3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
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info@fremontanalytical.com

PES Environmental, Inc.
Brian O'Neal
1215 Fourth Avenue, Suite 1350
Seattle, WA 98161

RE: Bethel Junction Phase II
Lab ID: 1507069

July 13, 2015

Attention Brian O'Neal:

Fremont Analytical, Inc. received 5 sample(s) on 7/8/2015 for the analyses presented in the following report.

Sample Moisture (Percent Moisture)
Volatile Organic Compounds by EPA Method 8260

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Chelsea Ward
Project Manager

CC:
Kelly Rankich

Date: *07/13/2015*

CLIENT: PES Environmental, Inc.
Project: Bethel Junction Phase II
Lab Order: 1507069

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1507069-001	Trench-1-1	07/06/2015 12:20 PM	07/08/2015 2:22 PM
1507069-002	Trench-2-4	07/06/2015 12:30 PM	07/08/2015 2:22 PM
1507069-003	Trench-3-1	07/06/2015 5:10 PM	07/08/2015 2:22 PM
1507069-004	Trench-4-4	07/06/2015 5:20 PM	07/08/2015 2:22 PM
1507069-005	Trench-5-4	07/06/2015 5:30 PM	07/08/2015 2:22 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **1507069**

Date: **7/13/2015**

CLIENT: PES Environmental, Inc.

Project: Bethel Junction Phase II

I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below LOQ
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

Analytical Report

WO#: **1507069**

Date Reported: **7/13/2015**

Client: PES Environmental, Inc.

Collection Date: 7/6/2015 12:20:00 PM

Project: Bethel Junction Phase II

Lab ID: 1507069-001

Matrix: Soil

Client Sample ID: **Trench-1-1**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: 11271		Analyst: BC
Vinyl chloride	ND	0.00216		mg/Kg-dry	1	7/10/2015 8:17:00 AM
trans-1,2-Dichloroethene	ND	0.0216		mg/Kg-dry	1	7/10/2015 8:17:00 AM
cis-1,2-Dichloroethene	ND	0.0216		mg/Kg-dry	1	7/10/2015 8:17:00 AM
Trichloroethene (TCE)	ND	0.0216		mg/Kg-dry	1	7/10/2015 8:17:00 AM
Tetrachloroethene (PCE)	ND	0.0216		mg/Kg-dry	1	7/10/2015 8:17:00 AM
Surr: Dibromofluoromethane	86.5	63.7-129		%REC	1	7/10/2015 8:17:00 AM
Surr: Toluene-d8	85.7	64.3-131		%REC	1	7/10/2015 8:17:00 AM
Surr: 1-Bromo-4-fluorobenzene	94.4	63.1-141		%REC	1	7/10/2015 8:17:00 AM
Sample Moisture (Percent Moisture)				Batch ID: R23462		Analyst: SL
Percent Moisture	11.9	0.500		wt%	1	7/9/2015 3:20:42 PM

Analytical Report

WO#: **1507069**
Date Reported: **7/13/2015**

Client: PES Environmental, Inc.
Collection Date: 7/6/2015 12:30:00 PM
Project: Bethel Junction Phase II
Lab ID: 1507069-002
Matrix: Soil
Client Sample ID: **Trench-2-4**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: 11271		Analyst: BC
Vinyl chloride	ND	0.00206		mg/Kg-dry	1	7/10/2015 9:14:00 AM
trans-1,2-Dichloroethene	ND	0.0206		mg/Kg-dry	1	7/10/2015 9:14:00 AM
cis-1,2-Dichloroethene	ND	0.0206		mg/Kg-dry	1	7/10/2015 9:14:00 AM
Trichloroethene (TCE)	ND	0.0206		mg/Kg-dry	1	7/10/2015 9:14:00 AM
Tetrachloroethene (PCE)	ND	0.0206		mg/Kg-dry	1	7/10/2015 9:14:00 AM
Surr: Dibromofluoromethane	85.9	63.7-129		%REC	1	7/10/2015 9:14:00 AM
Surr: Toluene-d8	88.0	64.3-131		%REC	1	7/10/2015 9:14:00 AM
Surr: 1-Bromo-4-fluorobenzene	95.1	63.1-141		%REC	1	7/10/2015 9:14:00 AM
Sample Moisture (Percent Moisture)				Batch ID: R23462		Analyst: SL
Percent Moisture	12.1	0.500		wt%	1	7/9/2015 3:20:42 PM

Analytical Report

WO#: **1507069**
Date Reported: **7/13/2015**

Client: PES Environmental, Inc.
Collection Date: 7/6/2015 5:10:00 PM
Project: Bethel Junction Phase II
Lab ID: 1507069-003
Matrix: Soil
Client Sample ID: **Trench-3-1**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: 11271		Analyst: BC
Vinyl chloride	ND	0.00202		mg/Kg-dry	1	7/10/2015 9:43:00 AM
trans-1,2-Dichloroethene	ND	0.0202		mg/Kg-dry	1	7/10/2015 9:43:00 AM
cis-1,2-Dichloroethene	ND	0.0202		mg/Kg-dry	1	7/10/2015 9:43:00 AM
Trichloroethene (TCE)	0.0712	0.0202		mg/Kg-dry	1	7/10/2015 9:43:00 AM
Tetrachloroethene (PCE)	0.147	0.0202		mg/Kg-dry	1	7/10/2015 9:43:00 AM
Surr: Dibromofluoromethane	85.2	63.7-129		%REC	1	7/10/2015 9:43:00 AM
Surr: Toluene-d8	88.3	64.3-131		%REC	1	7/10/2015 9:43:00 AM
Surr: 1-Bromo-4-fluorobenzene	94.4	63.1-141		%REC	1	7/10/2015 9:43:00 AM
Sample Moisture (Percent Moisture)				Batch ID: R23462		Analyst: SL
Percent Moisture	8.59	0.500		wt%	1	7/9/2015 3:20:42 PM

Analytical Report

WO#: **1507069**

Date Reported: **7/13/2015**

Client: PES Environmental, Inc.

Collection Date: 7/6/2015 5:20:00 PM

Project: Bethel Junction Phase II

Lab ID: 1507069-004

Matrix: Soil

Client Sample ID: **Trench-4-4**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: 11271		Analyst: BC
Vinyl chloride	ND	0.00216		mg/Kg-dry	1	7/10/2015 10:40:00 AM
trans-1,2-Dichloroethene	ND	0.0216		mg/Kg-dry	1	7/10/2015 10:40:00 AM
cis-1,2-Dichloroethene	0.0598	0.0216		mg/Kg-dry	1	7/10/2015 10:40:00 AM
Trichloroethene (TCE)	0.0345	0.0216		mg/Kg-dry	1	7/10/2015 10:40:00 AM
Tetrachloroethene (PCE)	ND	0.0216		mg/Kg-dry	1	7/10/2015 10:40:00 AM
Surr: Dibromofluoromethane	88.4	63.7-129		%REC	1	7/10/2015 10:40:00 AM
Surr: Toluene-d8	86.8	64.3-131		%REC	1	7/10/2015 10:40:00 AM
Surr: 1-Bromo-4-fluorobenzene	95.5	63.1-141		%REC	1	7/10/2015 10:40:00 AM
Sample Moisture (Percent Moisture)				Batch ID: R23462		Analyst: SL
Percent Moisture	15.1	0.500		wt%	1	7/9/2015 3:20:42 PM

Analytical Report

WO#: **1507069**
Date Reported: **7/13/2015**

Client: PES Environmental, Inc.
Collection Date: 7/6/2015 5:30:00 PM
Project: Bethel Junction Phase II
Lab ID: 1507069-005
Matrix: Soil
Client Sample ID: **Trench-5-4**

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Volatile Organic Compounds by EPA Method 8260				Batch ID: 11271		Analyst: BC
Vinyl chloride	ND	0.00218		mg/Kg-dry	1	7/10/2015 11:08:00 AM
trans-1,2-Dichloroethene	ND	0.0218		mg/Kg-dry	1	7/10/2015 11:08:00 AM
cis-1,2-Dichloroethene	0.300	0.0218		mg/Kg-dry	1	7/10/2015 11:08:00 AM
Trichloroethene (TCE)	0.507	0.0218		mg/Kg-dry	1	7/10/2015 11:08:00 AM
Tetrachloroethene (PCE)	0.131	0.0218		mg/Kg-dry	1	7/10/2015 11:08:00 AM
Surr: Dibromofluoromethane	86.4	63.7-129		%REC	1	7/10/2015 11:08:00 AM
Surr: Toluene-d8	89.7	64.3-131		%REC	1	7/10/2015 11:08:00 AM
Surr: 1-Bromo-4-fluorobenzene	93.0	63.1-141		%REC	1	7/10/2015 11:08:00 AM
Sample Moisture (Percent Moisture)				Batch ID: R23462		Analyst: SL
Percent Moisture	14.1	0.500		wt%	1	7/9/2015 3:20:42 PM

Work Order: 1507069
CLIENT: PES Environmental, Inc.
Project: Bethel Junction Phase II

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID **1507041-001BDUP** SampType: **DUP** Units: **mg/Kg-dry** Prep Date: **7/9/2015** RunNo: **23474**
Client ID: **BATCH** Batch ID: **11271** Analysis Date: **7/10/2015** SeqNo: **444808**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	ND	0.00292						0		30	
trans-1,2-Dichloroethene	ND	0.0292						0		30	
cis-1,2-Dichloroethene	ND	0.0292						0		30	
Trichloroethene (TCE)	ND	0.0292						0		30	
Tetrachloroethene (PCE)	ND	0.0292						0		30	
Surr: Dibromofluoromethane	1.58		1.825		86.8	63.7	129		0		
Surr: Toluene-d8	1.58		1.825		86.5	64.3	131		0		
Surr: 1-Bromo-4-fluorobenzene	1.76		1.825		96.6	63.1	141		0		

Sample ID **1507057-002BMS** SampType: **MS** Units: **mg/Kg-dry** Prep Date: **7/9/2015** RunNo: **23474**
Client ID: **BATCH** Batch ID: **11271** Analysis Date: **7/10/2015** SeqNo: **444812**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	0.926	0.00229	1.145	0	80.9	51.2	146				
trans-1,2-Dichloroethene	1.21	0.0229	1.145	0	106	52	136				
cis-1,2-Dichloroethene	1.14	0.0229	1.145	0	99.3	58.6	136				
Trichloroethene (TCE)	1.05	0.0229	1.145	0	92.0	68.6	132				
Tetrachloroethene (PCE)	1.07	0.0229	1.145	0	93.3	35.6	158				
Surr: Dibromofluoromethane	1.36		1.432		95.2	63.7	129				
Surr: Toluene-d8	1.24		1.432		86.5	64.3	131				
Surr: 1-Bromo-4-fluorobenzene	1.45		1.432		101	63.1	141				

Sample ID **LCS-11271** SampType: **LCS** Units: **mg/Kg** Prep Date: **7/9/2015** RunNo: **23474**
Client ID: **LCSS** Batch ID: **11271** Analysis Date: **7/9/2015** SeqNo: **444842**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	0.736	0.00200	1.000	0	73.6	56.1	130				
trans-1,2-Dichloroethene	1.01	0.0200	1.000	0	101	68	130				
cis-1,2-Dichloroethene	0.986	0.0200	1.000	0	98.6	71.3	135				
Trichloroethene (TCE)	0.897	0.0200	1.000	0	89.7	65.5	137				

Work Order: 1507069
CLIENT: PES Environmental, Inc.
Project: Bethel Junction Phase II

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260

Sample ID	LCS-11271	SampType:	LCS			Units:	mg/Kg	Prep Date:	7/9/2015		RunNo:	23474	
Client ID:	LCSS	Batch ID:	11271					Analysis Date:	7/9/2015		SeqNo:	444842	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Tetrachloroethene (PCE)		0.895	0.0200	1.000	0	89.5	52.7	150					
Surr: Dibromofluoromethane		1.25		1.250		99.9	63.7	129					
Surr: Toluene-d8		1.13		1.250		90.0	64.3	131					
Surr: 1-Bromo-4-fluorobenzene		1.24		1.250		99.0	63.1	141					

Sample ID	MB-11271	SampType:	MBLK			Units:	mg/Kg	Prep Date:	7/9/2015		RunNo:	23474	
Client ID:	MBLKS	Batch ID:	11271					Analysis Date:	7/9/2015		SeqNo:	444844	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Vinyl chloride		ND	0.00200										
trans-1,2-Dichloroethene		ND	0.0200										
cis-1,2-Dichloroethene		ND	0.0200										
Trichloroethene (TCE)		ND	0.0200										
Tetrachloroethene (PCE)		ND	0.0200										
Surr: Dibromofluoromethane		1.17		1.250		93.5	63.7	129					
Surr: Toluene-d8		1.11		1.250		88.9	64.3	131					
Surr: 1-Bromo-4-fluorobenzene		1.16		1.250		92.8	63.1	141					

Sample Log-In Check List

Client Name:	**PES**	Work Order Number:	**1507069**
Logged by:	**Erica Silva**	Date Received:	**7/8/2015 2:22:00 PM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	Client		

Log In

3.	Coolers are present?	Yes ☑	No ☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes ☑	No ☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Required ☑
6.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
7.	Were all items received at a temperature of >0°C to 10.0°C *	Yes ☑	No ☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
9.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
10.	Are samples properly preserved?	Yes ☑	No ☐	
11.	Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
12.	Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
13.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
14.	Does paperwork match bottle labels?	Yes ☑	No ☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
16.	Is it clear what analyses were requested?	Yes ☑	No ☐	
17.	Were all holding times able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Cooler	7.5
Sample	2.3

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Fremont Analytical

Chain of Custody Record

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Laboratory Project No (internal): 1507069

Date: 7-6-15 Page: 1 of: 1

Client: PES Environmental, Inc.
Address: 1215 4th Ave. Suite 1350
City, State, Zip Seattle WA 98161
Tel: (206) 529-3980 Fax: (206) 529-3985

Project Name: Bethel Junction Phase II
Project No: 1246.034.02.001 Collected by: C. DeBoer
Location: Port Orchard WA
Reports To (PM): B. O'neal / K. Ramkitch
Email: Kramkitch@pesenv.com

*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, WW = Waste Water, SW = Strom Water

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOC (EPA 8260) ★	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SEMI VOL (EPA 8270)	PAH (EPA 8270 - SIM)	PCBs (EPA 8082)	Metals** (6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments/Depth
1	Trench-1-1	7-6-15	1220	S	X													
2	Trench-2-4		1230		X													
3	Trench-3-1		1710		X													
4	Trench-4-4		1720		X													
5	Trench-5-4		1730		X													
6																		
7																		
8																		
9																		
10																		

**Metals Analysis (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Turn-around times for samples received after 4:00pm will begin on the following business day.

Special Remarks: ★ PCE, TCE, cis/trans-DCE, VC

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab (A fee may be assessed if samples are retained after 30 days.)

Relinquished	Date/Time	Received	Date/Time
x Chris DeBoer	7-8-15 1422	x	07/08/15 14:22
Relinquished	Date/Time	Received	Date/Time
x		x	

TAT -> SameDay^ NextDay^ 2 Day 3 Day (STD)

^Please coordinate with the lab in advance

Distribution: White - Lab, Yellow - File, Pink - Originator