.29	0.011	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo(j,k)fluoranthene	0.090	0.011	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[a]pyrene	0.25	0.011	EPA 8270E/SIM	3-2-20	3-2-20	
Indeno(1,2,3-c,d)pyrene	0.14	0.011	EPA 8270E/SIM	3-2-20	3-2-20	
Dibenz[a,h]anthracene	0.029	0.011	EPA 8270E/SIM	3-2-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>73</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>75</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>84</i>	<i>45 - 122</i>				



Date of Report: March 3, 2020
 Samples Submitted: February 21, 2020
 Laboratory Reference: 2002-208B
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0302S2					
Naphthalene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	89	40 - 111				
<i>Pyrene-d10</i>	93	40 - 110				
<i>Terphenyl-d14</i>	99	45 - 122				



Date of Report: March 3, 2020
 Samples Submitted: February 21, 2020
 Laboratory Reference: 2002-208B
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
	SB	SBD	SB	SBD	SB	SBD				
SPIKE BLANKS										
Laboratory ID:	SB0302S2									
Naphthalene	0.0652	0.0681	0.0833	0.0833	78	82	57 - 109	4	15	
Acenaphthylene	0.0687	0.0708	0.0833	0.0833	82	85	60 - 121	3	15	
Acenaphthene	0.0691	0.0711	0.0833	0.0833	83	85	59 - 121	3	15	
Fluorene	0.0689	0.0687	0.0833	0.0833	83	82	63 - 119	0	15	
Phenanthrene	0.0683	0.0692	0.0833	0.0833	82	83	59 - 114	1	15	
Anthracene	0.0734	0.0735	0.0833	0.0833	88	88	63 - 119	0	15	
Fluoranthene	0.0745	0.0753	0.0833	0.0833	89	90	63 - 120	1	15	
Pyrene	0.0673	0.0689	0.0833	0.0833	81	83	62 - 119	2	15	
Benzo[a]anthracene	0.0763	0.0769	0.0833	0.0833	92	92	64 - 127	1	15	
Chrysene	0.0706	0.0697	0.0833	0.0833	85	84	63 - 121	1	15	
Benzo[b]fluoranthene	0.0673	0.0695	0.0833	0.0833	81	83	61 - 122	3	15	
Benzo(j,k)fluoranthene	0.0714	0.0698	0.0833	0.0833	86	84	64 - 123	2	15	
Benzo[a]pyrene	0.0677	0.0683	0.0833	0.0833	81	82	62 - 122	1	15	
Indeno(1,2,3-c,d)pyrene	0.0595	0.0614	0.0833	0.0833	71	74	59 - 124	3	15	
Dibenz[a,h]anthracene	0.0648	0.0662	0.0833	0.0833	78	79	61 - 123	2	15	
Benzo[g,h,i]perylene	0.0653	0.0668	0.0833	0.0833	78	80	61 - 119	2	15	
<i>Surrogate:</i>										
2-Fluorobiphenyl					83	83	40 - 111			
Pyrene-d10					85	83	40 - 110			
Terphenyl-d14					92	89	45 - 122			



Date of Report: March 3, 2020
Samples Submitted: February 21, 2020
Laboratory Reference: 2002-208B
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
H3-B-20	02-208-02	16	2-25-20
C3-B-20	02-208-03	40	3-2-20





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 methods 8260 & 8270, 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
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
 (in working days)
 (Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

(other) _____

Laboratory Number: **02-208**

Company: **Favallon**
 Project Number: **397-019**
 Project Name: **Block 38 West**
 Project Manager: **Suzy Stumpf**
 Sampled by: **Lisa Thompson**

Lab ID

Date Sampled

Time Sampled

Matrix

Number of Containers

Sample Identification

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture	
1	G3-B-20	2/20/20	0805	Soil	5																			
2	H3-B-20		0820	I				X																X
3	C3-B-20		1051	I																				X

Handwritten signature

Signature

Company

Date

Time

Comments/Special Instructions

Handwritten signature

Favallon

2/21/20 09:25

Contact RM for analyses and turnaround time.

Handwritten signature

SPEEDY

2/21/20 11:20

X - Added 2/24/20. JB (3 day)

Handwritten signature

SPEEDY

2/21/20 11:10

Added 2/28/20. JB (2 day TAT)

Received

Blank

Received

Blank

Data Package: Standard Level III Level IV

Reviewed/Date

Blank

Reviewed/Date

Blank

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

February 25, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-215

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 21, 2020.

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



OnSite Environmental, Inc. 14648 NE 95th 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: February 25, 2020
Samples Submitted: February 21, 2020
Laboratory Reference: 2002-215
Project: 397-019

Case Narrative

Samples were collected on February 21, 2020 and received by the laboratory on February 21, 2020. 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.



Date of Report: February 25, 2020
 Samples Submitted: February 21, 2020
 Laboratory Reference: 2002-215
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N1-WSW3-170					
Laboratory ID:	02-215-01					
Diesel Range Organics	ND	36	NWTPH-Dx	2-24-20	2-25-20	
Lube Oil Range Organics	77	72	NWTPH-Dx	2-24-20	2-25-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	73	50-150				



Date of Report: February 25, 2020
 Samples Submitted: February 21, 2020
 Laboratory Reference: 2002-215
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0224S1					
Diesel Range Organics	ND	25	NWTPH-Dx	2-24-20	2-24-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-24-20	2-24-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	83	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0224S1							
	ORIG	DUP						
Diesel Fuel #2	98.4	87.8	NA	NA	NA	NA	11	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				91	88	50-150		



Date of Report: February 25, 2020
Samples Submitted: February 21, 2020
Laboratory Reference: 2002-215
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
N1-WSW3-170	02-215-01	30	2-24-20





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 methods 8260 & 8270, 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





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

March 2, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-223

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 24, 2020.

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



OnSite Environmental, Inc. 14648 NE 95th 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: March 2, 2020
Samples Submitted: February 24, 2020
Laboratory Reference: 2002-223
Project: 397-019

Case Narrative

Samples were collected on February 22, 2020 and received by the laboratory on February 24, 2020. 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.

NWTPH-Gx/BTEX Analysis

Method 5035A sets a 48-hour holding time during which the samples are held at 4±2°C from the time of sample collection to the time of laboratory preservation. Samples I3-B-20.0, I3-B-15.0, N2-B-15.0, and N2-B-10.0 were received by the laboratory outside of this holding time at 50 hours after collection at 0°C.

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: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	I3-B-20.0					
Laboratory ID:	02-223-01					
Benzene	ND	0.030	EPA 8021B	2-24-20	2-24-20	
Toluene	ND	0.15	EPA 8021B	2-24-20	2-24-20	
Ethyl Benzene	ND	0.15	EPA 8021B	2-24-20	2-24-20	
m,p-Xylene	ND	0.15	EPA 8021B	2-24-20	2-24-20	
o-Xylene	ND	0.15	EPA 8021B	2-24-20	2-24-20	
Gasoline	ND	15	NWTPH-Gx	2-24-20	2-24-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>87</i>	<i>58-129</i>				
Client ID:	I3-B-15.0					
Laboratory ID:	02-223-02					
Gasoline	ND	26	NWTPH-Gx	2-24-20	2-24-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>92</i>	<i>58-129</i>				
Client ID:	N2-B-15.0					
Laboratory ID:	02-223-04					
Gasoline	ND	22	NWTPH-Gx	2-24-20	2-24-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>99</i>	<i>58-129</i>				
Client ID:	N2-B-10.0					
Laboratory ID:	02-223-05					
Gasoline	ND	12	NWTPH-Gx	2-24-20	2-24-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>83</i>	<i>58-129</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0224S1					
Benzene	ND	0.020	EPA 8021B	2-24-20	2-24-20	
Toluene	ND	0.050	EPA 8021B	2-24-20	2-24-20	
Ethyl Benzene	ND	0.050	EPA 8021B	2-24-20	2-24-20	
m,p-Xylene	ND	0.050	EPA 8021B	2-24-20	2-24-20	
o-Xylene	ND	0.050	EPA 8021B	2-24-20	2-24-20	
Gasoline	ND	5.0	NWTPH-Gx	2-24-20	2-24-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	88	58-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-224-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				91	93	58-129		

SPIKE BLANKS

Laboratory ID:	SB0224S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	0.929	0.866	1.00	1.00	93	87	69-109	7	10
Toluene	0.942	0.886	1.00	1.00	94	89	67-112	6	10
Ethyl Benzene	0.925	0.880	1.00	1.00	93	88	67-113	5	10
m,p-Xylene	0.935	0.885	1.00	1.00	94	89	66-114	5	11
o-Xylene	0.933	0.899	1.00	1.00	93	90	68-112	4	11
<i>Surrogate:</i>									
<i>Fluorobenzene</i>					87	83	58-129		



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	I3-B-20.0					
Laboratory ID:	02-223-01					
Diesel Range Organics	ND	680	NWTPH-Dx	2-25-20	2-25-20	U1
Lube Oil	6200	470	NWTPH-Dx	2-25-20	2-25-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>81</i>	<i>50-150</i>				

Client ID:	I3-B-15.0					
Laboratory ID:	02-223-02					
Diesel Range Organics	ND	76	NWTPH-Dx	2-25-20	2-25-20	
Lube Oil Range Organics	690	150	NWTPH-Dx	2-25-20	2-25-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>69</i>	<i>50-150</i>				

Client ID:	M4-B-12.0					
Laboratory ID:	02-223-09					
Diesel Range Organics	ND	76	NWTPH-Dx	2-25-20	2-25-20	
Lube Oil Range Organics	400	150	NWTPH-Dx	2-25-20	2-25-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>73</i>	<i>50-150</i>				

Client ID:	N1-ESW-15.0					
Laboratory ID:	02-223-14					
Diesel Range Organics	ND	150	NWTPH-Dx	2-25-20	2-25-20	
Lube Oil Range Organics	1000	300	NWTPH-Dx	2-25-20	2-25-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>63</i>	<i>50-150</i>				

Client ID:	N1-B-15.0					
Laboratory ID:	02-223-15					
Diesel Range Organics	ND	110	NWTPH-Dx	2-25-20	2-25-20	
Lube Oil Range Organics	1900	210	NWTPH-Dx	2-25-20	2-25-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>81</i>	<i>50-150</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0225S1					
Diesel Range Organics	ND	25	NWTPH-Dx	2-25-20	2-25-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-25-20	2-25-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>90</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0225S1							
	ORIG	DUP						
Diesel Fuel #2	90.5	87.3	NA	NA	NA	NA	4	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>95</i>	<i>89</i>	<i>50-150</i>		



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	I3-B-20.0					
Laboratory ID:	02-223-01					
Naphthalene	7.8	0.13	EPA 8270E/SIM	2-25-20	2-27-20	
2-Methylnaphthalene	3.8	0.13	EPA 8270E/SIM	2-25-20	2-27-20	
1-Methylnaphthalene	1.9	0.13	EPA 8270E/SIM	2-25-20	2-27-20	
Benzo[a]anthracene	8.9	0.13	EPA 8270E/SIM	2-25-20	2-27-20	
Chrysene	8.3	0.13	EPA 8270E/SIM	2-25-20	2-27-20	
Benzo[b]fluoranthene	8.1	0.13	EPA 8270E/SIM	2-25-20	2-27-20	
Benzo(j,k)fluoranthene	2.4	0.13	EPA 8270E/SIM	2-25-20	2-27-20	
Benzo[a]pyrene	8.3	0.13	EPA 8270E/SIM	2-25-20	2-27-20	
Indeno(1,2,3-c,d)pyrene	4.4	0.13	EPA 8270E/SIM	2-25-20	2-27-20	
Dibenz[a,h]anthracene	0.84	0.13	EPA 8270E/SIM	2-25-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>71</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>80</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>82</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	I3-B-15.0					
Laboratory ID:	02-223-02					
Naphthalene	0.024	0.020	EPA 8270E/SIM	2-25-20	2-26-20	
2-Methylnaphthalene	ND	0.020	EPA 8270E/SIM	2-25-20	2-26-20	
1-Methylnaphthalene	ND	0.020	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[a]anthracene	0.022	0.020	EPA 8270E/SIM	2-25-20	2-26-20	
Chrysene	0.027	0.020	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[b]fluoranthene	0.023	0.020	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo(j,k)fluoranthene	ND	0.020	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[a]pyrene	0.021	0.020	EPA 8270E/SIM	2-25-20	2-26-20	
Indeno(1,2,3-c,d)pyrene	ND	0.020	EPA 8270E/SIM	2-25-20	2-26-20	
Dibenz[a,h]anthracene	ND	0.020	EPA 8270E/SIM	2-25-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>57</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>68</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>75</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N2-B-15.0					
Laboratory ID:	02-223-04					
Benzo[a]anthracene	ND	0.019	EPA 8270E/SIM	2-25-20	2-26-20	
Chrysene	ND	0.019	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[b]fluoranthene	ND	0.019	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo(j,k)fluoranthene	ND	0.019	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[a]pyrene	ND	0.019	EPA 8270E/SIM	2-25-20	2-26-20	
Indeno(1,2,3-c,d)pyrene	ND	0.019	EPA 8270E/SIM	2-25-20	2-26-20	
Dibenz[a,h]anthracene	ND	0.019	EPA 8270E/SIM	2-25-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>66</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>78</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>91</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N2-B-10.0					
Laboratory ID:	02-223-05					
Benzo[a]anthracene	ND	0.0083	EPA 8270E/SIM	2-25-20	2-26-20	
Chrysene	ND	0.0083	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[b]fluoranthene	ND	0.0083	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo(j,k)fluoranthene	ND	0.0083	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[a]pyrene	ND	0.0083	EPA 8270E/SIM	2-25-20	2-26-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0083	EPA 8270E/SIM	2-25-20	2-26-20	
Dibenz[a,h]anthracene	ND	0.0083	EPA 8270E/SIM	2-25-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>83</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>86</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>96</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H1-SSW-20.0					
Laboratory ID:	02-223-06					
Benzo[a]anthracene	0.080	0.013	EPA 8270E/SIM	2-25-20	2-26-20	
Chrysene	0.074	0.013	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[b]fluoranthene	0.13	0.013	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo(j,k)fluoranthene	0.052	0.013	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[a]pyrene	0.13	0.013	EPA 8270E/SIM	2-25-20	2-26-20	
Indeno(1,2,3-c,d)pyrene	0.11	0.013	EPA 8270E/SIM	2-25-20	2-26-20	
Dibenz[a,h]anthracene	0.015	0.013	EPA 8270E/SIM	2-25-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>84</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>81</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>96</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H1-ESW-20.0					
Laboratory ID:	02-223-07					
Benzo[a]anthracene	ND	0.019	EPA 8270E/SIM	2-25-20	2-26-20	
Chrysene	ND	0.019	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[b]fluoranthene	ND	0.019	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo(j,k)fluoranthene	ND	0.019	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[a]pyrene	ND	0.019	EPA 8270E/SIM	2-25-20	2-26-20	
Indeno(1,2,3-c,d)pyrene	ND	0.019	EPA 8270E/SIM	2-25-20	2-26-20	
Dibenz[a,h]anthracene	ND	0.019	EPA 8270E/SIM	2-25-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>74</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>82</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>92</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	J4-ESW-15.0					
Laboratory ID:	02-223-10					
Benzo[a]anthracene	0.033	0.021	EPA 8270E/SIM	2-25-20	2-26-20	
Chrysene	0.036	0.021	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[b]fluoranthene	0.035	0.021	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo(j,k)fluoranthene	ND	0.021	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[a]pyrene	0.039	0.021	EPA 8270E/SIM	2-25-20	2-26-20	
Indeno(1,2,3-c,d)pyrene	0.023	0.021	EPA 8270E/SIM	2-25-20	2-26-20	
Dibenz[a,h]anthracene	ND	0.021	EPA 8270E/SIM	2-25-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>77</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>81</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>91</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	K4-ESW-15.0					
Laboratory ID:	02-223-11					
Benzo[a]anthracene	ND	0.033	EPA 8270E/SIM	2-25-20	2-26-20	
Chrysene	ND	0.033	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[b]fluoranthene	ND	0.033	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo(j,k)fluoranthene	ND	0.033	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[a]pyrene	ND	0.033	EPA 8270E/SIM	2-25-20	2-26-20	
Indeno(1,2,3-c,d)pyrene	ND	0.033	EPA 8270E/SIM	2-25-20	2-26-20	
Dibenz[a,h]anthracene	ND	0.033	EPA 8270E/SIM	2-25-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>62</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>71</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>84</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	L4-ESW-15.0					
Laboratory ID:	02-223-12					
Benzo[a]anthracene	ND	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Chrysene	ND	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[b]fluoranthene	ND	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo(j,k)fluoranthene	ND	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[a]pyrene	ND	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Indeno(1,2,3-c,d)pyrene	ND	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
Dibenz[a,h]anthracene	ND	0.034	EPA 8270E/SIM	2-25-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>68</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>72</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>84</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	I4-ESW-15.0					
Laboratory ID:	02-223-13					
Benzo[a]anthracene	ND	0.020	EPA 8270E/SIM	2-25-20	2-26-20	
Chrysene	ND	0.020	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[b]fluoranthene	ND	0.020	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo(j,k)fluoranthene	ND	0.020	EPA 8270E/SIM	2-25-20	2-26-20	
Benzo[a]pyrene	ND	0.020	EPA 8270E/SIM	2-25-20	2-26-20	
Indeno(1,2,3-c,d)pyrene	ND	0.020	EPA 8270E/SIM	2-25-20	2-26-20	
Dibenz[a,h]anthracene	ND	0.020	EPA 8270E/SIM	2-25-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>67</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>69</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>78</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0225S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-25-20	2-25-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>77</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>77</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>80</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
					Result	Recovery	Limits		RPD	Limit	
MATRIX SPIKES											
Laboratory ID:	02-208-02										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0776	0.0806	0.0833	0.0833	ND	93	97	44 - 111	4	21	
Acenaphthylene	0.0724	0.0692	0.0833	0.0833	ND	87	83	47 - 122	5	24	
Acenaphthene	0.0796	0.0764	0.0833	0.0833	ND	96	92	46 - 122	4	24	
Fluorene	0.0817	0.0823	0.0833	0.0833	ND	98	99	53 - 118	1	23	
Phenanthrene	0.106	0.101	0.0833	0.0833	0.0190	104	98	41 - 124	5	24	
Anthracene	0.0773	0.0763	0.0833	0.0833	ND	93	92	53 - 119	1	21	
Fluoranthene	0.0938	0.0834	0.0833	0.0833	0.0118	98	86	39 - 135	12	32	
Pyrene	0.0920	0.0853	0.0833	0.0833	0.0137	94	86	39 - 134	8	34	
Benzo[a]anthracene	0.0878	0.0844	0.0833	0.0833	ND	105	101	53 - 131	4	23	
Chrysene	0.0788	0.0759	0.0833	0.0833	ND	95	91	46 - 126	4	24	
Benzo[b]fluoranthene	0.0826	0.0731	0.0833	0.0833	ND	99	88	45 - 127	12	25	
Benzo(j,k)fluoranthene	0.0691	0.0727	0.0833	0.0833	ND	83	87	52 - 122	5	21	
Benzo[a]pyrene	0.0764	0.0731	0.0833	0.0833	ND	92	88	51 - 126	4	24	
Indeno(1,2,3-c,d)pyrene	0.0701	0.0684	0.0833	0.0833	ND	84	82	48 - 127	2	23	
Dibenz[a,h]anthracene	0.0716	0.0693	0.0833	0.0833	ND	86	83	51 - 124	3	22	
Benzo[g,h,i]perylene	0.0737	0.0714	0.0833	0.0833	ND	88	86	50 - 120	3	22	
<i>Surrogate:</i>											
2-Fluorobiphenyl						79	77	40 - 111			
Pyrene-d10						83	80	40 - 110			
Terphenyl-d14						89	88	45 - 122			



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	J4-ESW-15.0					
Laboratory ID:	02-223-10					
Diesel Range Organics	ND	77	NWTPH-Dx	2-25-20	2-25-20	
Lube Oil Range Organics	ND	160	NWTPH-Dx	2-25-20	2-25-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	68	50-150				

Client ID:	K4-ESW-15.0					
Laboratory ID:	02-223-11					
Diesel Range Organics	ND	120	NWTPH-Dx	2-25-20	2-25-20	
Lube Oil Range Organics	710	250	NWTPH-Dx	2-25-20	2-25-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	71	50-150				

Client ID:	L4-ESW-15.0					
Laboratory ID:	02-223-12					
Diesel Range Organics	ND	130	NWTPH-Dx	2-25-20	2-25-20	
Lube Oil Range Organics	940	250	NWTPH-Dx	2-25-20	2-25-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	84	50-150				

Client ID:	I4-ESW-15.0					
Laboratory ID:	02-223-13					
Diesel Range Organics	ND	76	NWTPH-Dx	2-25-20	2-25-20	
Lube Oil Range Organics	160	150	NWTPH-Dx	2-25-20	2-25-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	80	50-150				



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0225S1					
Diesel Range Organics	ND	25	NWTPH-Dx	2-25-20	2-25-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-25-20	2-25-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>90</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0225S1							
	ORIG	DUP						
Diesel Fuel #2	90.5	87.3	NA	NA	NA	NA	4	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>95</i>	<i>89</i>	<i>50-150</i>		



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	I3-B-10.0					
Laboratory ID:	02-223-03					
Naphthalene	ND	0.0083	EPA 8270E/SIM	3-2-20	3-2-20	
2-Methylnaphthalene	ND	0.0083	EPA 8270E/SIM	3-2-20	3-2-20	
1-Methylnaphthalene	ND	0.0083	EPA 8270E/SIM	3-2-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>66</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>66</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>72</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

**SEMIVOLATILE ORGANICS EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0302S2					
Naphthalene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>89</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>93</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>99</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

**SEMIVOLATILE ORGANICS EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0302S2									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.0652	0.0681	0.0833	0.0833	78	82	57 - 109	4	15	
Acenaphthylene	0.0687	0.0708	0.0833	0.0833	82	85	60 - 121	3	15	
Acenaphthene	0.0691	0.0711	0.0833	0.0833	83	85	59 - 121	3	15	
Fluorene	0.0689	0.0687	0.0833	0.0833	83	82	63 - 119	0	15	
Phenanthrene	0.0683	0.0692	0.0833	0.0833	82	83	59 - 114	1	15	
Anthracene	0.0734	0.0735	0.0833	0.0833	88	88	63 - 119	0	15	
Fluoranthene	0.0745	0.0753	0.0833	0.0833	89	90	63 - 120	1	15	
Pyrene	0.0673	0.0689	0.0833	0.0833	81	83	62 - 119	2	15	
Benzo[a]anthracene	0.0763	0.0769	0.0833	0.0833	92	92	64 - 127	1	15	
Chrysene	0.0706	0.0697	0.0833	0.0833	85	84	63 - 121	1	15	
Benzo[b]fluoranthene	0.0673	0.0695	0.0833	0.0833	81	83	61 - 122	3	15	
Benzo(j,k)fluoranthene	0.0714	0.0698	0.0833	0.0833	86	84	64 - 123	2	15	
Benzo[a]pyrene	0.0677	0.0683	0.0833	0.0833	81	82	62 - 122	1	15	
Indeno(1,2,3-c,d)pyrene	0.0595	0.0614	0.0833	0.0833	71	74	59 - 124	3	15	
Dibenz[a,h]anthracene	0.0648	0.0662	0.0833	0.0833	78	79	61 - 123	2	15	
Benzo[g,h,i]perylene	0.0653	0.0668	0.0833	0.0833	78	80	61 - 119	2	15	
<i>Surrogate:</i>										
2-Fluorobiphenyl					83	83	40 - 111			
Pyrene-d10					85	83	40 - 110			
Terphenyl-d14					92	89	45 - 122			



Date of Report: March 2, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223
 Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
I3-B-20.0	02-223-01	47	2-25-20
I3-B-15.0	02-223-02	67	2-25-20
I3-B-10.0	02-223-03	20	2-28-20
N2-B-15.0	02-223-04	64	2-25-20
N2-B-10.0	02-223-05	19	2-25-20
H1-SSW-20.0	02-223-06	50	2-25-20
H1-ESW-20.0	02-223-07	65	2-25-20
M4-B-12.0	02-223-09	67	2-25-20
J4-ESW-15.0	02-223-10	68	2-25-20
K4-ESW-15.0	02-223-11	80	2-25-20
L4-ESW-15.0	02-223-12	80	2-25-20
I4-ESW-15.0	02-223-13	67	2-25-20
N1-ESW-15.0	02-223-14	83	2-25-20
N1-B-15.0	02-223-15	76	2-25-20





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 methods 8260 & 8270, 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





Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days) (1, 12, 15)

(other) _____

Laboratory Number:

02-223

Company: Farewellon
Project Number: 397-019
Project Name: Block 28
Project Manager: Blair Sprunt
Sampled by: Gregg Kefers

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	I3-B-20.0	2/24/20	1010	Soil	5
2	I3-B-15.0		1015		
3	I3-B-10.0		1020		
4	N2-B-15.0		1045		
5	N2-B-10.0		1050		
6	H1-SSW-20.0		0930		
7	H1-ESW-20.0		1400		
8	H1-NWSW-20.0		1415		
9	M4-B-12.0		0945		
10	S4-ESW-15.0		1100		

Parameter	1	2	3	4	5	6	7	8	9	10
NWTPH-HCID										
NWTPH-Gx/BTEX	X									
NWTPH-Gx		X								
NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	X	X								
Volatiles 8260C										
Halogenated Volatiles 8260C										
EDB EPA 8011 (Waters Only)										
Semivolatiles 8270D/SIM (with low-level PAHs)	X	X								
PAHs 8270D/SIM (low-level)	X	X								
PCBs 8082A										
Organochlorine Pesticides 8081B										
Organophosphorus Pesticides 8270D/SIM										
Chlorinated Acid Herbicides 8151A										
Total RCRA Metals										
Total MTCA Metals										
TCLP Metals										
HEM (oil and grease) 1664A										
HOLD										
3 DAY TAT										
STANDARD TAT										
% Moisture	X	X								

Signature	Company	Date	Time	Comments/Special Instructions
<u>[Signature]</u>	<u>Farewellon</u>	<u>2/24/20</u>	<u>1413</u>	<u>Reverse Containers Sample analyzed and returned free with</u>
<u>[Signature]</u>	<u>Speedy</u>	<u>2/24/20</u>	<u>1452</u>	<u>Added 2/28/20 - DJ (same day TAT)</u>

Received _____
Relinquished _____
Received _____
Relinquished _____
Reviewed/Date _____

Reviewed/Date _____

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



MVA Onsite Environmental Inc.

Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

(other) _____

Laboratory Number: **02-223**

Company: *Furvell*

Project Number: *397-019*

Project Name: *Shoe 38*

Project Manager: *Suzy Stumpf*

Sampled by: *Eyes Rebus*

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
11	<i>14 - ESW - 15.0</i>	<i>2/24/20</i>	<i>1105</i>	<i>Soil</i>	5
12	<i>14 - ESW - 15.0</i>		<i>1110</i>		
13	<i>14 - ESW - 15.0</i>		<i>1120</i>		
14	<i>N1 - ESW - 15.0</i>		<i>1430</i>		
15	<i>N1 - B - 15.0</i>		<i>1445</i>		

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture	
11	<i>14 - ESW - 15.0</i>	<i>2/24/20</i>	<i>1105</i>	<i>Soil</i>	5				X					X										X
12	<i>14 - ESW - 15.0</i>		<i>1110</i>						X					X										X
13	<i>14 - ESW - 15.0</i>		<i>1120</i>						X					X										X
14	<i>N1 - ESW - 15.0</i>		<i>1430</i>						X															X
15	<i>N1 - B - 15.0</i>		<i>1445</i>						X															X

Signature: *[Handwritten Signature]*

Company: *Furvell on*

Date: *2/24/20*

Time: *1413*

Comments/Special Instructions: *See page 4.*

Relinquished: *[Signature]*

Received: *[Signature]*

Relinquished: *[Signature]*

Received: *[Signature]*

Relinquished: *[Signature]*

Received: *[Signature]*

Relinquished: *[Signature]*

Reviewed/Date: _____

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

March 4, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-223B

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 24, 2020.

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



OnSite Environmental, Inc. 14648 NE 95th 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: March 4, 2020
Samples Submitted: February 24, 2020
Laboratory Reference: 2002-223B
Project: 397-019

Case Narrative

Samples were collected on February 22, 2020 and received by the laboratory on February 24, 2020. 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.



Date of Report: March 4, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223B
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N2-B-10.0					
Laboratory ID:	02-223-05					
Diesel Range Organics	ND	31	NWTPH-Dx	3-4-20	3-4-20	
Lube Oil Range Organics	ND	62	NWTPH-Dx	3-4-20	3-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	75	50-150				



Date of Report: March 4, 2020
 Samples Submitted: February 24, 2020
 Laboratory Reference: 2002-223B
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0304S1					
Diesel Range Organics	ND	25	NWTPH-Dx	3-4-20	3-4-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	3-4-20	3-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	100	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0304S1							
	ORIG	DUP						
Diesel Fuel #2	93.0	89.8	NA	NA	NA	NA	4	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				88	84	50-150		





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 methods 8260 & 8270, 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





Onsite Environmental Inc.
 Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days) (1, 12, 18)

(other)

Laboratory Number:

02-223

Company: Farewellon
 Project Number: 397-019
 Project Name: Block Z8
 Project Manager: Suzy Sprunt
 Sampled by: Gary Kopus

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	I3-B-20.0	2/24/20	1010	Soil	5
2	I3-B-15.0		1015		
3	I3-B-10.0		1020		
4	N2-B-15.0		1045		
5	N2-B-10.0		1050		
6	H1-SSW-20.0		0930		
7	H1-ESW-20.0		1400		
8	H1-N2SW-20.0		1415		
9	M4-B-12.0		0945		
10	I4-ESW-15.0		1100		

Parameter	1	2	3	4	5	6	7	8	9	10
NWTPH-HCID										
NWTPH-Gx/BTEX	X									
NWTPH-Gx		X								
NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	X	X								
Volatiles 8260C										
Halogenated Volatiles 8260C										
EDB EPA 8011 (Waters Only)										
Semivolatiles 8270D/SIM (with low-level PAHs)	X	X								
PAHs 8270D/SIM (low-level)	X	X								
PCBs 8082A										
Organochlorine Pesticides 8081B										
Organophosphorus Pesticides 8270D/SIM										
Chlorinated Acid Herbicides 8151A										
Total RCRA Metals										
Total MTCA Metals										
TCLP Metals										
HEM (oil and grease) 1664A										
% Moisture										

Signature	Company	Date	Time	Comments/Special Instructions
<u>[Signature]</u>	<u>Farewellon</u>	<u>2/24/20</u>	<u>1413</u>	<u>Reverse Containers Sample analysis</u>
<u>[Signature]</u>	<u>Speedy</u>	<u>2-24-20</u>	<u>1413</u>	<u>and forwarded from with</u>
<u>[Signature]</u>	<u>Speedy</u>	<u>2/24/20</u>	<u>1452</u>	<u>added 2/28/20 .03 (15 min TAT)</u>
				<u>Added 3/4/20 .03 (same day)</u>

Received/Date: _____

Received/Date: _____

Received/Date: _____

Received/Date: _____

Reviewed/Date: _____

Reviewed/Date: _____

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

March 3, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-240

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 25, 2020.

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 flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: March 3, 2020
Samples Submitted: February 25, 2020
Laboratory Reference: 2002-240
Project: 397-019

Case Narrative

Samples were collected on February 24, 2020 and received by the laboratory on February 25, 2020. 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.

NWTPH-Gx Analysis

The MTCA Method A cleanup level of 30.0 ppm for fresh gasoline is not achievable for sample N2-NSW-15.0 due to the low dry weight of the sample.

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: March 3, 2020
 Samples Submitted: February 25, 2020
 Laboratory Reference: 2002-240
 Project: 397-019

**GASOLINE RANGE ORGANICS
 NWTPH-Gx**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N2-NSW-15.0					
Laboratory ID:	02-240-01					
Gasoline	ND	32	NWTPH-Gx	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	80	58-129				
Client ID:	H3-B-15.0					
Laboratory ID:	02-240-09					
Gasoline	ND	21	NWTPH-Gx	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	86	58-129				



Date of Report: March 3, 2020
 Samples Submitted: February 25, 2020
 Laboratory Reference: 2002-240
 Project: 397-019

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0226S2					
Gasoline	ND	5.0	NWTPH-Gx	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	86	58-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-254-03							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				84	86	58-129		



Date of Report: March 3, 2020
 Samples Submitted: February 25, 2020
 Laboratory Reference: 2002-240
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M1-B-15.0					
Laboratory ID:	02-240-04					
Diesel Range Organics	ND	160	NWTPH-Dx	2-26-20	2-26-20	
Lube Oil Range Organics	470	330	NWTPH-Dx	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	76	50-150				

Client ID:	L1-B-15.0					
Laboratory ID:	02-240-07					
Diesel Range Organics	ND	170	NWTPH-Dx	2-26-20	2-26-20	
Lube Oil Range Organics	560	330	NWTPH-Dx	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	70	50-150				

Client ID:	L3-B-15.0					
Laboratory ID:	02-240-08					
Diesel Range Organics	ND	140	NWTPH-Dx	2-26-20	2-26-20	
Lube Oil Range Organics	1300	270	NWTPH-Dx	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	75	50-150				

Client ID:	H3-B-15.0					
Laboratory ID:	02-240-09					
Diesel Range Organics	ND	67	NWTPH-Dx	2-26-20	2-26-20	
Lube Oil Range Organics	250	130	NWTPH-Dx	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	77	50-150				



Date of Report: March 3, 2020
 Samples Submitted: February 25, 2020
 Laboratory Reference: 2002-240
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0226S1					
Diesel Range Organics	ND	25	NWTPH-Dx	2-26-20	2-26-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>84</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0226S1							
	ORIG	DUP						
Diesel Fuel #2	90.4	91.9	NA	NA	NA	NA	2	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>88</i>	<i>92</i>	<i>50-150</i>		



Date of Report: March 3, 2020
 Samples Submitted: February 25, 2020
 Laboratory Reference: 2002-240
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H3-B-15.0					
Laboratory ID:	02-240-09					
Naphthalene	0.29	0.018	EPA 8270E/SIM	2-26-20	2-27-20	
2-Methylnaphthalene	0.34	0.018	EPA 8270E/SIM	2-26-20	2-27-20	
1-Methylnaphthalene	0.22	0.018	EPA 8270E/SIM	2-26-20	2-27-20	
Benzo[a]anthracene	0.15	0.018	EPA 8270E/SIM	2-26-20	2-27-20	
Chrysene	0.13	0.018	EPA 8270E/SIM	2-26-20	2-27-20	
Benzo[b]fluoranthene	0.11	0.018	EPA 8270E/SIM	2-26-20	2-27-20	
Benzo(j,k)fluoranthene	0.036	0.018	EPA 8270E/SIM	2-26-20	2-27-20	
Benzo[a]pyrene	0.11	0.018	EPA 8270E/SIM	2-26-20	2-27-20	
Indeno(1,2,3-c,d)pyrene	0.056	0.018	EPA 8270E/SIM	2-26-20	2-27-20	
Dibenz[a,h]anthracene	ND	0.018	EPA 8270E/SIM	2-26-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>73</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>74</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>84</i>	<i>45 - 122</i>				



Date of Report: March 3, 2020
 Samples Submitted: February 25, 2020
 Laboratory Reference: 2002-240
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	K2-B-15.0					
Laboratory ID:	02-240-10					
Benzo[a]anthracene	ND	0.020	EPA 8270E/SIM	2-26-20	2-26-20	
Chrysene	ND	0.020	EPA 8270E/SIM	2-26-20	2-26-20	
Benzo[b]fluoranthene	ND	0.020	EPA 8270E/SIM	2-26-20	2-26-20	
Benzo(j,k)fluoranthene	ND	0.020	EPA 8270E/SIM	2-26-20	2-26-20	
Benzo[a]pyrene	ND	0.020	EPA 8270E/SIM	2-26-20	2-26-20	
Indeno(1,2,3-c,d)pyrene	ND	0.020	EPA 8270E/SIM	2-26-20	2-26-20	
Dibenz[a,h]anthracene	ND	0.020	EPA 8270E/SIM	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>76</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>79</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>92</i>	<i>45 - 122</i>				



Date of Report: March 3, 2020
 Samples Submitted: February 25, 2020
 Laboratory Reference: 2002-240
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	K3-B-15.0					
Laboratory ID:	02-240-11					
Benzo[a]anthracene	ND	0.014	EPA 8270E/SIM	2-26-20	2-27-20	
Chrysene	ND	0.014	EPA 8270E/SIM	2-26-20	2-27-20	
Benzo[b]fluoranthene	ND	0.014	EPA 8270E/SIM	2-26-20	2-27-20	
Benzo(j,k)fluoranthene	ND	0.014	EPA 8270E/SIM	2-26-20	2-27-20	
Benzo[a]pyrene	ND	0.014	EPA 8270E/SIM	2-26-20	2-27-20	
Indeno(1,2,3-c,d)pyrene	ND	0.014	EPA 8270E/SIM	2-26-20	2-27-20	
Dibenz[a,h]anthracene	ND	0.014	EPA 8270E/SIM	2-26-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>58</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>71</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>78</i>	<i>45 - 122</i>				



Date of Report: March 3, 2020
 Samples Submitted: February 25, 2020
 Laboratory Reference: 2002-240
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0226S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	2-26-20	2-26-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-26-20	2-26-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-26-20	2-26-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-26-20	2-26-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-26-20	2-26-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-26-20	2-26-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-26-20	2-26-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-26-20	2-26-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-26-20	2-26-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>92</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>94</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>102</i>	<i>45 - 122</i>				



Date of Report: March 3, 2020
 Samples Submitted: February 25, 2020
 Laboratory Reference: 2002-240
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
					Result	Recovery	Limits	RPD	Limit		
MATRIX SPIKES											
Laboratory ID:	02-133-02										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0737	0.0723	0.0833	0.0833	ND	88	87	44 - 111	2		21
Acenaphthylene	0.0811	0.0790	0.0833	0.0833	ND	97	95	47 - 122	3		24
Acenaphthene	0.0822	0.0812	0.0833	0.0833	ND	99	97	46 - 122	1		24
Fluorene	0.0825	0.0798	0.0833	0.0833	ND	99	96	53 - 118	3		23
Phenanthrene	0.0803	0.0790	0.0833	0.0833	ND	96	95	41 - 124	2		24
Anthracene	0.0835	0.0814	0.0833	0.0833	ND	100	98	53 - 119	3		21
Fluoranthene	0.0847	0.0781	0.0833	0.0833	ND	102	94	39 - 135	8		32
Pyrene	0.0822	0.0808	0.0833	0.0833	ND	99	97	39 - 134	2		34
Benzo[a]anthracene	0.0919	0.0864	0.0833	0.0833	ND	110	104	53 - 131	6		23
Chrysene	0.0829	0.0810	0.0833	0.0833	ND	100	97	46 - 126	2		24
Benzo[b]fluoranthene	0.0833	0.0799	0.0833	0.0833	ND	100	96	45 - 127	4		25
Benzo(j,k)fluoranthene	0.0839	0.0795	0.0833	0.0833	ND	101	95	52 - 122	5		21
Benzo[a]pyrene	0.0829	0.0793	0.0833	0.0833	ND	100	95	51 - 126	4		24
Indeno(1,2,3-c,d)pyrene	0.0807	0.0769	0.0833	0.0833	ND	97	92	48 - 127	5		23
Dibenz[a,h]anthracene	0.0828	0.0786	0.0833	0.0833	ND	99	94	51 - 124	5		22
Benzo[g,h,i]perylene	0.0812	0.0772	0.0833	0.0833	ND	97	93	50 - 120	5		22
<i>Surrogate:</i>											
2-Fluorobiphenyl						86	86	40 - 111			
Pyrene-d10						87	88	40 - 110			
Terphenyl-d14						103	96	45 - 122			



Date of Report: March 3, 2020
 Samples Submitted: February 25, 2020
 Laboratory Reference: 2002-240
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N1-NSW-15.0					
Laboratory ID:	02-240-02					
Diesel Range Organics	ND	150	NWTPH-Dx	2-26-20	2-26-20	
Lube Oil Range Organics	580	300	NWTPH-Dx	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	73	50-150				

Client ID:	N1-WSW-15.0					
Laboratory ID:	02-240-03					
Diesel Range Organics	ND	79	NWTPH-Dx	2-26-20	2-26-20	
Lube Oil Range Organics	630	160	NWTPH-Dx	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	79	50-150				

Client ID:	M1-WSW-15.0					
Laboratory ID:	02-240-05					
Diesel Range Organics	160	150	NWTPH-Dx	2-26-20	2-26-20	N
Lube Oil Range Organics	2100	290	NWTPH-Dx	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	81	50-150				

Client ID:	L1-WSW-15.0					
Laboratory ID:	02-240-06					
Diesel Range Organics	ND	83	NWTPH-Dx	2-26-20	2-26-20	
Lube Oil Range Organics	510	170	NWTPH-Dx	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	75	50-150				



Date of Report: March 3, 2020
 Samples Submitted: February 25, 2020
 Laboratory Reference: 2002-240
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0226S1					
Diesel Range Organics	ND	25	NWTPH-Dx	2-26-20	2-26-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>84</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0226S1							
	ORIG	DUP						
Diesel Fuel #2	91.9	90.4	NA	NA	NA	NA	2	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>92</i>	<i>88</i>	<i>50-150</i>		



Date of Report: March 3, 2020
 Samples Submitted: February 25, 2020
 Laboratory Reference: 2002-240
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	K3-B-15.0					
Laboratory ID:	02-240-11					
Diesel Range Organics	68	53	NWTPH-Dx	3-1-20	3-1-20	N
Lube Oil Range Organics	830	110	NWTPH-Dx	3-1-20	3-1-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>85</i>	<i>50-150</i>				



Date of Report: March 3, 2020
 Samples Submitted: February 25, 2020
 Laboratory Reference: 2002-240
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0301S1					
Diesel Range Organics	ND	25	NWTPH-Dx	3-1-20	3-1-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	3-1-20	3-1-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>93</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0301S1							
	ORIG	DUP						
Diesel Fuel #2	87.1	79.1	NA	NA	NA	NA	10	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>89</i>	<i>83</i>	<i>50-150</i>		



Date of Report: March 3, 2020
Samples Submitted: February 25, 2020
Laboratory Reference: 2002-240
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
N2-NSW-15.0	02-240-01	72	2-26-20
N1-NSW-15.0	02-240-02	83	2-26-20
N1-WSW-15.0	02-240-03	68	2-26-20
M1-B-15.0	02-240-04	85	2-26-20
M1-WSW-15.0	02-240-05	83	2-26-20
L1-WSW-15.0	02-240-06	70	2-26-20
L1-B-15.0	02-240-07	85	2-26-20
L3-B-15.0	02-240-08	82	2-26-20
H3-B-15.0	02-240-09	63	2-26-20
K2-B-15.0	02-240-10	67	2-26-20
K3-B-15.0	02-240-11	53	2-26-20





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 methods 8260 & 8270, 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





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

February 27, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-241

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 25, 2020.

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



OnSite Environmental, Inc. 14648 NE 95th 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: February 27, 2020
Samples Submitted: February 25, 2020
Laboratory Reference: 2002-241
Project: 397-019

Case Narrative

Samples were collected on February 24, 2020 and received by the laboratory on February 25, 2020. 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.

NWTPH-Gx Analysis

The chromatogram for sample I3-B-Dup-15.0 is not similar to a typical gas.

The MTCA Method A cleanup level of 30.0 ppm for fresh gasoline is not achievable for sample N2-B-Dup-15.0 due to the low dry weight of the sample.

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: February 27, 2020
 Samples Submitted: February 25, 2020
 Laboratory Reference: 2002-241
 Project: 397-019

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N2-B-Dup-15.0					
Laboratory ID:	02-241-01					
Gasoline	ND	64	NWTPH-Gx	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	77	58-129				
Client ID:	N2-B-Dup-10.0					
Laboratory ID:	02-241-02					
Gasoline	ND	6.4	NWTPH-Gx	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	92	58-129				
Client ID:	I3-B-Dup-15.0					
Laboratory ID:	02-241-03					
Gasoline	23	18	NWTPH-Gx	2-26-20	2-26-20	T
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	86	58-129				



Date of Report: February 27, 2020
 Samples Submitted: February 25, 2020
 Laboratory Reference: 2002-241
 Project: 397-019

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0226S2					
Gasoline	ND	5.0	NWTPH-Gx	2-26-20	2-26-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>86</i>	<i>58-129</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-254-03							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				<i>84</i>	<i>86</i>	<i>58-129</i>		



Date of Report: February 27, 2020
Samples Submitted: February 25, 2020
Laboratory Reference: 2002-241
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
N2-B-Dup-15.0	02-241-01	84	2-26-20
N2-B-Dup-10.0	02-241-02	21	2-26-20
I3-B-Dup-15.0	02-241-03	57	2-26-20





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 gas.
 - 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 methods 8260 & 8270, 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
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request (in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

_____ (other)

Laboratory Number: 02-241

Company: Favallon
 Project Number: 397-019
 Project Name: Block 38
 Project Manager: SUTY STUMPF
 Sampled by: GREG PETERS

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	N2-B-Dup - 15.0	2/24/20	1530	Soil	5
2	N2-B-Dup - 10.0		1540		
3	I3-B-Dup - 15.0		1545		
4	I3-B-Dup - 10.0		1550		

Parameter	1	2	3	4
NWTPH-HCID				
NWTPH-Gx/BTEX				
NWTPH-Gx	X	X		
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 RCRA Metals				
Total MTCA Metals				
TCLP Metals				
HEM (oil and grease) 1664A				
% Moisture				

Received	Relinquished	Signature	Company	Date	Time	Comments/Special Instructions
			Favallon	2/25/20	10:45	Duplicats of samples collected 2/22/20.
			SPEEDY	2/25/20	10:15	
			SPEEDY	2/25/20	12:10	
			OSB	2/25/20	12:10	
Received	Relinquished					
Received	Relinquished					
Reviewed/Date	Reviewed/Date					

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



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

February 28, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-263

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 26, 2020.

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 flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: February 28, 2020
Samples Submitted: February 26, 2020
Laboratory Reference: 2002-263
Project: 397-019

Case Narrative

Samples were collected on February 25, 2020 and received by the laboratory on February 26, 2020. 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.



Date of Report: February 28, 2020
 Samples Submitted: February 26, 2020
 Laboratory Reference: 2002-263
 Project: 397-019

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	N2-ESW-10					
Laboratory ID:	02-263-04					
Gasoline	ND	6.5	NWTPH-Gx	2-27-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	99	58-129				
Client ID:	N2-SSW-10					
Laboratory ID:	02-263-05					
Gasoline	ND	6.9	NWTPH-Gx	2-27-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	97	58-129				



Date of Report: February 28, 2020
 Samples Submitted: February 26, 2020
 Laboratory Reference: 2002-263
 Project: 397-019

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0227S1					
Gasoline	ND	5.0	NWTPH-Gx	2-27-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>87</i>	<i>58-129</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-263-05							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				97	97	58-129		



Date of Report: February 28, 2020
Samples Submitted: February 26, 2020
Laboratory Reference: 2002-263
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
N2-ESW-10	02-263-04	24	2-26-20
N2-SSW-10	02-263-05	22	2-26-20





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 methods 8260 & 8270, 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





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

March 4, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-263B

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 26, 2020.

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 flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: March 4, 2020
Samples Submitted: February 26, 2020
Laboratory Reference: 2002-263B
Project: 397-019

Case Narrative

Samples were collected on February 25, 2020 and received by the laboratory on February 26, 2020. 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.



Date of Report: March 4, 2020
 Samples Submitted: February 26, 2020
 Laboratory Reference: 2002-263B
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	TP-17-15					
Laboratory ID:	02-263-11					
Diesel Range Organics	ND	59	NWTPH-Dx	3-3-20	3-4-20	
Lube Oil Range Organics	ND	120	NWTPH-Dx	3-3-20	3-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>84</i>	<i>50-150</i>				
Client ID:	TP-17-10					
Laboratory ID:	02-263-12					
Diesel Range Organics	ND	29	NWTPH-Dx	3-3-20	3-4-20	
Lube Oil Range Organics	ND	58	NWTPH-Dx	3-3-20	3-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>80</i>	<i>50-150</i>				



Date of Report: March 4, 2020
 Samples Submitted: February 26, 2020
 Laboratory Reference: 2002-263B
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0303S1					
Diesel Range Organics	ND	25	NWTPH-Dx	3-3-20	3-3-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	3-3-20	3-3-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>90</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0303S1							
	ORIG	DUP						
Diesel Fuel #2	101	95.4	NA	NA	NA	NA	6	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				106	91	50-150		



Date of Report: March 4, 2020
Samples Submitted: February 26, 2020
Laboratory Reference: 2002-263B
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
TP-17-15	02-263-11	58	3-3-20
TP-17-10	02-263-12	13	3-3-20





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 methods 8260 & 8270, 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





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

March 6, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-263C

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 26, 2020.

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 flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: March 6, 2020
Samples Submitted: February 26, 2020
Laboratory Reference: 2002-263C
Project: 397-019

Case Narrative

Samples were collected on February 25, 2020 and received by the laboratory on February 26, 2020. 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.



Date of Report: March 6, 2020
 Samples Submitted: February 26, 2020
 Laboratory Reference: 2002-263C
 Project: 397-019

DIESEL AND HEAVY OIL RANGE ORGANICS
NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M1-WSW-10					
Laboratory ID:	02-263-07					
Diesel Range Organics	ND	36	NWTPH-Dx	3-5-20	3-5-20	
Lube Oil Range Organics	ND	72	NWTPH-Dx	3-5-20	3-5-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	75	50-150				



Date of Report: March 6, 2020
 Samples Submitted: February 26, 2020
 Laboratory Reference: 2002-263C
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0305S1					
Diesel Range Organics	ND	25	NWTPH-Dx	3-5-20	3-5-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	3-5-20	3-5-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	87	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0305S1							
	ORIG	DUP						
Diesel Fuel #2	78.9	77.6	NA	NA	NA	NA	2	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				85	91	50-150		



Date of Report: March 6, 2020
 Samples Submitted: February 26, 2020
 Laboratory Reference: 2002-263C
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M1-B-10					
Laboratory ID:	02-263-06					
Diesel Range Organics	ND	31	NWTPH-Dx	3-6-20	3-6-20	
Lube Oil Range Organics	ND	62	NWTPH-Dx	3-6-20	3-6-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>83</i>	<i>50-150</i>				



Date of Report: March 6, 2020
 Samples Submitted: February 26, 2020
 Laboratory Reference: 2002-263C
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0306S1					
Diesel Range Organics	ND	25	NWTPH-Dx	3-6-20	3-6-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	3-6-20	3-6-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>88</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0306S1							
	ORIG	DUP						
Diesel Fuel #2	74.1	72.7	NA	NA	NA	NA	2	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>93</i>	<i>91</i>	<i>50-150</i>		



Date of Report: March 6, 2020
Samples Submitted: February 26, 2020
Laboratory Reference: 2002-263C
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
M1-B-10	02-263-06	19	3-5-20
M1-WSW-10	02-263-07	31	3-5-20





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 methods 8260 & 8270, 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





Onsite Environmental Inc.
 Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
 (in working days)
 (Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

(other) _____

Laboratory Number: **02-263**

Company: **Favallon**
 Project Number: **307-019**
 Project Name: **Block 38 West**
 Project Manager: **Suzi Stumpf**
 Sampled by: **G. Peters | L. Thompson**

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	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 RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture	
1	N1-ESW-10	2/25/20	1200	Soil	5																			
2	N1-NSW-10		1210																					
3	N1-B-10		1215																					
4	N2-ESW-10		1220																					
5	N2-SSW-10		1225																					
6	M1-B-10		1230																					
7	M1-WSW-10		1240																					
8	L1-B-10		1245																					
9	L1-WSM-10		1245																					
10	M4-ESW-10	2/25/20	1250																					

Received	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished		Favallon	2/26/20	1025	Contact PM for TAT and analyses
Received		SPEEDY	2/26/20	1025	<input checked="" type="checkbox"/> Added 2/26/20. DB (2 day TAT)
Relinquished		SPEEDY	2/26/20	1115	Added 3/3/20. DB (5 day TAT)
Received		OSFE	2/26/20	1115	Added 3/5/20. DB (2 day TAT)
Relinquished					Added 3/5/20. DB (1 day TAT)
Received					Data Package: Standard <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/>
Reviewed/Date		Reviewed/Date			Chromatograms with final report <input type="checkbox"/> Electronic Data Deliverables (EDDs) <input type="checkbox"/>



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

March 6, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-275

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 27, 2020.

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



OnSite Environmental, Inc. 14648 NE 95th 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: March 6, 2020
Samples Submitted: February 27, 2020
Laboratory Reference: 2002-275
Project: 397-019

Case Narrative

Samples were collected on February 26, 2020 and received by the laboratory on February 27, 2020. 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.



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H4-ESW-15.0					
Laboratory ID:	02-275-14					
Gasoline	ND	17	NWTPH-Gx	3-4-20	3-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	102	58-129				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0304S3					
Gasoline	ND	5.0	NWTPH-Gx	3-4-20	3-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>101</i>	<i>58-129</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-274-02							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				97	95	58-129		



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	K4-B-15.0					
Laboratory ID:	02-275-03					
Diesel Range Organics	ND	33	NWTPH-Dx	2-27-20	2-27-20	
Lube Oil Range Organics	ND	67	NWTPH-Dx	2-27-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	79	50-150				

Client ID:	K4-B-10.0					
Laboratory ID:	02-275-04					
Diesel Range Organics	110	66	NWTPH-Dx	2-27-20	2-27-20	
Lube Oil Range Organics	290	130	NWTPH-Dx	2-27-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	69	50-150				

Client ID:	H4-ESW-15.0					
Laboratory ID:	02-275-14					
Diesel Range Organics	ND	55	NWTPH-Dx	2-27-20	2-27-20	
Lube Oil Range Organics	ND	110	NWTPH-Dx	2-27-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	65	50-150				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0227S1					
Diesel Range Organics	ND	25	NWTPH-Dx	2-27-20	2-27-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-27-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	90	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-283-02							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>			81	75	50-150			



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M1-ESW-10.0					
Laboratory ID:	02-275-01					
Benzo[a]anthracene	ND	0.010	EPA 8270E/SIM	2-27-20	2-27-20	
Chrysene	ND	0.010	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[b]fluoranthene	ND	0.010	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[a]pyrene	ND	0.010	EPA 8270E/SIM	2-27-20	2-27-20	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270E/SIM	2-27-20	2-27-20	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270E/SIM	2-27-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>83</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>90</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>99</i>	<i>45 - 122</i>				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	K4-B-15.0					
Laboratory ID:	02-275-03					
Naphthalene	1.2	0.045	EPA 8270E/SIM	2-27-20	2-28-20	
2-Methylnaphthalene	0.59	0.0089	EPA 8270E/SIM	2-27-20	2-27-20	
1-Methylnaphthalene	0.33	0.0089	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[a]anthracene	ND	0.0089	EPA 8270E/SIM	2-27-20	2-27-20	
Chrysene	ND	0.0089	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[b]fluoranthene	ND	0.0089	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo(j,k)fluoranthene	ND	0.0089	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[a]pyrene	ND	0.0089	EPA 8270E/SIM	2-27-20	2-27-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0089	EPA 8270E/SIM	2-27-20	2-27-20	
Dibenz[a,h]anthracene	ND	0.0089	EPA 8270E/SIM	2-27-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>73</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>75</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>83</i>	<i>45 - 122</i>				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	K4-B-10.0					
Laboratory ID:	02-275-04					
Naphthalene	0.72	0.018	EPA 8270E/SIM	2-27-20	2-27-20	
2-Methylnaphthalene	0.55	0.018	EPA 8270E/SIM	2-27-20	2-27-20	
1-Methylnaphthalene	0.30	0.018	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[a]anthracene	0.055	0.018	EPA 8270E/SIM	2-27-20	2-27-20	
Chrysene	0.052	0.018	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[b]fluoranthene	0.037	0.018	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo(j,k)fluoranthene	ND	0.018	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[a]pyrene	0.035	0.018	EPA 8270E/SIM	2-27-20	2-27-20	
Indeno(1,2,3-c,d)pyrene	0.018	0.018	EPA 8270E/SIM	2-27-20	2-27-20	
Dibenz[a,h]anthracene	ND	0.018	EPA 8270E/SIM	2-27-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>81</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>83</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>92</i>	<i>45 - 122</i>				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	J2-B-15.0					
Laboratory ID:	02-275-05					
Benzo[a]anthracene	ND	0.018	EPA 8270E/SIM	2-27-20	2-27-20	
Chrysene	ND	0.018	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[b]fluoranthene	ND	0.018	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo(j,k)fluoranthene	ND	0.018	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[a]pyrene	ND	0.018	EPA 8270E/SIM	2-27-20	2-27-20	
Indeno(1,2,3-c,d)pyrene	ND	0.018	EPA 8270E/SIM	2-27-20	2-27-20	
Dibenz[a,h]anthracene	ND	0.018	EPA 8270E/SIM	2-27-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>74</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>75</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>86</i>	<i>45 - 122</i>				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	G2-B-15.0					
Laboratory ID:	02-275-06					
Benzo[a]anthracene	0.092	0.016	EPA 8270E/SIM	2-27-20	2-27-20	
Chrysene	0.074	0.016	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[b]fluoranthene	0.061	0.016	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo(j,k)fluoranthene	0.023	0.016	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[a]pyrene	0.060	0.016	EPA 8270E/SIM	2-27-20	2-27-20	
Indeno(1,2,3-c,d)pyrene	0.030	0.016	EPA 8270E/SIM	2-27-20	2-27-20	
Dibenz[a,h]anthracene	ND	0.016	EPA 8270E/SIM	2-27-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>79</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>79</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>88</i>	<i>45 - 122</i>				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	F2-B-15.0					
Laboratory ID:	02-275-07					
Benzo[a]anthracene	0.54	0.019	EPA 8270E/SIM	2-27-20	2-27-20	
Chrysene	0.48	0.019	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[b]fluoranthene	0.63	0.019	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo(j,k)fluoranthene	0.25	0.019	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[a]pyrene	0.73	0.019	EPA 8270E/SIM	2-27-20	2-27-20	
Indeno(1,2,3-c,d)pyrene	0.51	0.019	EPA 8270E/SIM	2-27-20	2-27-20	
Dibenz[a,h]anthracene	0.081	0.019	EPA 8270E/SIM	2-27-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>73</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>81</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>87</i>	<i>45 - 122</i>				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	D2-B-15.0					
Laboratory ID:	02-275-08					
Benzo[a]anthracene	ND	0.019	EPA 8270E/SIM	2-27-20	2-27-20	
Chrysene	ND	0.019	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[b]fluoranthene	ND	0.019	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo(j,k)fluoranthene	ND	0.019	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[a]pyrene	ND	0.019	EPA 8270E/SIM	2-27-20	2-27-20	
Indeno(1,2,3-c,d)pyrene	ND	0.019	EPA 8270E/SIM	2-27-20	2-27-20	
Dibenz[a,h]anthracene	ND	0.019	EPA 8270E/SIM	2-27-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>66</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>77</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>82</i>	<i>45 - 122</i>				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B2-B-15.0					
Laboratory ID:	02-275-09					
Benzo[a]anthracene	ND	0.015	EPA 8270E/SIM	2-27-20	2-27-20	
Chrysene	ND	0.015	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[b]fluoranthene	ND	0.015	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo(j,k)fluoranthene	ND	0.015	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[a]pyrene	ND	0.015	EPA 8270E/SIM	2-27-20	2-27-20	
Indeno(1,2,3-c,d)pyrene	ND	0.015	EPA 8270E/SIM	2-27-20	2-27-20	
Dibenz[a,h]anthracene	ND	0.015	EPA 8270E/SIM	2-27-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>80</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>82</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>94</i>	<i>45 - 122</i>				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	C2-B-15.0					
Laboratory ID:	02-275-10					
Benzo[a]anthracene	ND	0.021	EPA 8270E/SIM	2-27-20	2-27-20	
Chrysene	ND	0.021	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[b]fluoranthene	ND	0.021	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo(j,k)fluoranthene	ND	0.021	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[a]pyrene	ND	0.021	EPA 8270E/SIM	2-27-20	2-27-20	
Indeno(1,2,3-c,d)pyrene	ND	0.021	EPA 8270E/SIM	2-27-20	2-27-20	
Dibenz[a,h]anthracene	ND	0.021	EPA 8270E/SIM	2-27-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>73</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>77</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>86</i>	<i>45 - 122</i>				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	G3-B-15.0					
Laboratory ID:	02-275-11					
Naphthalene	ND	0.038	EPA 8270E/SIM	2-27-20	2-27-20	
2-Methylnaphthalene	ND	0.038	EPA 8270E/SIM	2-27-20	2-27-20	
1-Methylnaphthalene	ND	0.038	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[a]anthracene	ND	0.038	EPA 8270E/SIM	2-27-20	2-27-20	
Chrysene	ND	0.038	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[b]fluoranthene	ND	0.038	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo(j,k)fluoranthene	ND	0.038	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[a]pyrene	ND	0.038	EPA 8270E/SIM	2-27-20	2-27-20	
Indeno(1,2,3-c,d)pyrene	ND	0.038	EPA 8270E/SIM	2-27-20	2-27-20	
Dibenz[a,h]anthracene	ND	0.038	EPA 8270E/SIM	2-27-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>64</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>76</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>82</i>	<i>45 - 122</i>				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0227S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	2-27-20	2-27-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-27-20	2-27-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-27-20	2-27-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-27-20	2-27-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-27-20	2-27-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-27-20	2-27-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-27-20	2-27-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>88</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>87</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>97</i>	<i>45 - 122</i>				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
					Result	Recovery	Limits		RPD	Limit	
MATRIX SPIKES											
Laboratory ID:	02-275-11										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0598	0.0582	0.0833	0.0833	ND	72	70	44 - 111	3	21	
Acenaphthylene	0.0664	0.0645	0.0833	0.0833	ND	80	77	47 - 122	3	24	
Acenaphthene	0.0669	0.0656	0.0833	0.0833	ND	80	79	46 - 122	2	24	
Fluorene	0.0668	0.0673	0.0833	0.0833	ND	80	81	53 - 118	1	23	
Phenanthrene	0.0670	0.0673	0.0833	0.0833	ND	80	81	41 - 124	0	24	
Anthracene	0.0724	0.0720	0.0833	0.0833	ND	87	86	53 - 119	1	21	
Fluoranthene	0.0675	0.0701	0.0833	0.0833	ND	81	84	39 - 135	4	32	
Pyrene	0.0699	0.0692	0.0833	0.0833	ND	84	83	39 - 134	1	34	
Benzo[a]anthracene	0.0740	0.0747	0.0833	0.0833	ND	89	90	53 - 131	1	23	
Chrysene	0.0675	0.0677	0.0833	0.0833	ND	81	81	46 - 126	0	24	
Benzo[b]fluoranthene	0.0686	0.0698	0.0833	0.0833	ND	82	84	45 - 127	2	25	
Benzo(j,k)fluoranthene	0.0649	0.0673	0.0833	0.0833	ND	78	81	52 - 122	4	21	
Benzo[a]pyrene	0.0671	0.0706	0.0833	0.0833	ND	81	85	51 - 126	5	24	
Indeno(1,2,3-c,d)pyrene	0.0611	0.0649	0.0833	0.0833	ND	73	78	48 - 127	6	23	
Dibenz[a,h]anthracene	0.0663	0.0682	0.0833	0.0833	ND	80	82	51 - 124	3	22	
Benzo[g,h,i]perylene	0.0637	0.0662	0.0833	0.0833	ND	76	79	50 - 120	4	22	
<i>Surrogate:</i>											
2-Fluorobiphenyl						73	70	40 - 111			
Pyrene-d10						76	79	40 - 110			
Terphenyl-d14						84	84	45 - 122			



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	L3-B-10.0					
Laboratory ID:	02-275-02					
Naphthalene	ND	0.018	EPA 8270E/SIM	2-28-20	2-28-20	
2-Methylnaphthalene	ND	0.018	EPA 8270E/SIM	2-28-20	2-28-20	
1-Methylnaphthalene	ND	0.018	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]anthracene	ND	0.018	EPA 8270E/SIM	2-28-20	2-28-20	
Chrysene	ND	0.018	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[b]fluoranthene	ND	0.018	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo(j,k)fluoranthene	ND	0.018	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]pyrene	ND	0.018	EPA 8270E/SIM	2-28-20	2-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.018	EPA 8270E/SIM	2-28-20	2-28-20	
Dibenz[a,h]anthracene	ND	0.018	EPA 8270E/SIM	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>79</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>79</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>85</i>	<i>45 - 122</i>				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	E4-ESW-15.0					
Laboratory ID:	02-275-12					
Benzo[a]anthracene	ND	0.020	EPA 8270E/SIM	2-28-20	2-28-20	
Chrysene	ND	0.020	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[b]fluoranthene	ND	0.020	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[j,k]fluoranthene	ND	0.020	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]pyrene	ND	0.020	EPA 8270E/SIM	2-28-20	2-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.020	EPA 8270E/SIM	2-28-20	2-28-20	
Dibenz[a,h]anthracene	ND	0.020	EPA 8270E/SIM	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>67</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>68</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>72</i>	<i>45 - 122</i>				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	G4-ESW-15.0					
Laboratory ID:	02-275-13					
Benzo[a]anthracene	ND	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
Chrysene	ND	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[b]fluoranthene	ND	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[j,k]fluoranthene	ND	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]pyrene	ND	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
Dibenz[a,h]anthracene	ND	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>80</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>82</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>89</i>	<i>45 - 122</i>				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H4-ESW-15.0					
Laboratory ID:	02-275-14					
Benzo[a]anthracene	ND	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
Chrysene	ND	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[b]fluoranthene	ND	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[j,k]fluoranthene	ND	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]pyrene	ND	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
Dibenz[a,h]anthracene	ND	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>75</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>75</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>80</i>	<i>45 - 122</i>				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	F4-ESW-15.0					
Laboratory ID:	02-275-15					
Benzo[a]anthracene	0.020	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
Chrysene	0.020	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[b]fluoranthene	0.020	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[j,k]fluoranthene	ND	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]pyrene	0.021	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
Dibenz[a,h]anthracene	ND	0.015	EPA 8270E/SIM	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>71</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>72</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>77</i>	<i>45 - 122</i>				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0228S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>80</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>89</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>97</i>	<i>45 - 122</i>				



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
	MS	MSD	MS	MSD	Result	Recovery	Limits	RPD	Limit		
MATRIX SPIKES											
Laboratory ID:	02-275-13										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0616	0.0590	0.0833	0.0833	ND	74	71	44 - 111	4	21	
Acenaphthylene	0.0639	0.0563	0.0833	0.0833	ND	77	68	47 - 122	13	24	
Acenaphthene	0.0647	0.0569	0.0833	0.0833	ND	78	68	46 - 122	13	24	
Fluorene	0.0627	0.0569	0.0833	0.0833	ND	75	68	53 - 118	10	23	
Phenanthrene	0.0615	0.0570	0.0833	0.0833	ND	74	68	41 - 124	8	24	
Anthracene	0.0640	0.0598	0.0833	0.0833	ND	77	72	53 - 119	7	21	
Fluoranthene	0.0654	0.0610	0.0833	0.0833	ND	79	73	39 - 135	7	32	
Pyrene	0.0599	0.0568	0.0833	0.0833	ND	72	68	39 - 134	5	34	
Benzo[a]anthracene	0.0658	0.0614	0.0833	0.0833	ND	79	74	53 - 131	7	23	
Chrysene	0.0609	0.0571	0.0833	0.0833	ND	73	69	46 - 126	6	24	
Benzo[b]fluoranthene	0.0592	0.0555	0.0833	0.0833	ND	71	67	45 - 127	6	25	
Benzo(j,k)fluoranthene	0.0603	0.0569	0.0833	0.0833	ND	72	68	52 - 122	6	21	
Benzo[a]pyrene	0.0611	0.0571	0.0833	0.0833	ND	73	69	51 - 126	7	24	
Indeno(1,2,3-c,d)pyrene	0.0592	0.0558	0.0833	0.0833	ND	71	67	48 - 127	6	23	
Dibenz[a,h]anthracene	0.0596	0.0566	0.0833	0.0833	ND	72	68	51 - 124	5	22	
Benzo[g,h,i]perylene	0.0587	0.0554	0.0833	0.0833	ND	70	67	50 - 120	6	22	
<i>Surrogate:</i>											
2-Fluorobiphenyl						63	66	40 - 111			
Pyrene-d10						65	69	40 - 110			
Terphenyl-d14						69	72	45 - 122			



Date of Report: March 6, 2020
 Samples Submitted: February 27, 2020
 Laboratory Reference: 2002-275
 Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
M1-ESW-10.0	02-275-01	35	2-27-20
L3-B-10.0	02-275-02	63	2-28-20
K4-B-15.0	02-275-03	25	2-27-20
K4-B-10.0	02-275-04	62	2-27-20
J2-B-15.0	02-275-05	64	2-27-20
G2-B-15.0	02-275-06	58	2-27-20
F2-B-15.0	02-275-07	65	2-27-20
D2-B-15.0	02-275-08	65	2-27-20
B2-B-15.0	02-275-09	56	2-27-20
C2-B-15.0	02-275-10	68	2-27-20
G3-B-15.0	02-275-11	82	2-27-20
E4-ESW-15.0	02-275-12	66	2-27-20
G4-ESW-15.0	02-275-13	55	2-27-20
H4-ESW-15.0	02-275-14	54	2-27-20
F4-ESW-15.0	02-275-15	56	2-27-20





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 methods 8260 & 8270, 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





MVA Onsite Environmental Inc.
Analytical Laboratory Testing Services

14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

See individual sample line

(other)

Laboratory Number:

02-275

Company: Favallon
Project Number: 397-019
Project Name: Block 38 West
Project Manager: Suzy Stumpf
Sampled by: Greg Peters

Lab ID	Sample Identification	TAT
1	M1-ESW-10.0	2-day
2	L3-B-10.0	-
3	K4-B-15.0	2-day
4	K4-B-10.0	2-day
5	J2-B-15.0	2-day
6	G2-B-15.0	2-day
7	F2-B-15.0	2-day
8	D2-B-15.0	2-day
9	B2-B-15.0	2-day
10	C2-B-15.0	2-day

Date Sampled	Time Sampled	Matrix	Number of Containers
2/26/20	0730	Soil	5
	0740		
	0800		
	0810		
	0900		
	0920		
	0930		
	0940		
	0950		
	1000		

Method	Result	Notes
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)		<u>CPAHs + naphthalenes</u>
PCBs 8082A		
Organochlorine Pesticides 8081B		
Organophosphorus Pesticides 8270D/SIM		
Chlorinated Acid Herbicides 8151A		
Total RCRA Metals		
Total MTCA Metals		
TCLP Metals		
HEM (oil and grease) 1664A		<u>Hold</u>
% Moisture		

Signature: [Signature] Company: Favallon Date: 2/27/20 Time: 0915 Comments/Special Instructions: Contact Project Manager for sample analysis and TAT.

Relinquished: [Signature] Received: [Signature] Relinquished: [Signature] Received: [Signature]

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



**OnSite
Environmental Inc.**

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

March 2, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-293

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 28, 2020.

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,

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: March 2, 2020
Samples Submitted: February 28, 2020
Laboratory Reference: 2002-293
Project: 397-019

Case Narrative

Samples were collected on February 27, 2020 and received by the laboratory on February 28, 2020. 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.



Date of Report: March 2, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-293
 Project: 397-019

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H4-SSW-15.0					
Laboratory ID:	02-293-01					
Gasoline	ND	21	NWTPH-Gx	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>98</i>	<i>58-129</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-293
 Project: 397-019

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0228S1					
Gasoline	ND	5.0	NWTPH-Gx	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	<i>88</i>	<i>58-129</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	02-293-01							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				<i>98</i>	<i>98</i>	<i>58-129</i>		



Date of Report: March 2, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-293
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H4-SSW-15.0					
Laboratory ID:	02-293-01					
Diesel Range Organics	ND	65	NWTPH-Dx	2-28-20	2-28-20	
Lube Oil Range Organics	170	130	NWTPH-Dx	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>78</i>	<i>50-150</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-293
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0228S1					
Diesel Range Organics	ND	25	NWTPH-Dx	2-28-20	2-28-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>91</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0228S1							
	ORIG	DUP						
Diesel Fuel #2	89.5	80.2	NA	NA	NA	NA	11	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>91</i>	<i>88</i>	<i>50-150</i>		



Date of Report: March 2, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-293
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H4-SSW-15.0					
Laboratory ID:	02-293-01					
Benzo[a]anthracene	ND	0.017	EPA 8270E/SIM	2-28-20	2-28-20	
Chrysene	ND	0.017	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[b]fluoranthene	ND	0.017	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo(j,k)fluoranthene	ND	0.017	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]pyrene	ND	0.017	EPA 8270E/SIM	2-28-20	2-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.017	EPA 8270E/SIM	2-28-20	2-28-20	
Dibenz[a,h]anthracene	ND	0.017	EPA 8270E/SIM	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>68</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>72</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>80</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-293
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	D3-B-15					
Laboratory ID:	02-293-05					
Benzo[a]anthracene	ND	0.020	EPA 8270E/SIM	2-28-20	2-28-20	
Chrysene	ND	0.020	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[b]fluoranthene	ND	0.020	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo(j,k)fluoranthene	ND	0.020	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]pyrene	ND	0.020	EPA 8270E/SIM	2-28-20	2-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.020	EPA 8270E/SIM	2-28-20	2-28-20	
Dibenz[a,h]anthracene	ND	0.020	EPA 8270E/SIM	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>60</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>66</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>69</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-293
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	C3-B-15					
Laboratory ID:	02-293-06					
Benzo[a]anthracene	0.11	0.014	EPA 8270E/SIM	2-28-20	2-28-20	
Chrysene	0.087	0.014	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[b]fluoranthene	0.075	0.014	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo(j,k)fluoranthene	0.021	0.014	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]pyrene	0.059	0.014	EPA 8270E/SIM	2-28-20	2-28-20	
Indeno(1,2,3-c,d)pyrene	0.028	0.014	EPA 8270E/SIM	2-28-20	2-28-20	
Dibenz[a,h]anthracene	ND	0.014	EPA 8270E/SIM	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>59</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>63</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>72</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-293
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B3-B-15					
Laboratory ID:	02-293-09					
Benzo[a]anthracene	ND	0.0096	EPA 8270E/SIM	2-28-20	2-28-20	
Chrysene	ND	0.0096	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[b]fluoranthene	ND	0.0096	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo(j,k)fluoranthene	ND	0.0096	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]pyrene	ND	0.0096	EPA 8270E/SIM	2-28-20	2-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0096	EPA 8270E/SIM	2-28-20	2-28-20	
Dibenz[a,h]anthracene	ND	0.0096	EPA 8270E/SIM	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>68</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>68</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>78</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-293
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0228S1					
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[j,k]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>80</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>89</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>97</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-293
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	Limit			
SPIKE BLANKS										
Laboratory ID:	SB0228S1									
	SB	SBD	SB	SBD	SB	SBD				
Benzo[a]anthracene	0.0814	0.0842	0.0833	0.0833	98	101	64 - 127	3	15	
Chrysene	0.0770	0.0788	0.0833	0.0833	92	95	63 - 121	2	15	
Benzo[b]fluoranthene	0.0735	0.0770	0.0833	0.0833	88	92	61 - 122	5	15	
Benzo(j,k)fluoranthene	0.0763	0.0764	0.0833	0.0833	92	92	64 - 123	0	15	
Benzo[a]pyrene	0.0752	0.0767	0.0833	0.0833	90	92	62 - 122	2	15	
Indeno(1,2,3-c,d)pyrene	0.0686	0.0725	0.0833	0.0833	82	87	59 - 124	6	15	
Dibenz[a,h]anthracene	0.0759	0.0778	0.0833	0.0833	91	93	61 - 123	2	15	
<i>Surrogate:</i>										
<i>2-Fluorobiphenyl</i>					<i>81</i>	<i>81</i>	<i>40 - 111</i>			
<i>Pyrene-d10</i>					<i>88</i>	<i>90</i>	<i>40 - 110</i>			
<i>Terphenyl-d14</i>					<i>99</i>	<i>104</i>	<i>45 - 122</i>			



Date of Report: March 2, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-293
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H1-B-15.0					
Laboratory ID:	02-293-02					
Benzo[a]anthracene	3.0	0.071	EPA 8270E/SIM	2-28-20	3-2-20	
Chrysene	2.5	0.071	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo[b]fluoranthene	2.3	0.071	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo(j,k)fluoranthene	0.78	0.071	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo[a]pyrene	2.3	0.071	EPA 8270E/SIM	2-28-20	3-2-20	
Indeno(1,2,3-c,d)pyrene	1.2	0.071	EPA 8270E/SIM	2-28-20	3-2-20	
Dibenz[a,h]anthracene	0.22	0.071	EPA 8270E/SIM	2-28-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>72</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>73</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>82</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-293
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H1-SSW-15.0					
Laboratory ID:	02-293-03					
Benzo[a]anthracene	0.054	0.0091	EPA 8270E/SIM	2-28-20	2-28-20	
Chrysene	0.042	0.0091	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[b]fluoranthene	0.020	0.0091	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo(j,k)fluoranthene	ND	0.0091	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]pyrene	0.011	0.0091	EPA 8270E/SIM	2-28-20	2-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0091	EPA 8270E/SIM	2-28-20	2-28-20	
Dibenz[a,h]anthracene	ND	0.0091	EPA 8270E/SIM	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>71</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>72</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>80</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-293
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H1-ESW-15.0					
Laboratory ID:	02-293-04					
Benzo[a]anthracene	ND	0.010	EPA 8270E/SIM	2-28-20	2-28-20	
Chrysene	ND	0.010	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[b]fluoranthene	ND	0.010	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]pyrene	ND	0.010	EPA 8270E/SIM	2-28-20	2-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270E/SIM	2-28-20	2-28-20	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270E/SIM	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>69</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>69</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>79</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-293
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	D4-ESW-15					
Laboratory ID:	02-293-07					
Benzo[a]anthracene	ND	0.025	EPA 8270E/SIM	2-28-20	2-28-20	
Chrysene	ND	0.025	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[b]fluoranthene	ND	0.025	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo(j,k)fluoranthene	ND	0.025	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]pyrene	ND	0.025	EPA 8270E/SIM	2-28-20	2-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.025	EPA 8270E/SIM	2-28-20	2-28-20	
Dibenz[a,h]anthracene	ND	0.025	EPA 8270E/SIM	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>46</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>56</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>62</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-293
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	C4-ESW-15					
Laboratory ID:	02-293-08					
Benzo[a]anthracene	ND	0.021	EPA 8270E/SIM	2-28-20	2-28-20	
Chrysene	ND	0.021	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[b]fluoranthene	ND	0.021	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo(j,k)fluoranthene	ND	0.021	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]pyrene	ND	0.021	EPA 8270E/SIM	2-28-20	2-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.021	EPA 8270E/SIM	2-28-20	2-28-20	
Dibenz[a,h]anthracene	ND	0.021	EPA 8270E/SIM	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>47</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>55</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>59</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-293
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0228S1					
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>80</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>89</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>97</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-293
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery		RPD	RPD	Limit	Flags
					Result	Recovery	Limits	RPD	Limit				
MATRIX SPIKES													
Laboratory ID:	02-275-13												
	MS	MSD	MS	MSD		MS	MSD						
Benzo[a]anthracene	0.0658	0.0614	0.0833	0.0833	ND	79	74	53 - 131	7			23	
Chrysene	0.0609	0.0571	0.0833	0.0833	ND	73	69	46 - 126	6			24	
Benzo[b]fluoranthene	0.0592	0.0555	0.0833	0.0833	ND	71	67	45 - 127	6			25	
Benzo(j,k)fluoranthene	0.0603	0.0569	0.0833	0.0833	ND	72	68	52 - 122	6			21	
Benzo[a]pyrene	0.0611	0.0571	0.0833	0.0833	ND	73	69	51 - 126	7			24	
Indeno(1,2,3-c,d)pyrene	0.0592	0.0558	0.0833	0.0833	ND	71	67	48 - 127	6			23	
Dibenz[a,h]anthracene	0.0596	0.0566	0.0833	0.0833	ND	72	68	51 - 124	5			22	
<i>Surrogate:</i>													
2-Fluorobiphenyl						63	66	40 - 111					
Pyrene-d10						65	69	40 - 110					
Terphenyl-d14						69	72	45 - 122					



Date of Report: March 2, 2020
Samples Submitted: February 28, 2020
Laboratory Reference: 2002-293
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
H4-SSW-15.0	02-293-01	62	2-28-20
H1-B-15.0	02-293-02	53	2-28-20
H1-SSW-15.0	02-293-03	27	2-28-20
H1-ESW-15.0	02-293-04	34	2-28-20
D3-B-15	02-293-05	67	2-28-20
C3-B-15	02-293-06	52	2-28-20
D4-ESW-15	02-293-07	73	2-28-20
C4-ESW-15	02-293-08	69	2-28-20
B3-B-15	02-293-09	30	2-28-20





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 methods 8260 & 8270, 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





Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
 (in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

See individual samples (other)

Laboratory Number:

02-293

Company: **Favallon**
 Project Number: **307-019**
 Project Name: **Block 38 West**
 Project Manager: **Suey Stumpf**
 Sampled by: **G. Retzys / L. Thompson**

Lab ID: **AB-TAT**

Date Sampled: **2/27/20**
 Time Sampled: **0800**
 Matrix: **Soil S**

Number of Containers

NWTPH-HCID	
NWTPH-Gx/BTEX	
NWTPH-Gx	X
NWTPH-Dx (<input type="checkbox"/> Acid / SG Clean-up)	X
Volatiles 8260C	
Halogenated Volatiles 8260C	
EDB EPA 8011 (Waters Only)	
Semivolatiles 8270D/SIM (with low-level PAHs)	
PAHs 8270D/SIM (low-level)	X
CPAHs only	
PCBs 8082A	
Organochlorine Pesticides 8081B	
Organophosphorus Pesticides 8270D/SIM	
Chlorinated Acid Herbicides 8151A	
Total RCRA Metals	
Total MTCA Metals	
TCLP Metals	
HEM (oil and grease) 1664A	

Same Day TAT
 1 Day TAT
 7 Day TAT

% Moisture

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix
1	H4-SSW-15.0	2/27/20	0800	Soil S
2	H1-B-15.0		0815	
3	H1-SSW-15.0		0820	
4	H1-ESW-15.0		0830	
5	D3-B-15		1430	
6	C3-B-15		1440	
7	O4-ESW-15		1445	
8	C4-ESW-15		1450	
9	B3-B-15		1455	

Signature: *[Handwritten Signature]*

Company: **Favallon**

Date: **2/28/20**

Time: **9:38**

Comments/Special Instructions

Relinquished	
Received	
Relinquished	
Received	
Relinquished	
Received	
Relinquished	
Reviewed/Date	

Signature: *[Handwritten Signature]*

Date: **2/28/20**

Time: **9:38**

Comments/Special Instructions

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



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

March 3, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-303

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 28, 2020.

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



OnSite Environmental, Inc. 14648 NE 95th 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: March 3, 2020
Samples Submitted: February 28, 2020
Laboratory Reference: 2002-303
Project: 397-019

Case Narrative

Samples were collected on February 28, 2020 and received by the laboratory on February 28, 2020. 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.



Date of Report: March 3, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-303
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	D4-ESW-19.0					
Laboratory ID:	02-303-01					
Naphthalene	0.30	0.022	EPA 8270E/SIM	3-2-20	3-2-20	
2-Methylnaphthalene	0.22	0.022	EPA 8270E/SIM	3-2-20	3-2-20	
1-Methylnaphthalene	0.17	0.022	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[a]anthracene	0.032	0.022	EPA 8270E/SIM	3-2-20	3-2-20	
Chrysene	0.028	0.022	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[b]fluoranthene	ND	0.022	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo(j,k)fluoranthene	ND	0.022	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[a]pyrene	ND	0.022	EPA 8270E/SIM	3-2-20	3-2-20	
Indeno(1,2,3-c,d)pyrene	ND	0.022	EPA 8270E/SIM	3-2-20	3-2-20	
Dibenz[a,h]anthracene	ND	0.022	EPA 8270E/SIM	3-2-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>61</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>63</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>70</i>	<i>45 - 122</i>				



Date of Report: March 3, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-303
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	C4-ESW-19.0					
Laboratory ID:	02-303-02					
Benzo[a]anthracene	ND	0.021	EPA 8270E/SIM	3-2-20	3-2-20	
Chrysene	ND	0.021	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[b]fluoranthene	ND	0.021	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo(j,k)fluoranthene	ND	0.021	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[a]pyrene	ND	0.021	EPA 8270E/SIM	3-2-20	3-2-20	
Indeno(1,2,3-c,d)pyrene	ND	0.021	EPA 8270E/SIM	3-2-20	3-2-20	
Dibenz[a,h]anthracene	ND	0.021	EPA 8270E/SIM	3-2-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>75</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>78</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>85</i>	<i>45 - 122</i>				



Date of Report: March 3, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-303
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0302S2					
Naphthalene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	89	40 - 111				
<i>Pyrene-d10</i>	93	40 - 110				
<i>Terphenyl-d14</i>	99	45 - 122				



Date of Report: March 3, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-303
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
	SB	SBD	SB	SBD	SB	SBD				
SPIKE BLANKS										
Laboratory ID:	SB0302S2									
Naphthalene	0.0652	0.0681	0.0833	0.0833	78	82	57 - 109	4	15	
Acenaphthylene	0.0687	0.0708	0.0833	0.0833	82	85	60 - 121	3	15	
Acenaphthene	0.0691	0.0711	0.0833	0.0833	83	85	59 - 121	3	15	
Fluorene	0.0689	0.0687	0.0833	0.0833	83	82	63 - 119	0	15	
Phenanthrene	0.0683	0.0692	0.0833	0.0833	82	83	59 - 114	1	15	
Anthracene	0.0734	0.0735	0.0833	0.0833	88	88	63 - 119	0	15	
Fluoranthene	0.0745	0.0753	0.0833	0.0833	89	90	63 - 120	1	15	
Pyrene	0.0673	0.0689	0.0833	0.0833	81	83	62 - 119	2	15	
Benzo[a]anthracene	0.0763	0.0769	0.0833	0.0833	92	92	64 - 127	1	15	
Chrysene	0.0706	0.0697	0.0833	0.0833	85	84	63 - 121	1	15	
Benzo[b]fluoranthene	0.0673	0.0695	0.0833	0.0833	81	83	61 - 122	3	15	
Benzo(j,k)fluoranthene	0.0714	0.0698	0.0833	0.0833	86	84	64 - 123	2	15	
Benzo[a]pyrene	0.0677	0.0683	0.0833	0.0833	81	82	62 - 122	1	15	
Indeno(1,2,3-c,d)pyrene	0.0595	0.0614	0.0833	0.0833	71	74	59 - 124	3	15	
Dibenz[a,h]anthracene	0.0648	0.0662	0.0833	0.0833	78	79	61 - 123	2	15	
Benzo[g,h,i]perylene	0.0653	0.0668	0.0833	0.0833	78	80	61 - 119	2	15	
<i>Surrogate:</i>										
2-Fluorobiphenyl					83	83	40 - 111			
Pyrene-d10					85	83	40 - 110			
Terphenyl-d14					92	89	45 - 122			



Date of Report: March 3, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-303
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	K3-B-10.0					
Laboratory ID:	02-303-03					
Naphthalene	ND	0.0086	EPA 8270E/SIM	2-28-20	3-2-20	
2-Methylnaphthalene	ND	0.0086	EPA 8270E/SIM	2-28-20	3-2-20	
1-Methylnaphthalene	ND	0.0086	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo[a]anthracene	ND	0.0086	EPA 8270E/SIM	2-28-20	3-2-20	
Chrysene	ND	0.0086	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo[b]fluoranthene	ND	0.0086	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo(j,k)fluoranthene	ND	0.0086	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo[a]pyrene	ND	0.0086	EPA 8270E/SIM	2-28-20	3-2-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0086	EPA 8270E/SIM	2-28-20	3-2-20	
Dibenz[a,h]anthracene	ND	0.0086	EPA 8270E/SIM	2-28-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>70</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>66</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>77</i>	<i>45 - 122</i>				



Date of Report: March 3, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-303
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H3-B-10.0					
Laboratory ID:	02-303-04					
Naphthalene	ND	0.0077	EPA 8270E/SIM	2-28-20	3-2-20	
2-Methylnaphthalene	ND	0.0077	EPA 8270E/SIM	2-28-20	3-2-20	
1-Methylnaphthalene	ND	0.0077	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo[a]anthracene	ND	0.0077	EPA 8270E/SIM	2-28-20	3-2-20	
Chrysene	ND	0.0077	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo[b]fluoranthene	ND	0.0077	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo(j,k)fluoranthene	ND	0.0077	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo[a]pyrene	ND	0.0077	EPA 8270E/SIM	2-28-20	3-2-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0077	EPA 8270E/SIM	2-28-20	3-2-20	
Dibenz[a,h]anthracene	ND	0.0077	EPA 8270E/SIM	2-28-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>80</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>80</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>88</i>	<i>45 - 122</i>				



Date of Report: March 3, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-303
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	G3-B-10.0					
Laboratory ID:	02-303-05					
Naphthalene	0.058	0.0073	EPA 8270E/SIM	2-28-20	3-2-20	
2-Methylnaphthalene	0.13	0.0073	EPA 8270E/SIM	2-28-20	3-2-20	
1-Methylnaphthalene	0.051	0.0073	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo[a]anthracene	ND	0.0073	EPA 8270E/SIM	2-28-20	3-2-20	
Chrysene	ND	0.0073	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo[b]fluoranthene	ND	0.0073	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo(j,k)fluoranthene	ND	0.0073	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo[a]pyrene	ND	0.0073	EPA 8270E/SIM	2-28-20	3-2-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0073	EPA 8270E/SIM	2-28-20	3-2-20	
Dibenz[a,h]anthracene	ND	0.0073	EPA 8270E/SIM	2-28-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>82</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>78</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>87</i>	<i>45 - 122</i>				



Date of Report: March 3, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-303
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	L4-SSW-10.0					
Laboratory ID:	02-303-06					
Naphthalene	0.028	0.0081	EPA 8270E/SIM	2-28-20	3-2-20	
2-Methylnaphthalene	0.010	0.0081	EPA 8270E/SIM	2-28-20	3-2-20	
1-Methylnaphthalene	ND	0.0081	EPA 8270E/SIM	2-28-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>79</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>77</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>86</i>	<i>45 - 122</i>				



Date of Report: March 3, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-303
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	J2-B-10.0					
Laboratory ID:	02-303-07					
Naphthalene	0.15	0.0081	EPA 8270E/SIM	2-28-20	3-2-20	
2-Methylnaphthalene	0.15	0.0081	EPA 8270E/SIM	2-28-20	3-2-20	
1-Methylnaphthalene	0.076	0.0081	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo[a]anthracene	0.034	0.0081	EPA 8270E/SIM	2-28-20	3-2-20	
Chrysene	0.023	0.0081	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo[b]fluoranthene	0.015	0.0081	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo(j,k)fluoranthene	ND	0.0081	EPA 8270E/SIM	2-28-20	3-2-20	
Benzo[a]pyrene	0.0085	0.0081	EPA 8270E/SIM	2-28-20	3-2-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0081	EPA 8270E/SIM	2-28-20	3-2-20	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270E/SIM	2-28-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>77</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>75</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>83</i>	<i>45 - 122</i>				



Date of Report: March 3, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-303
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	L2-B-10.0					
Laboratory ID:	02-303-08					
Naphthalene	ND	0.0089	EPA 8270E/SIM	2-28-20	3-2-20	
2-Methylnaphthalene	ND	0.0089	EPA 8270E/SIM	2-28-20	3-2-20	
1-Methylnaphthalene	ND	0.0089	EPA 8270E/SIM	2-28-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>76</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>76</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>84</i>	<i>45 - 122</i>				



Date of Report: March 3, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-303
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	I2-B-10.0					
Laboratory ID:	02-303-09					
Naphthalene	ND	0.0074	EPA 8270E/SIM	2-28-20	3-2-20	
2-Methylnaphthalene	ND	0.0074	EPA 8270E/SIM	2-28-20	3-2-20	
1-Methylnaphthalene	ND	0.0074	EPA 8270E/SIM	2-28-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>81</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>81</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>88</i>	<i>45 - 122</i>				



Date of Report: March 3, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-303
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0228S2					
Naphthalene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	2-28-20	2-28-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>81</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>85</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>89</i>	<i>45 - 122</i>				



Date of Report: March 3, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-303
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
	SB	SBD	SB	SBD	SB	SBD				
SPIKE BLANKS										
Laboratory ID:	SB0228S2									
Naphthalene	0.0798	0.0727	0.0833	0.0833	96	87	57 - 109	9	15	
Acenaphthylene	0.0737	0.0676	0.0833	0.0833	88	81	60 - 121	9	15	
Acenaphthene	0.0737	0.0682	0.0833	0.0833	88	82	59 - 121	8	15	
Fluorene	0.0729	0.0691	0.0833	0.0833	88	83	63 - 119	5	15	
Phenanthrene	0.0713	0.0690	0.0833	0.0833	86	83	59 - 114	3	15	
Anthracene	0.0765	0.0739	0.0833	0.0833	92	89	63 - 119	3	15	
Fluoranthene	0.0740	0.0744	0.0833	0.0833	89	89	63 - 120	1	15	
Pyrene	0.0726	0.0714	0.0833	0.0833	87	86	62 - 119	2	15	
Benzo[a]anthracene	0.0821	0.0761	0.0833	0.0833	99	91	64 - 127	8	15	
Chrysene	0.0713	0.0709	0.0833	0.0833	86	85	63 - 121	1	15	
Benzo[b]fluoranthene	0.0770	0.0680	0.0833	0.0833	92	82	61 - 122	12	15	
Benzo(j,k)fluoranthene	0.0689	0.0716	0.0833	0.0833	83	86	64 - 123	4	15	
Benzo[a]pyrene	0.0724	0.0697	0.0833	0.0833	87	84	62 - 122	4	15	
Indeno(1,2,3-c,d)pyrene	0.0700	0.0684	0.0833	0.0833	84	82	59 - 124	2	15	
Dibenz[a,h]anthracene	0.0728	0.0705	0.0833	0.0833	87	85	61 - 123	3	15	
Benzo[g,h,i]perylene	0.0710	0.0687	0.0833	0.0833	85	82	61 - 119	3	15	
<i>Surrogate:</i>										
2-Fluorobiphenyl					86	86	40 - 111			
Pyrene-d10					86	86	40 - 110			
Terphenyl-d14					95	91	45 - 122			



Date of Report: March 3, 2020
Samples Submitted: February 28, 2020
Laboratory Reference: 2002-303
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
D4-ESW-19.0	02-303-01	70	2-28-20
C4-ESW-19.0	02-303-02	69	2-28-20
K3-B-10.0	02-303-03	22	2-28-20
H3-B-10.0	02-303-04	13	2-28-20
G3-B-10.0	02-303-05	9	2-28-20
L4-SSW-10.0	02-303-06	18	2-28-20
J2-B-10.0	02-303-07	17	2-28-20
L2-B-10.0	02-303-08	25	2-28-20
I2-B-10.0	02-303-09	9	2-28-20





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 methods 8260 & 8270, 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





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

March 4, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2002-303B

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on February 28, 2020.

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



OnSite Environmental, Inc. 14648 NE 95th 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: March 4, 2020
Samples Submitted: February 28, 2020
Laboratory Reference: 2002-303B
Project: 397-019

Case Narrative

Samples were collected on February 28, 2020 and received by the laboratory on February 28, 2020. 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.



Date of Report: March 4, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-303B
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	K3-B-10.0					
Laboratory ID:	02-303-03					
Diesel Range Organics	ND	32	NWTPH-Dx	3-4-20	3-4-20	
Lube Oil Range Organics	ND	64	NWTPH-Dx	3-4-20	3-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>80</i>	<i>50-150</i>				
Client ID:	L2-B-10.0					
Laboratory ID:	02-303-08					
Diesel Range Organics	ND	33	NWTPH-Dx	3-4-20	3-4-20	
Lube Oil Range Organics	ND	67	NWTPH-Dx	3-4-20	3-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>74</i>	<i>50-150</i>				
Client ID:	I2-B-10.0					
Laboratory ID:	02-303-09					
Diesel Range Organics	ND	28	NWTPH-Dx	3-4-20	3-4-20	
Lube Oil Range Organics	ND	55	NWTPH-Dx	3-4-20	3-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>76</i>	<i>50-150</i>				



Date of Report: March 4, 2020
 Samples Submitted: February 28, 2020
 Laboratory Reference: 2002-303B
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0304S1					
Diesel Range Organics	ND	25	NWTPH-Dx	3-4-20	3-4-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	3-4-20	3-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>100</i>	<i>50-150</i>				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0304S1							
	ORIG	DUP						
Diesel Fuel #2	93.0	89.8	NA	NA	NA	NA	4	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				<i>88</i>	<i>84</i>	<i>50-150</i>		



Date of Report: March 4, 2020
Samples Submitted: February 28, 2020
Laboratory Reference: 2002-303B
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
K3-B-10.0	02-303-03	22	2-28-20
L2-B-10.0	02-303-08	25	2-28-20
I2-B-10.0	02-303-09	9	2-28-20





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 methods 8260 & 8270, 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





**OnSite
Environmental Inc.**

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

March 2, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2003-002

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on March 2, 2020.

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,

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: March 2, 2020
Samples Submitted: March 2, 2020
Laboratory Reference: 2003-002
Project: 397-019

Case Narrative

Samples were collected on February 29, 2020 and received by the laboratory on March 2, 2020. 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.



Date of Report: March 2, 2020
 Samples Submitted: March 2, 2020
 Laboratory Reference: 2003-002
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	F1-B-10.0					
Laboratory ID:	03-002-06					
Benzo[a]anthracene	ND	0.0090	EPA 8270E/SIM	3-2-20	3-2-20	
Chrysene	ND	0.0090	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[b]fluoranthene	ND	0.0090	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo(j,k)fluoranthene	ND	0.0090	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[a]pyrene	ND	0.0090	EPA 8270E/SIM	3-2-20	3-2-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0090	EPA 8270E/SIM	3-2-20	3-2-20	
Dibenz[a,h]anthracene	ND	0.0090	EPA 8270E/SIM	3-2-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>70</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>68</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>77</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: March 2, 2020
 Laboratory Reference: 2003-002
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	F2-B-10.0					
Laboratory ID:	03-002-07					
Benzo[a]anthracene	ND	0.0081	EPA 8270E/SIM	3-2-20	3-2-20	
Chrysene	ND	0.0081	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[b]fluoranthene	ND	0.0081	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo(j,k)fluoranthene	ND	0.0081	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[a]pyrene	ND	0.0081	EPA 8270E/SIM	3-2-20	3-2-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0081	EPA 8270E/SIM	3-2-20	3-2-20	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270E/SIM	3-2-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>73</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>74</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>86</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: March 2, 2020
 Laboratory Reference: 2003-002
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0302S2					
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[j,k]fluoranthene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>89</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>93</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>99</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: March 2, 2020
 Laboratory Reference: 2003-002
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
							Limits		Limit	
SPIKE BLANKS										
Laboratory ID:	SB0302S2									
	SB	SBD	SB	SBD	SB	SBD				
Benzo[a]anthracene	0.0763	0.0769	0.0833	0.0833	92	92	64 - 127	1	15	
Chrysene	0.0706	0.0697	0.0833	0.0833	85	84	63 - 121	1	15	
Benzo[b]fluoranthene	0.0673	0.0695	0.0833	0.0833	81	83	61 - 122	3	15	
Benzo(j,k)fluoranthene	0.0714	0.0698	0.0833	0.0833	86	84	64 - 123	2	15	
Benzo[a]pyrene	0.0677	0.0683	0.0833	0.0833	81	82	62 - 122	1	15	
Indeno(1,2,3-c,d)pyrene	0.0595	0.0614	0.0833	0.0833	71	74	59 - 124	3	15	
Dibenz[a,h]anthracene	0.0648	0.0662	0.0833	0.0833	78	79	61 - 123	2	15	
<i>Surrogate:</i>										
<i>2-Fluorobiphenyl</i>					<i>83</i>	<i>83</i>	<i>40 - 111</i>			
<i>Pyrene-d10</i>					<i>85</i>	<i>83</i>	<i>40 - 110</i>			
<i>Terphenyl-d14</i>					<i>92</i>	<i>89</i>	<i>45 - 122</i>			



Date of Report: March 2, 2020
Samples Submitted: March 2, 2020
Laboratory Reference: 2003-002
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
F1-B-10.0	03-002-06	26	3-2-20
F2-B-10.0	03-002-07	17	3-2-20





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 methods 8260 & 8270, 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
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3981 • www.onsite-env.com

Chain of Custody

Turnaround Request
 (in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

see individual samples

(other)

Laboratory Number: ~~02-508~~ **03-002**

Company: *Favallan*

Project Number: *397-019*

Project Name: *Block 38*

Project Manager: *Suzy Stumpf*

Sampled by: *Gregg DeFors*

Lab ID	Sample Identification	TAT
1	F1-WSW-19.0	
2	F1-WSW-15.0	
3	G1-WSW-19.0	
4	G1-WSW-15.0	
5	F1-WSW-10.0	
6	F1-B-10.0	same day
7	F2-B-10.0	same day

Date Sampled	Time Sampled	Matrix	Number of Containers
<i>2/29/20</i>	<i>1030</i>	<i>Soil</i>	<i>5</i>

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)	
<i>CPAHs</i>	
PCBs 8082A	
Organochlorine Pesticides 8081B	
Organophosphorus Pesticides 8270D/SIM	
Chlorinated Acid Herbicides 8151A	
Total RCRA Metals	
Total MTCA Metals	
TCLP Metals	
HEM (oil and grease) 1664A	
<i>Mold</i>	
% Moisture	

Signature	Company	Date	Time	Comments/Special Instructions
<i>[Signature]</i>	<i>Favallan</i>	<i>2/29/20</i>	<i>1700</i>	<i>Contact project manager for sample analysis and turnaround time.</i>
<i>[Signature]</i>	<i>Favallan</i>	<i>2/29/20</i>	<i>1700</i>	
<i>[Signature]</i>	<i>Favallan</i>	<i>3/2/20</i>	<i>10:00</i>	
<i>[Signature]</i>	<i>SPEEDY</i>	<i>3/2/20</i>	<i>10:55</i>	
<i>[Signature]</i>	<i>SPEEDY</i>	<i>3/2/20</i>	<i>10:55</i>	
<i>[Signature]</i>	<i>SPEEDY</i>	<i>3/2/20</i>	<i>10:55</i>	
<i>[Signature]</i>	<i>SPEEDY</i>	<i>3/2/20</i>	<i>10:55</i>	

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

March 2, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2003-002

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on March 2, 2020.

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



OnSite Environmental, Inc. 14648 NE 95th 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: March 2, 2020
Samples Submitted: March 2, 2020
Laboratory Reference: 2003-002
Project: 397-019

Case Narrative

Samples were collected on February 29, 2020 and received by the laboratory on March 2, 2020. 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.



Date of Report: March 2, 2020
 Samples Submitted: March 2, 2020
 Laboratory Reference: 2003-002
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	F1-B-10.0					
Laboratory ID:	03-002-06					
Benzo[a]anthracene	ND	0.0090	EPA 8270E/SIM	3-2-20	3-2-20	
Chrysene	ND	0.0090	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[b]fluoranthene	ND	0.0090	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo(j,k)fluoranthene	ND	0.0090	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[a]pyrene	ND	0.0090	EPA 8270E/SIM	3-2-20	3-2-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0090	EPA 8270E/SIM	3-2-20	3-2-20	
Dibenz[a,h]anthracene	ND	0.0090	EPA 8270E/SIM	3-2-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>70</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>68</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>77</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: March 2, 2020
 Laboratory Reference: 2003-002
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	F2-B-10.0					
Laboratory ID:	03-002-07					
Benzo[a]anthracene	ND	0.0081	EPA 8270E/SIM	3-2-20	3-2-20	
Chrysene	ND	0.0081	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[b]fluoranthene	ND	0.0081	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo(j,k)fluoranthene	ND	0.0081	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[a]pyrene	ND	0.0081	EPA 8270E/SIM	3-2-20	3-2-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0081	EPA 8270E/SIM	3-2-20	3-2-20	
Dibenz[a,h]anthracene	ND	0.0081	EPA 8270E/SIM	3-2-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>73</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>74</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>86</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: March 2, 2020
 Laboratory Reference: 2003-002
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0302S2					
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[j,k]fluoranthene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	3-2-20	3-2-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>89</i>	<i>40 - 111</i>				
<i>Pyrene-d10</i>	<i>93</i>	<i>40 - 110</i>				
<i>Terphenyl-d14</i>	<i>99</i>	<i>45 - 122</i>				



Date of Report: March 2, 2020
 Samples Submitted: March 2, 2020
 Laboratory Reference: 2003-002
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
							Limits		Limit	
SPIKE BLANKS										
Laboratory ID:	SB0302S2									
	SB	SBD	SB	SBD	SB	SBD				
Benzo[a]anthracene	0.0763	0.0769	0.0833	0.0833	92	92	64 - 127	1	15	
Chrysene	0.0706	0.0697	0.0833	0.0833	85	84	63 - 121	1	15	
Benzo[b]fluoranthene	0.0673	0.0695	0.0833	0.0833	81	83	61 - 122	3	15	
Benzo(j,k)fluoranthene	0.0714	0.0698	0.0833	0.0833	86	84	64 - 123	2	15	
Benzo[a]pyrene	0.0677	0.0683	0.0833	0.0833	81	82	62 - 122	1	15	
Indeno(1,2,3-c,d)pyrene	0.0595	0.0614	0.0833	0.0833	71	74	59 - 124	3	15	
Dibenz[a,h]anthracene	0.0648	0.0662	0.0833	0.0833	78	79	61 - 123	2	15	
<i>Surrogate:</i>										
<i>2-Fluorobiphenyl</i>					<i>83</i>	<i>83</i>	<i>40 - 111</i>			
<i>Pyrene-d10</i>					<i>85</i>	<i>83</i>	<i>40 - 110</i>			
<i>Terphenyl-d14</i>					<i>92</i>	<i>89</i>	<i>45 - 122</i>			



Date of Report: March 2, 2020
Samples Submitted: March 2, 2020
Laboratory Reference: 2003-002
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
F1-B-10.0	03-002-06	26	3-2-20
F2-B-10.0	03-002-07	17	3-2-20





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 methods 8260 & 8270, 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
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

see individual samples

(other)

Laboratory Number: ~~02-508~~ **03-002**

Company: *Favallan*

Project Number: *397-019*

Project Name: *Block 38*

Project Manager: *Suzy Stumpf*

Sampled by: *Gregg DeFors*

Lab ID	Sample Identification	TAT	Date Sampled	Time Sampled	Matrix	Number of Containers
1	F1-WSW-19.0		2/29/20	1030	Soil	5
2	F1-WSW-15.0			1040		
3	G1-WSW-19.0			1045		
4	G1-WSW-15.0			1050		
5	F1-WSW-10.0			1440		
6	F1-B-10.0	same day		1445		
7	F2-B-10.0	same day		1535		

Method	Result
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)	
CPAHs	
PCBs 8082A	
Organochlorine Pesticides 8081B	
Organophosphorus Pesticides 8270D/SIM	
Chlorinated Acid Herbicides 8151A	
Total RCRA Metals	
Total MTCA Metals	
TCLP Metals	
HEM (oil and grease) 1664A	
<i>Mold</i>	
% Moisture	

Signature	Company	Date	Time	Comments/Special Instructions
<i>[Signature]</i>	<i>Favallan</i>	<i>2/29/20</i>	<i>1700</i>	<i>Contact project manager for sample analysis and turnaround time.</i>
<i>[Signature]</i>	<i>Favallan</i>	<i>2/29/20</i>	<i>1700</i>	
<i>[Signature]</i>	<i>Favallan</i>	<i>3/2/20</i>	<i>10:00</i>	
<i>[Signature]</i>	<i>SPEEDY</i>	<i>3/2/20</i>	<i>10:55</i>	
<i>[Signature]</i>	<i>SPEEDY</i>	<i>3/2/20</i>	<i>10:55</i>	
<i>[Signature]</i>	<i>SPEEDY</i>	<i>3/2/20</i>	<i>10:55</i>	
<i>[Signature]</i>	<i>SPEEDY</i>	<i>3/2/20</i>	<i>10:55</i>	

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

April 30, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2004-206

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on April 29, 2020.

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 "D. Baumeister", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: April 30, 2020
Samples Submitted: April 29, 2020
Laboratory Reference: 2004-206
Project: 397-019

Case Narrative

Samples were collected on April 29, 2020 and received by the laboratory on April 29, 2020. 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.



Date of Report: April 30, 2020
 Samples Submitted: April 29, 2020
 Laboratory Reference: 2004-206
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	A2-B-(-5.0)					
Laboratory ID:	04-206-01					
Diesel Range Organics	ND	27	NWTPH-Dx	4-29-20	4-29-20	
Lube Oil Range Organics	ND	53	NWTPH-Dx	4-29-20	4-29-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	86	50-150				



Date of Report: April 30, 2020
 Samples Submitted: April 29, 2020
 Laboratory Reference: 2004-206
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0429S1					
Diesel Range Organics	ND	25	NWTPH-Dx	4-29-20	4-29-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	4-29-20	4-29-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	103	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	SB0429S1							
	ORIG	DUP						
Diesel Fuel #2	89.9	74.8	NA	NA	NA	18	NA	
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				93	85	50-150		



Date of Report: April 30, 2020
Samples Submitted: April 29, 2020
Laboratory Reference: 2004-206
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
A2-B-(-5.0)	04-206-01	6	4-29-20





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 methods 8260 & 8270, 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





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

May 5, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2004-218

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on April 30, 2020.

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 "D. Baumeister", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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 5, 2020
Samples Submitted: April 30, 2020
Laboratory Reference: 2004-218
Project: 397-019

Case Narrative

Samples were collected on April 30, 2020 and received by the laboratory on April 30, 2020. 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.



Date of Report: May 5, 2020
 Samples Submitted: April 30, 2020
 Laboratory Reference: 2004-218
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M2-B-0.0					
Laboratory ID:	04-218-01					
Benzo[a]anthracene	0.074	0.0078	EPA 8270E/SIM	5-4-20	5-4-20	
Chrysene	0.046	0.0078	EPA 8270E/SIM	5-4-20	5-4-20	
Benzo[b]fluoranthene	0.029	0.0078	EPA 8270E/SIM	5-4-20	5-4-20	
Benzo(j,k)fluoranthene	0.0085	0.0078	EPA 8270E/SIM	5-4-20	5-4-20	
Benzo[a]pyrene	0.015	0.0078	EPA 8270E/SIM	5-4-20	5-4-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0078	EPA 8270E/SIM	5-4-20	5-4-20	
Dibenz[a,h]anthracene	ND	0.0078	EPA 8270E/SIM	5-4-20	5-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>88</i>	<i>46 - 113</i>				
<i>Pyrene-d10</i>	<i>87</i>	<i>45 - 114</i>				
<i>Terphenyl-d14</i>	<i>92</i>	<i>49 - 121</i>				



Date of Report: May 5, 2020
 Samples Submitted: April 30, 2020
 Laboratory Reference: 2004-218
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0504S1					
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>92</i>	<i>46 - 113</i>				
<i>Pyrene-d10</i>	<i>92</i>	<i>45 - 114</i>				
<i>Terphenyl-d14</i>	<i>98</i>	<i>49 - 121</i>				



Date of Report: May 5, 2020
 Samples Submitted: April 30, 2020
 Laboratory Reference: 2004-218
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
							Limits		Limit	
SPIKE BLANKS										
Laboratory ID:	SB0504S1									
	SB	SBD	SB	SBD	SB	SBD				
Benzo[a]anthracene	0.0855	0.0886	0.0833	0.0833	103	106	72 - 129	4	15	
Chrysene	0.0775	0.0798	0.0833	0.0833	93	96	66 - 123	3	15	
Benzo[b]fluoranthene	0.0793	0.0788	0.0833	0.0833	95	95	68 - 128	1	15	
Benzo(j,k)fluoranthene	0.0768	0.0820	0.0833	0.0833	92	98	63 - 128	7	16	
Benzo[a]pyrene	0.0788	0.0809	0.0833	0.0833	95	97	66 - 130	3	15	
Indeno(1,2,3-c,d)pyrene	0.0730	0.0735	0.0833	0.0833	88	88	63 - 135	1	15	
Dibenz[a,h]anthracene	0.0758	0.0781	0.0833	0.0833	91	94	65 - 130	3	15	
<i>Surrogate:</i>										
2-Fluorobiphenyl					91	94	46 - 113			
Pyrene-d10					90	92	45 - 114			
Terphenyl-d14					95	98	49 - 121			



Date of Report: May 5, 2020
Samples Submitted: April 30, 2020
Laboratory Reference: 2004-218
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
M2-B-0.0	04-218-01	14	5-4-20





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 methods 8260 & 8270, 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





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

May 5, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2005-017

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on May 4, 2020.

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



OnSite Environmental, Inc. 14648 NE 95th 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 5, 2020
Samples Submitted: May 4, 2020
Laboratory Reference: 2005-017
Project: 397-019

Case Narrative

Samples were collected on May 4, 2020 and received by the laboratory on May 4, 2020. 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.



Date of Report: May 5, 2020
 Samples Submitted: May 4, 2020
 Laboratory Reference: 2005-017
 Project: 397-019

cPAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	H1-B-5.0					
Laboratory ID:	05-017-01					
Benzo[a]anthracene	0.019	0.0079	EPA 8270E/SIM	5-4-20	5-4-20	
Chrysene	0.022	0.0079	EPA 8270E/SIM	5-4-20	5-4-20	
Benzo[b]fluoranthene	ND	0.0079	EPA 8270E/SIM	5-4-20	5-4-20	
Benzo(j,k)fluoranthene	ND	0.0079	EPA 8270E/SIM	5-4-20	5-4-20	
Benzo[a]pyrene	ND	0.0079	EPA 8270E/SIM	5-4-20	5-4-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0079	EPA 8270E/SIM	5-4-20	5-4-20	
Dibenz[a,h]anthracene	ND	0.0079	EPA 8270E/SIM	5-4-20	5-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>86</i>	<i>46 - 113</i>				
<i>Pyrene-d10</i>	<i>83</i>	<i>45 - 114</i>				
<i>Terphenyl-d14</i>	<i>87</i>	<i>49 - 121</i>				



Date of Report: May 5, 2020
 Samples Submitted: May 4, 2020
 Laboratory Reference: 2005-017
 Project: 397-019

SEMIVOLATILE ORGANICS EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	K2-B-0.0					
Laboratory ID:	05-017-03					
Naphthalene	ND	0.0082	EPA 8270E/SIM	5-4-20	5-4-20	
2-Methylnaphthalene	ND	0.0082	EPA 8270E/SIM	5-4-20	5-4-20	
1-Methylnaphthalene	ND	0.0082	EPA 8270E/SIM	5-4-20	5-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>77</i>	<i>46 - 113</i>				
<i>Pyrene-d10</i>	<i>73</i>	<i>45 - 114</i>				
<i>Terphenyl-d14</i>	<i>76</i>	<i>49 - 121</i>				



Date of Report: May 5, 2020
 Samples Submitted: May 4, 2020
 Laboratory Reference: 2005-017
 Project: 397-019

cPAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	L2-B-0.0					
Laboratory ID:	05-017-04					
Benzo[a]anthracene	ND	0.0071	EPA 8270E/SIM	5-4-20	5-4-20	
Chrysene	ND	0.0071	EPA 8270E/SIM	5-4-20	5-4-20	
Benzo[b]fluoranthene	ND	0.0071	EPA 8270E/SIM	5-4-20	5-4-20	
Benzo(j,k)fluoranthene	ND	0.0071	EPA 8270E/SIM	5-4-20	5-4-20	
Benzo[a]pyrene	ND	0.0071	EPA 8270E/SIM	5-4-20	5-4-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0071	EPA 8270E/SIM	5-4-20	5-4-20	
Dibenz[a,h]anthracene	ND	0.0071	EPA 8270E/SIM	5-4-20	5-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>82</i>	<i>46 - 113</i>				
<i>Pyrene-d10</i>	<i>82</i>	<i>45 - 114</i>				
<i>Terphenyl-d14</i>	<i>86</i>	<i>49 - 121</i>				



Date of Report: May 5, 2020
 Samples Submitted: May 4, 2020
 Laboratory Reference: 2005-017
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0504S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Acenaphthylene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Acenaphthene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Fluorene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Phenanthrene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Anthracene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Fluoranthene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Pyrene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270E/SIM	5-4-20	5-4-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>92</i>	<i>46 - 113</i>				
<i>Pyrene-d10</i>	<i>92</i>	<i>45 - 114</i>				
<i>Terphenyl-d14</i>	<i>98</i>	<i>49 - 121</i>				



Date of Report: May 5, 2020
 Samples Submitted: May 4, 2020
 Laboratory Reference: 2005-017
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
	SB	SBD	SB	SBD	SB	SBD				
SPIKE BLANKS										
Laboratory ID:	SB0504S1									
Naphthalene	0.0756	0.0795	0.0833	0.0833	91	95	60 - 116	5	16	
Acenaphthylene	0.0823	0.0818	0.0833	0.0833	99	98	60 - 125	1	15	
Acenaphthene	0.0767	0.0796	0.0833	0.0833	92	96	60 - 121	4	15	
Fluorene	0.0766	0.0796	0.0833	0.0833	92	96	65 - 126	4	15	
Phenanthrene	0.0756	0.0790	0.0833	0.0833	91	95	65 - 120	4	15	
Anthracene	0.0791	0.0812	0.0833	0.0833	95	97	67 - 125	3	15	
Fluoranthene	0.0765	0.0798	0.0833	0.0833	92	96	66 - 125	4	15	
Pyrene	0.0772	0.0794	0.0833	0.0833	93	95	62 - 125	3	15	
Benzo[a]anthracene	0.0855	0.0886	0.0833	0.0833	103	106	72 - 129	4	15	
Chrysene	0.0775	0.0798	0.0833	0.0833	93	96	66 - 123	3	15	
Benzo[b]fluoranthene	0.0793	0.0788	0.0833	0.0833	95	95	68 - 128	1	15	
Benzo(j,k)fluoranthene	0.0768	0.0820	0.0833	0.0833	92	98	63 - 128	7	16	
Benzo[a]pyrene	0.0788	0.0809	0.0833	0.0833	95	97	66 - 130	3	15	
Indeno(1,2,3-c,d)pyrene	0.0730	0.0735	0.0833	0.0833	88	88	63 - 135	1	15	
Dibenz[a,h]anthracene	0.0758	0.0781	0.0833	0.0833	91	94	65 - 130	3	15	
Benzo[g,h,i]perylene	0.0762	0.0784	0.0833	0.0833	91	94	66 - 127	3	15	
<i>Surrogate:</i>										
2-Fluorobiphenyl					91	94	46 - 113			
Pyrene-d10					90	92	45 - 114			
Terphenyl-d14					95	98	49 - 121			



Date of Report: May 5, 2020
Samples Submitted: May 4, 2020
Laboratory Reference: 2005-017
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
H1-B-5.0	05-017-01	16	5-4-20
K2-B-0.0	05-017-03	18	5-4-20
L2-B-0.0	05-017-04	6	5-4-20





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 methods 8260 & 8270, 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





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

May 12, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2005-017B

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on May 4, 2020.

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 "D. Baumeister", with a long horizontal stroke extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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 12, 2020
Samples Submitted: May 4, 2020
Laboratory Reference: 2005-017B
Project: 397-019

Case Narrative

Samples were collected on May 4, 2020 and received by the laboratory on May 4, 2020. 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.



Date of Report: May 12, 2020
 Samples Submitted: May 4, 2020
 Laboratory Reference: 2005-017B
 Project: 397-019

cPAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M1-B-0.0					
Laboratory ID:	05-017-02					
Benzo[a]anthracene	ND	0.0086	EPA 8270E/SIM	5-11-20	5-11-20	
Chrysene	ND	0.0086	EPA 8270E/SIM	5-11-20	5-11-20	
Benzo[b]fluoranthene	ND	0.0086	EPA 8270E/SIM	5-11-20	5-11-20	
Benzo(j,k)fluoranthene	ND	0.0086	EPA 8270E/SIM	5-11-20	5-11-20	
Benzo[a]pyrene	ND	0.0086	EPA 8270E/SIM	5-11-20	5-11-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0086	EPA 8270E/SIM	5-11-20	5-11-20	
Dibenz[a,h]anthracene	ND	0.0086	EPA 8270E/SIM	5-11-20	5-11-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>74</i>	<i>46 - 113</i>				
<i>Pyrene-d10</i>	<i>78</i>	<i>45 - 114</i>				
<i>Terphenyl-d14</i>	<i>84</i>	<i>49 - 121</i>				



Date of Report: May 12, 2020
 Samples Submitted: May 4, 2020
 Laboratory Reference: 2005-017B
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0511S2					
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	5-11-20	5-11-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	5-11-20	5-11-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	5-11-20	5-11-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	5-11-20	5-11-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	5-11-20	5-11-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	5-11-20	5-11-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	5-11-20	5-11-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>86</i>	<i>46 - 113</i>				
<i>Pyrene-d10</i>	<i>89</i>	<i>45 - 114</i>				
<i>Terphenyl-d14</i>	<i>92</i>	<i>49 - 121</i>				



Date of Report: May 12, 2020
 Samples Submitted: May 4, 2020
 Laboratory Reference: 2005-017B
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD		Flags
					Recovery	Limits	RPD	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0511S2									
	SB	SBD	SB	SBD	SB	SBD				
Benzo[a]anthracene	0.0975	0.0943	0.0833	0.0833	117	113	72 - 129	3	15	
Chrysene	0.0851	0.0813	0.0833	0.0833	102	98	66 - 123	5	15	
Benzo[b]fluoranthene	0.0932	0.0812	0.0833	0.0833	112	97	68 - 128	14	15	
Benzo(j,k)fluoranthene	0.0825	0.0872	0.0833	0.0833	99	105	63 - 128	6	16	
Benzo[a]pyrene	0.0884	0.0846	0.0833	0.0833	106	102	66 - 130	4	15	
Indeno(1,2,3-c,d)pyrene	0.0803	0.0749	0.0833	0.0833	96	90	63 - 135	7	15	
Dibenz[a,h]anthracene	0.0804	0.0803	0.0833	0.0833	97	96	65 - 130	0	15	
<i>Surrogate:</i>										
2-Fluorobiphenyl					83	83	46 - 113			
Pyrene-d10					94	89	45 - 114			
Terphenyl-d14					92	88	49 - 121			



Date of Report: May 12, 2020
Samples Submitted: May 4, 2020
Laboratory Reference: 2005-017B
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
M1-B-0.0	05-017-02	23	5-11-20





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 methods 8260 & 8270, 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





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

May 19, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2005-017C

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on May 4, 2020.

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 "D. Baumeister", with a long horizontal stroke extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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 19, 2020
Samples Submitted: May 4, 2020
Laboratory Reference: 2005-017C
Project: 397-019

Case Narrative

Samples were collected on May 4, 2020 and received by the laboratory on May 4, 2020. 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.



Date of Report: May 19, 2020
 Samples Submitted: May 4, 2020
 Laboratory Reference: 2005-017C
 Project: 397-019

cPAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	G1-B-0.0					
Laboratory ID:	05-017-05					
Benzo[a]anthracene	ND	0.0076	EPA 8270E/SIM	5-18-20	5-18-20	
Chrysene	ND	0.0076	EPA 8270E/SIM	5-18-20	5-18-20	
Benzo[b]fluoranthene	ND	0.0076	EPA 8270E/SIM	5-18-20	5-18-20	
Benzo(j,k)fluoranthene	ND	0.0076	EPA 8270E/SIM	5-18-20	5-18-20	
Benzo[a]pyrene	ND	0.0076	EPA 8270E/SIM	5-18-20	5-18-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0076	EPA 8270E/SIM	5-18-20	5-18-20	
Dibenz[a,h]anthracene	ND	0.0076	EPA 8270E/SIM	5-18-20	5-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>87</i>	<i>46 - 113</i>				
<i>Pyrene-d10</i>	<i>81</i>	<i>45 - 114</i>				
<i>Terphenyl-d14</i>	<i>80</i>	<i>49 - 121</i>				



Date of Report: May 19, 2020
 Samples Submitted: May 4, 2020
 Laboratory Reference: 2005-017C
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0518S1					
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	5-18-20	5-18-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	5-18-20	5-18-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	5-18-20	5-18-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	5-18-20	5-18-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	5-18-20	5-18-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	5-18-20	5-18-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	5-18-20	5-18-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorobiphenyl	104	46 - 113				
Pyrene-d10	96	45 - 114				
Terphenyl-d14	96	49 - 121				



Date of Report: May 19, 2020
 Samples Submitted: May 4, 2020
 Laboratory Reference: 2005-017C
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
							Limits		Limit	
SPIKE BLANKS										
Laboratory ID:	SB0518S1									
	SB	SBD	SB	SBD	SB	SBD				
Benzo[a]anthracene	0.0874	0.0869	0.0833	0.0833	105	104	72 - 129	1	15	
Chrysene	0.0899	0.0907	0.0833	0.0833	108	109	66 - 123	1	15	
Benzo[b]fluoranthene	0.0805	0.0803	0.0833	0.0833	97	96	68 - 128	0	15	
Benzo(j,k)fluoranthene	0.0866	0.0858	0.0833	0.0833	104	103	63 - 128	1	16	
Benzo[a]pyrene	0.0873	0.0857	0.0833	0.0833	105	103	66 - 130	2	15	
Indeno(1,2,3-c,d)pyrene	0.0720	0.0721	0.0833	0.0833	86	87	63 - 135	0	15	
Dibenz[a,h]anthracene	0.0751	0.0774	0.0833	0.0833	90	93	65 - 130	3	15	
<i>Surrogate:</i>										
2-Fluorobiphenyl					89	90	46 - 113			
Pyrene-d10					89	88	45 - 114			
Terphenyl-d14					89	89	49 - 121			



Date of Report: May 19, 2020
Samples Submitted: May 4, 2020
Laboratory Reference: 2005-017C
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
G1-B-0.0	05-017-05	12	5-18-20





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 methods 8260 & 8270, 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





Mn OnSite Environmental Inc.
 Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
(in working days)
(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

(other) _____

Laboratory Number: **05-017**

Company: *Fornalun*
 Project Number: *397-019*
 Project Name: *Block 38*
 Project Manager: *Suzzy Stumpf*
 Sampled by: *Gary Peters*

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	H1-B-5.0	5/4/20	1100	Soil	1
2	M1-B-0.0		1330		
3	K2-B-0.0		1340		
4	L2-B-0.0		1350		
5	G1-B-0.0		1400		

Parameter	1	2	3	4	5
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)	X	X			
PCBs 8082A					
Organochlorine Pesticides 8081B					
Organophosphorus Pesticides 8270D/SIM					
Chlorinated Acid Herbicides 8151A					
Total RCRA Metals					
Total MTCA Metals					
TCLP Metals					
HEM (oil and grease) 1664A					
<i>Naphthalenes</i>					
<i>Hold</i>					
% Moisture					

Received/Relinquished	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished	<i>[Signature]</i>	<i>Fornalun</i>	<i>5/4/20</i>	<i>1508</i>	<i>Added 5/18/2000 SB</i>
Received	<i>[Signature]</i>	<i>OSRE</i>	<i>5/4/20</i>	<i>1508</i>	<i>Added 5/18/2000 SB (1 day TA)</i>
Relinquished					
Received					
Relinquished					
Received					
Relinquished					

Reviewed/Date: _____

Reviewed/Date: _____

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

June 17, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2005-214

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on May 28, 2020.

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



OnSite Environmental, Inc. 14648 NE 95th 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: June 17, 2020
Samples Submitted: May 28, 2020
Laboratory Reference: 2005-214
Project: 397-019

Case Narrative

Samples were collected on May 28, 2020 and received by the laboratory on May 28, 2020. 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.



Date of Report: June 17, 2020
 Samples Submitted: May 28, 2020
 Laboratory Reference: 2005-214
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M3-B-(-6.75)					
Laboratory ID:	05-214-06					
Benzene	ND	0.020	EPA 8021B	6-11-20	6-11-20	
Toluene	ND	0.052	EPA 8021B	6-11-20	6-11-20	
Ethyl Benzene	ND	0.052	EPA 8021B	6-11-20	6-11-20	
m,p-Xylene	ND	0.052	EPA 8021B	6-11-20	6-11-20	
o-Xylene	ND	0.052	EPA 8021B	6-11-20	6-11-20	
Gasoline	ND	5.2	NWTPH-Gx	6-11-20	6-11-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	98	58-129				



Date of Report: June 17, 2020
 Samples Submitted: May 28, 2020
 Laboratory Reference: 2005-214
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0611S1					
Benzene	ND	0.020	EPA 8021B	6-11-20	6-11-20	
Toluene	ND	0.050	EPA 8021B	6-11-20	6-11-20	
Ethyl Benzene	ND	0.050	EPA 8021B	6-11-20	6-11-20	
m,p-Xylene	ND	0.050	EPA 8021B	6-11-20	6-11-20	
o-Xylene	ND	0.050	EPA 8021B	6-11-20	6-11-20	
Gasoline	ND	5.0	NWTPH-Gx	6-11-20	6-11-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	96	58-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	06-123-02							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				94	87	58-129		

SPIKE BLANKS

Laboratory ID:	SB0611S1							
	SB	SBD	SB	SBD	SB	SBD		
Benzene	0.957	0.934	1.00	1.00	96	93	68-112	2 10
Toluene	0.990	0.958	1.00	1.00	99	96	70-114	3 10
Ethyl Benzene	0.999	0.964	1.00	1.00	100	96	70-115	4 10
m,p-Xylene	0.995	0.960	1.00	1.00	100	96	69-117	4 11
o-Xylene	0.964	0.936	1.00	1.00	96	94	71-115	3 11
<i>Surrogate:</i>								
<i>Fluorobenzene</i>					99	96	58-129	



Date of Report: June 17, 2020
 Samples Submitted: May 28, 2020
 Laboratory Reference: 2005-214
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M3-B-(-6.75)					
Laboratory ID:	05-214-06					
Diesel Range Organics	ND	29	NWTPH-Dx	6-11-20	6-11-20	
Lube Oil Range Organics	ND	58	NWTPH-Dx	6-11-20	6-11-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	78	50-150				



Date of Report: June 17, 2020
 Samples Submitted: May 28, 2020
 Laboratory Reference: 2005-214
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0611S1					
Diesel Range Organics	ND	25	NWTPH-Dx	6-11-20	6-11-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	6-11-20	6-11-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	102	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	06-098-02							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				94	85	50-150		



Date of Report: June 17, 2020
 Samples Submitted: May 28, 2020
 Laboratory Reference: 2005-214
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	M3-B-(-6.75)					
Laboratory ID:	05-214-06					
Naphthalene	ND	0.0077	EPA 8270E/SIM	6-11-20	6-11-20	
2-Methylnaphthalene	ND	0.0077	EPA 8270E/SIM	6-11-20	6-11-20	
1-Methylnaphthalene	ND	0.0077	EPA 8270E/SIM	6-11-20	6-11-20	
Benzo[a]anthracene	ND	0.0077	EPA 8270E/SIM	6-11-20	6-11-20	
Chrysene	ND	0.0077	EPA 8270E/SIM	6-11-20	6-11-20	
Benzo[b]fluoranthene	ND	0.0077	EPA 8270E/SIM	6-11-20	6-11-20	
Benzo(j,k)fluoranthene	ND	0.0077	EPA 8270E/SIM	6-11-20	6-11-20	
Benzo[a]pyrene	ND	0.0077	EPA 8270E/SIM	6-11-20	6-11-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0077	EPA 8270E/SIM	6-11-20	6-11-20	
Dibenz[a,h]anthracene	ND	0.0077	EPA 8270E/SIM	6-11-20	6-11-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>58</i>	<i>46 - 113</i>				
<i>Pyrene-d10</i>	<i>86</i>	<i>45 - 114</i>				
<i>Terphenyl-d14</i>	<i>81</i>	<i>49 - 121</i>				



Date of Report: June 17, 2020
 Samples Submitted: May 28, 2020
 Laboratory Reference: 2005-214
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0611S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	6-11-20	6-11-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	6-11-20	6-11-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	6-11-20	6-11-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	6-11-20	6-11-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	6-11-20	6-11-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	6-11-20	6-11-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	6-11-20	6-11-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	6-11-20	6-11-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	6-11-20	6-11-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	6-11-20	6-11-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>82</i>	<i>46 - 113</i>				
<i>Pyrene-d10</i>	<i>93</i>	<i>45 - 114</i>				
<i>Terphenyl-d14</i>	<i>82</i>	<i>49 - 121</i>				



Date of Report: June 17, 2020
 Samples Submitted: May 28, 2020
 Laboratory Reference: 2005-214
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
					Result	Recovery	Limits			Limit	
MATRIX SPIKES											
Laboratory ID:	06-123-03										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0613	0.0618	0.0833	0.0833	ND	74	74	51 - 115	1		26
Acenaphthylene	0.0560	0.0620	0.0833	0.0833	ND	67	74	53 - 121	10		24
Acenaphthene	0.0559	0.0568	0.0833	0.0833	ND	67	68	52 - 121	2		25
Fluorene	0.0598	0.0597	0.0833	0.0833	ND	72	72	58 - 127	0		23
Phenanthrene	0.0566	0.0556	0.0833	0.0833	ND	68	67	46 - 129	2		28
Anthracene	0.0658	0.0683	0.0833	0.0833	ND	79	82	57 - 124	4		21
Fluoranthene	0.0674	0.0667	0.0833	0.0833	ND	81	80	46 - 136	1		29
Pyrene	0.0687	0.0687	0.0833	0.0833	ND	82	82	41 - 136	0		32
Benzo[a]anthracene	0.0670	0.0708	0.0833	0.0833	ND	80	85	56 - 136	6		25
Chrysene	0.0750	0.0678	0.0833	0.0833	ND	90	81	49 - 130	10		22
Benzo[b]fluoranthene	0.0687	0.0558	0.0833	0.0833	ND	82	67	51 - 135	21		26
Benzo(j,k)fluoranthene	0.0701	0.0685	0.0833	0.0833	ND	84	82	56 - 124	2		23
Benzo[a]pyrene	0.0757	0.0742	0.0833	0.0833	ND	91	89	54 - 133	2		26
Indeno(1,2,3-c,d)pyrene	0.0662	0.0651	0.0833	0.0833	ND	79	78	52 - 134	2		20
Dibenz[a,h]anthracene	0.0680	0.0665	0.0833	0.0833	ND	82	80	58 - 127	2		17
Benzo[g,h,i]perylene	0.0688	0.0674	0.0833	0.0833	ND	83	81	54 - 129	2		21
<i>Surrogate:</i>											
2-Fluorobiphenyl						55	63	46 - 113			
Pyrene-d10						78	77	45 - 114			
Terphenyl-d14						73	73	49 - 121			



Date of Report: June 17, 2020
Samples Submitted: May 28, 2020
Laboratory Reference: 2005-214
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
M3-B-(-6.75)	05-214-06	14	6-11-20





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 methods 8260 & 8270, 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





Onsite Environmental Inc.
 Analytical Laboratory Testing Services
 14648 NE 95th Street • Redmond, WA 98052
 Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Turnaround Request
 (in working days)

(Check One)

Same Day 1 Day

2 Days 3 Days

Standard (7 Days)

(other) _____

Laboratory Number: **05-214**

Company: Favallan Consulting
 Project Number: 397-019
 Project Name: Block 35 West
 Project Manager: Suzy Stumpf Lisa Thompson
 Sampled by: Gary Peters

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	N1-B-(6-75)	5/28/20	1000	Soil	5
2	N2-B-(6-75)	5/28/20	1030	Soil	5
3	M1-B-(6-75)	5/28/20	1120	Soil	5
4	N3-B-(6-75)	5/28/20	1430	Soil	5
5	N4-B-(6-75)	5/28/20	1445	Soil	5
6	M3-B-(6-75)	5/28/20	1500	Soil	5

Parameter	Result
NWTPH-HCID	
NWTPH-Gx/BTEX	8021
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)	CPAHs + Naphthalenes
PCBs 8082A	
Organochlorine Pesticides 8081B	
Organophosphorus Pesticides 8270D/SIM	
Chlorinated Acid Herbicides 8151A	
Total RCRA Metals	
Total MTCA Metals	
TCLP Metals	
HEM (oil and grease) 1664A	Hold
% Moisture	

Signature	Company	Date	Time	Comments/Special Instructions
	Favallan	5/28/20	1600	Field samples for DEQ/DOA GRI, BTEX, Naphthalenes & CPAHs analyses. <input checked="" type="checkbox"/> Added 5/11/2020. DB (STA)
	OSE	5/28/20	1600	

Relinquished
 Received
 Relinquished
 Received
 Relinquished
 Received
 Relinquished
 Reviewed/Date

Reviewed/Date

Data Package: Standard Level III Level IV

Chromatograms with final report Electronic Data Deliverables (EDDs)



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

June 15, 2020

Suzy Stumpf
Farallon Consulting
1809 7th Avenue, Suite 1111
Seattle, WA 98101

Re: Analytical Data for Project 397-019
Laboratory Reference No. 2006-023

Dear Suzy:

Enclosed are the analytical results and associated quality control data for samples submitted on June 2, 2020.

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 "D. Baumeister", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures



OnSite Environmental, Inc. 14648 NE 95th 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: June 15, 2020
Samples Submitted: June 2, 2020
Laboratory Reference: 2006-023
Project: 397-019

Case Narrative

Samples were collected on June 2, 2020 and received by the laboratory on June 2, 2020. 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.



Date of Report: June 15, 2020
 Samples Submitted: June 2, 2020
 Laboratory Reference: 2006-023
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	J/K-B-(-5.75)					
Laboratory ID:	06-023-01					
Benzene	ND	0.020	EPA 8021B	6-12-20	6-12-20	
Toluene	ND	0.049	EPA 8021B	6-12-20	6-12-20	
Ethyl Benzene	ND	0.049	EPA 8021B	6-12-20	6-12-20	
m,p-Xylene	ND	0.049	EPA 8021B	6-12-20	6-12-20	
o-Xylene	ND	0.049	EPA 8021B	6-12-20	6-12-20	
Gasoline	ND	4.9	NWTPH-Gx	6-12-20	6-12-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	95	58-129				



Date of Report: June 15, 2020
 Samples Submitted: June 2, 2020
 Laboratory Reference: 2006-023
 Project: 397-019

**GASOLINE RANGE ORGANICS/BTEX
 NWTPH-Gx/EPA 8021B
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0612S1					
Benzene	ND	0.020	EPA 8021B	6-12-20	6-12-20	
Toluene	ND	0.050	EPA 8021B	6-12-20	6-12-20	
Ethyl Benzene	ND	0.050	EPA 8021B	6-12-20	6-12-20	
m,p-Xylene	ND	0.050	EPA 8021B	6-12-20	6-12-20	
o-Xylene	ND	0.050	EPA 8021B	6-12-20	6-12-20	
Gasoline	ND	5.0	NWTPH-Gx	6-12-20	6-12-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	92	58-129				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	06-139-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	30	
Toluene	ND	ND	NA	NA	NA	NA	30	
Ethyl Benzene	ND	ND	NA	NA	NA	NA	30	
m,p-Xylene	ND	ND	NA	NA	NA	NA	30	
o-Xylene	ND	ND	NA	NA	NA	NA	30	
Gasoline	ND	ND	NA	NA	NA	NA	30	
<i>Surrogate:</i>								
<i>Fluorobenzene</i>				79	80	58-129		

SPIKE BLANKS

Laboratory ID:	SB0612S1								
	SB	SBD	SB	SBD	SB	SBD			
Benzene	0.991	1.01	1.00	1.00	99	101	68-112	2	10
Toluene	0.995	1.01	1.00	1.00	100	101	70-114	1	10
Ethyl Benzene	1.00	1.01	1.00	1.00	100	101	70-115	1	10
m,p-Xylene	1.00	1.01	1.00	1.00	100	101	69-117	1	11
o-Xylene	1.00	1.00	1.00	1.00	100	100	71-115	0	11
<i>Surrogate:</i>									
<i>Fluorobenzene</i>					94	95	58-129		



Date of Report: June 15, 2020
 Samples Submitted: June 2, 2020
 Laboratory Reference: 2006-023
 Project: 397-019

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

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	J/K-B-(-5.75)					
Laboratory ID:	06-023-01					
Diesel Range Organics	ND	28	NWTPH-Dx	6-12-20	6-12-20	
Lube Oil Range Organics	ND	55	NWTPH-Dx	6-12-20	6-12-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	86	50-150				



Date of Report: June 15, 2020
 Samples Submitted: June 2, 2020
 Laboratory Reference: 2006-023
 Project: 397-019

**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
METHOD BLANK						
Laboratory ID:	MB0612S1					
Diesel Range Organics	ND	25	NWTPH-Dx	6-12-20	6-12-20	
Lube Oil Range Organics	ND	50	NWTPH-Dx	6-12-20	6-12-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	90	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	06-119-01							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	NA
Lube Oil	94.6	69.4	NA	NA	NA	NA	31	NA
<i>Surrogate:</i>								
<i>o-Terphenyl</i>				80	85	50-150		



Date of Report: June 15, 2020
 Samples Submitted: June 2, 2020
 Laboratory Reference: 2006-023
 Project: 397-019

PAHs EPA 8270E/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	J/K-B-(-5.75)					
Laboratory ID:	06-023-01					
Naphthalene	ND	0.0074	EPA 8270E/SIM	6-12-20	6-15-20	
2-Methylnaphthalene	ND	0.0074	EPA 8270E/SIM	6-12-20	6-15-20	
1-Methylnaphthalene	ND	0.0074	EPA 8270E/SIM	6-12-20	6-15-20	
Benzo[a]anthracene	ND	0.0074	EPA 8270E/SIM	6-12-20	6-15-20	
Chrysene	ND	0.0074	EPA 8270E/SIM	6-12-20	6-15-20	
Benzo[b]fluoranthene	ND	0.0074	EPA 8270E/SIM	6-12-20	6-15-20	
Benzo(j,k)fluoranthene	ND	0.0074	EPA 8270E/SIM	6-12-20	6-15-20	
Benzo[a]pyrene	ND	0.0074	EPA 8270E/SIM	6-12-20	6-15-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0074	EPA 8270E/SIM	6-12-20	6-15-20	
Dibenz[a,h]anthracene	ND	0.0074	EPA 8270E/SIM	6-12-20	6-15-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorobiphenyl	72	46 - 113				
Pyrene-d10	71	45 - 114				
Terphenyl-d14	82	49 - 121				



Date of Report: June 15, 2020
 Samples Submitted: June 2, 2020
 Laboratory Reference: 2006-023
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0612S1					
Naphthalene	ND	0.0067	EPA 8270E/SIM	6-12-20	6-12-20	
2-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	6-12-20	6-12-20	
1-Methylnaphthalene	ND	0.0067	EPA 8270E/SIM	6-12-20	6-12-20	
Benzo[a]anthracene	ND	0.0067	EPA 8270E/SIM	6-12-20	6-12-20	
Chrysene	ND	0.0067	EPA 8270E/SIM	6-12-20	6-12-20	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270E/SIM	6-12-20	6-12-20	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270E/SIM	6-12-20	6-12-20	
Benzo[a]pyrene	ND	0.0067	EPA 8270E/SIM	6-12-20	6-12-20	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270E/SIM	6-12-20	6-12-20	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270E/SIM	6-12-20	6-12-20	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>86</i>	<i>46 - 113</i>				
<i>Pyrene-d10</i>	<i>84</i>	<i>45 - 114</i>				
<i>Terphenyl-d14</i>	<i>95</i>	<i>49 - 121</i>				



Date of Report: June 15, 2020
 Samples Submitted: June 2, 2020
 Laboratory Reference: 2006-023
 Project: 397-019

**PAHs EPA 8270E/SIM
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
					Result	Recovery		Limits	RPD	Limit	
MATRIX SPIKES											
Laboratory ID:	06-045-04										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.138	0.140	0.167	0.167	ND	83	84	51 - 115	1	26	
Acenaphthylene	0.152	0.152	0.167	0.167	ND	91	91	53 - 121	0	24	
Acenaphthene	0.151	0.151	0.167	0.167	ND	90	90	52 - 121	0	25	
Fluorene	0.140	0.143	0.167	0.167	ND	84	86	58 - 127	2	23	
Phenanthrene	0.134	0.136	0.167	0.167	ND	80	81	46 - 129	1	28	
Anthracene	0.143	0.146	0.167	0.167	ND	86	87	57 - 124	2	21	
Fluoranthene	0.138	0.140	0.167	0.167	ND	83	84	46 - 136	1	29	
Pyrene	0.140	0.141	0.167	0.167	ND	84	84	41 - 136	1	32	
Benzo[a]anthracene	0.159	0.160	0.167	0.167	ND	95	96	56 - 136	1	25	
Chrysene	0.149	0.150	0.167	0.167	ND	89	90	49 - 130	1	22	
Benzo[b]fluoranthene	0.144	0.145	0.167	0.167	ND	86	87	51 - 135	1	26	
Benzo(j,k)fluoranthene	0.145	0.146	0.167	0.167	ND	87	87	56 - 124	1	23	
Benzo[a]pyrene	0.145	0.147	0.167	0.167	ND	87	88	54 - 133	1	26	
Indeno(1,2,3-c,d)pyrene	0.142	0.145	0.167	0.167	ND	85	87	52 - 134	2	20	
Dibenz[a,h]anthracene	0.140	0.143	0.167	0.167	ND	84	86	58 - 127	2	17	
Benzo[g,h,i]perylene	0.143	0.144	0.167	0.167	ND	86	86	54 - 129	1	21	
<i>Surrogate:</i>											
2-Fluorobiphenyl						81	80	46 - 113			
Pyrene-d10						78	79	45 - 114			
Terphenyl-d14						89	88	49 - 121			



Date of Report: June 15, 2020
Samples Submitted: June 2, 2020
Laboratory Reference: 2006-023
Project: 397-019

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
J/K-B-(-5.75)	06-023-01	9	6-12-20





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 methods 8260 & 8270, 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



