

Independent Remedial Action and Drilled Shaft Observation Report South Bellevue Station (EL111) 2500 Bellevue Way SE Bellevue, Washington

**Sound Transit Contract RTA/CN 0063-15
E320 South Bellevue**

June 18, 2019

Prepared For:

Sound Transit

Heritage Park Field Office

13427 NE 16th Street, Suite 200A
Bellevue, WA 98005

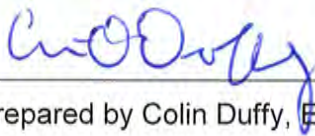
Prepared By:



16310 80th Street NE
Suite 300
Redmond, WA 98052
www.innovex.net

CERTIFICATION

The technical material and data contained in this document were prepared under the supervision and direction of the undersigned, whose seal is affixed below.



Prepared by Colin Duffy, Environmental Scientist



Reviewed by Glenn A. Hayman, LHg

 (for Peter Battuello)

Approved by Peter Battuello, LG, LHg

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ACRONYMS AND ABBREVIATIONS

bgs	below ground surface
cPAHs	carcinogenic polycyclic aromatic hydrocarbons
CUL	cleanup level
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
INNOVEX	INNOVEX Environmental Management, Inc.
MTCA	Model Toxics Control Act Cleanup Regulation
OnSite	OnSite Environmental Inc.
OSG	O'Neill Service Group
PAHs	polycyclic aromatic hydrocarbons
SPJV	Shimmick-Parsons Joint Venture
TEC	toxic equivalent concentration
TPH-d	diesel-range hydrocarbons
TPH-g	gasoline-range hydrocarbons
TPH-o	oil-range hydrocarbons
VOCs	volatile organic compounds

1.0 INTRODUCTION

Sound Transit, officially the Central Puget Sound Regional Transit Authority, is a public transit agency serving the Seattle metropolitan area in Washington State. Beginning in 2015, Sound Transit commenced construction on the East Link light rail corridor through Bellevue, Washington. This project is divided into four segments referred to as E320, E330, E335, and E340. As part of the project, Sound Transit acquired several parcels of property and performed demolition and cleanup of environmental contaminants as necessary to construct the project.

This report documents the Independent Remedial Action completed by Sound Transit to address potentially contaminated soil encountered at the former South Bellevue Park and Ride facility (King County Tax Parcel 7000100360), located at 2500 Bellevue Way SE, in Bellevue, Washington ("the Site"). The location of the Site is shown on Figure 1. The Site is not currently identified as a confirmed or suspected contaminated site by the Washington State Department of Ecology (Ecology).

The Site is identified by Sound Transit as parcel EL111 in the construction documents and is part of the E320 segment being constructed under Sound Transit Contract No. RTA/CN 0063-15. INNOVEX Environmental Management, Inc. (INNOVEX) conducted activities related to the remedial action and prepared this report as a subcontractor to Sound Transit's prime construction management contractor, HDR.

The Independent Remedial Action was performed in a manner generally consistent with requirements of the Washington State Model Toxics Control Act (MTCA) Cleanup Regulation (Ecology, 2007), including section 173-340-515 (independent remedial actions), and this report provides information consistent with section 173-340-300 (site discovery and reporting).

1.1 Background Information

A Phase I Environmental Site Assessment (ESA) of the Site prepared for Sound Transit in 2015 identified that farm residences occupied the Site before it was converted into the South Bellevue Park and Ride in the 1980s (GeoEngineers Inc., 2015a). The Phase I ESA also noted that historical geotechnical boring logs reported fill at the Site contained demolition debris with fragments of wood, brick, and asphalt.

An ESA Data Report identified concentrations of oil-range hydrocarbons (TPH-o) exceeding applicable MTCA Cleanup Levels (CULs). Polycyclic aromatic hydrocarbon (PAH) concentrations were also reported but at concentrations below applicable MTCA CULs. These chemicals of concern were present in fill material at the locations of drilled shafts required for construction of the East Link (GeoEngineers Inc., 2015b).

From June 6 to June 13, 2017, the Sound Transit E320 general contractor, Shimmick-Parsons Joint Venture (SPJV) conducted a test pit investigation to confirm the presence or absence of

contaminated soil. SPJV excavated 13 test pits in the northern portion of the Site. Soil samples were collected by the SPJV environmental contractor, O'Neill Service Group (OSG), at 2-foot intervals to a maximum depth of 16 feet below ground surface (bgs). Fifteen samples were submitted for laboratory analysis. Laboratory analytical results indicated that PAHs were present in three of the 15 samples at concentrations exceeding the applicable MTCA CULs. No other contaminants were reported at concentrations exceeding applicable MTCA CULs. The approximate location of the test pit area is shown on Figure 2. The laboratory analytical reports from that investigation are included in Appendix B.

The Site is currently under construction as the future location of the Sound Transit South Bellevue Station and is surrounded by the Mercer Slough Nature Park on the north, east, and south sides, and by Bellevue Way SE to the west.

1.2 Objectives and Scope

1.2.1 Independent Remedial Action

The objectives of the remedial work described in this report were to identify and remove potentially contaminated soil encountered during the course of light rail construction activities. In accordance with our contract, the scope of the remedial action was limited to soil conditions only, and only to the extent necessary for completion of the light rail project.

1.2.2 Drilled Shaft Observation

The objectives of the drilled shaft observation work described in this report were to identify potentially contaminated soils and ensure that those soils were properly segregated. Drilling, stockpiling, and transportation of the soils was accomplished by other contractors and INNOVEX provided periodic oversight of these activities.

1.3 Cleanup Levels

The CULs specified in the MTCA Cleanup Regulation (Ecology, 2007) were used to evaluate analytical results. Detected analyte concentrations in soil were compared to MTCA Method A Soil CULs for Unrestricted Land Uses, if available. For analytes not listed as having Method A CULs, detected concentrations were compared to MTCA Method B Soil CULs based on direct contact. The MTCA CULs used to evaluate each detected analyte are included with analytical results provided in Table 1. Concentrations of detected carcinogenic polycyclic aromatic hydrocarbons (cPAHs) were evaluated by using MTCA-specific toxic equivalent concentrations (TECs). The TEC calculations are provided in Appendix C.

In this report, soil with detected analyte concentrations below MTCA CULs is referred to as impacted, and soil with analyte concentrations above MTCA CULs is referred to as contaminated.

2.0 INDEPENDENT REMEDIAL ACTION

This independent remedial action included the following activities:

- Characterization of creosote-stained soil encountered during construction
- Excavation and offsite disposal of known contaminated soil
- Confirmation soil sampling after potentially contaminated soil was removed

2.1 Debris Discovery

On June 29, 2017, SPJV's subcontractor, KLB Construction, Inc., encountered creosote-coated woody debris and creosote-stained soil during excavation for parking garage construction in the northeastern portion of the Site. The approximate area of the debris is shown on Figure 2.

2.1.1 Debris Area Characterization Soil Sampling and Analysis

On June 29, 2017, INNOVEX collected three characterization soil samples from within the area of debris. Samples were collected beneath debris where soil staining was observed and where contamination was most likely to be present. Soil sampling locations are shown on Figure 2.

Soil samples were collected in accordance with the Sampling and Analysis Plan prepared for this project (INNOVEX, 2018). Soil samples were placed into laboratory-supplied containers, labeled, and immediately placed in a cooler with ice. Samples were delivered under standard chain-of-custody procedures to OnSite Environmental, Inc. (OnSite), a Washington State-accredited laboratory located in Redmond, Washington for the following analyses:

- Gasoline-range hydrocarbons (TPH-g) using Method NWTPH-Gx
- Diesel-range hydrocarbons (TPH-d) and TPH-o using Method NWTPH-Dx
- Volatile organic compounds (VOCs) using U.S. Environmental Protection Agency (EPA) Method 8260
- PAHs using EPA Method 8270 SIM
- Resource Conservation and Recovery Act metals using EPA Methods 6010 and 7471

One characterization soil sample contained a detectable concentration of TPH-o, all three samples contained detectable concentrations of several VOCs and metals, and two of the three samples contained detectable concentrations of several PAHs. All analyte concentrations are below applicable MTCA CULs. Analytical results for analytes detected in one or more soil samples are summarized in Table 1. The laboratory analytical report is provided in Appendix B.

2.2 Known Contaminated Soil Removal

The area of contaminated soil identified during the June 2017 test pit investigation was excavated intermittently between June 29 and December 5, 2017. Excavated soil was staged onsite for offsite disposal. The approximate area of known contamination is shown on Figure 2.

2.2.1 Known Contaminated Area Confirmation Soil Sampling and Analysis

INNOVEX collected four confirmation soil samples when the excavation activities were completed in the area of known contamination. Samples were collected on November 29 and December 5,

2017 at elevations of approximately 26.5 and 27 feet above mean sea level. The sample locations and analytical results for detected analytes are shown on Figure 2.

Soil samples were collected, stored, and transported to the laboratory as described above in Section 2.1.1. Samples were submitted to OnSite for the following analyses:

- TPH-d and TPH-o using Method NWTPH-Dx
- Semi-volatile organic compounds using EPA Method 8270 SIM
- Polychlorinated biphenyls using EPA Method 8082
- Priority Pollutant metals using EPA Methods 6010 and 7471

Two of the confirmation soil samples contained concentrations of benzo(a)pyrene and cPAHs above the applicable MTCA CULs. No other analyte concentrations exceeded applicable MTCA CULs.

Analytical results for analytes detected in the soil samples are summarized in Table 1. The laboratory analytical reports are provided in Appendix B. The TEC calculations are provided in Appendix C.

2.3 Site Disposition

The soil removals were completed on December 5, 2017. The excavations were then regraded to meet the requirements of the Sound Transit East Link construction project.

3.0 DRILLED SHAFT OBSERVATIONS

Between August 14, 2017 and October 2, 2017, Malcolm Drilling Company, Inc. advanced ten drilled shafts at the Site. The shafts were located in areas where previous investigations found TPH-o exceeding applicable MTCA CULs and PAH concentrations below applicable MTCA CULs (GeoEngineers Inc., 2015b). Locations of the drilled shafts and areas of contaminated soil are shown on Figure 3.

Drilling and stockpiling, sampling, and transportation of drill spoils was accomplished by other contractors. INNOVEX provided periodic oversight of these activities and was on site periodically to observe the drill spoils for evidence of contamination. Results of these observations are summarized below.

Drilled Shaft Visual Observation Results:

Drilled Shaft Column	Date Drilled	Observations
B-33R	8/14/17-8/15/17	No evidence of contamination was observed.
B-33L	8/23/17-8/24/17	No evidence of contamination was observed.
B-32R	8/17/17-8/21/17	Petroleum odor observed in fill material from 0-20 feet bgs.
B-32L	8/25/17	Petroleum odor observed in fill material from 0-40 feet bgs.
B-31R	9/5/17	No evidence of contamination was observed.
B-31L	8/29/17-8/30/17	No evidence of contamination was observed.
B-30R	9/7/17	No evidence of contamination was observed.
B-30L	8/30/17-8/31/17	No evidence of contamination was observed.
B-29R	10/1/17-10/2/17	No evidence of contamination was observed.
B-29L	9/11/17	No evidence of contamination was observed.

Based on observations and characterization sampling conducted by the SPJV environmental contractor, OSG, potentially contaminated soils were segregated and stockpiled onsite for offsite disposal.

4.0 SOIL DISPOSAL

OSG collected samples of the excavated soil to characterize it for disposal. Laboratory analytical results indicate that the excavated soil contained analytes below applicable MTCA CULs. A total of 1,523 tons of impacted soil was removed during Independent Remedial Action and drilled shaft activities. The soil was transported to Republic Services Regional Disposal Facility in Seattle, Washington for disposal. Soil disposal tickets are provided in Appendix D.

5.0 CONCLUSIONS

The following conclusions are supported by the activities described above:

- cPAH concentrations above applicable MTCA CULs remain in soil in the known contaminated area in the northern portion of the Site (Figure 2). INNOVEX recommends administrative controls be established for this area.
- Groundwater was not encountered and no assessment of groundwater was completed as part of the Independent Remedial Action.

6.0 LIMITATIONS

This report is for the exclusive use of Sound Transit and its representatives. INNOVEX prepared this report in a professional manner, using that level of skill and care normally exercised for similar projects under similar conditions by reputable and competent environmental consultants currently practicing in the area, and in accordance with the terms and conditions set forth in our contract and Sound Transit Contract RTA/CN 0063-15. INNOVEX is not responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time the report was prepared. Also note that the facts and conditions referenced in this report may change over time and that the conclusions set forth here are applicable to the facts and conditions as described in this report. Conclusions were made within the operative constraints of the scope, budget, and schedule for this project. We believe that the conditions stated here are factual. No guarantee is made or implied. Any reliance on this report by a third party is at such party's sole risk.

7.0 REFERENCES

- GeoEngineers, Inc. 2015a. Phase I Environmental Site Assessment, Sound Transit East Link E320, EL111 King County Tax Parcel 7000100360, WSDOT Park and Ride 2700 Bellevue Way SE, Bellevue, Washington. February 12, 2015.
- GeoEngineers, Inc. 2015b. Environmental Site Assessment Data Report, Sound Transit East Link E320, WSDOT South Bellevue Park and Ride, EL111, East Link South Bellevue Station, Bellevue, Washington. July 15, 2015.
- INNOVEX Environmental Management, Inc. 2018. Sampling and Analysis Plan, Sound Transit East Link Segments E320, E330, E335, and E340, Bellevue, Washington. July 16, 2018.
- Washington State Department of Ecology. 2007. Model Toxics Control Act Cleanup Regulation, Chapter 173-340 Washington Administrative Code. Amended October 12, 2007.

FIGURES



DESIGNED BY
Innovex Environmental
Mitch Williams
DRAWN BY
ICD
January 24, 2018



16310 NE 80th St., Suite 300
Redmond, WA 98052
(800) 988-7880

LATITUDE 47D 35M 12S NORTH
LONGITUDE 122D 11M 23S WEST

US GEOLOGICAL SURVEY - 2017
7.5 MINUTE QUADRANGLE MAP
MERCER ISLAND, WASHINGTON

0 1000 2000
SCALE IN FEET

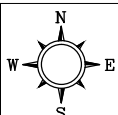
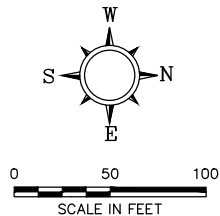
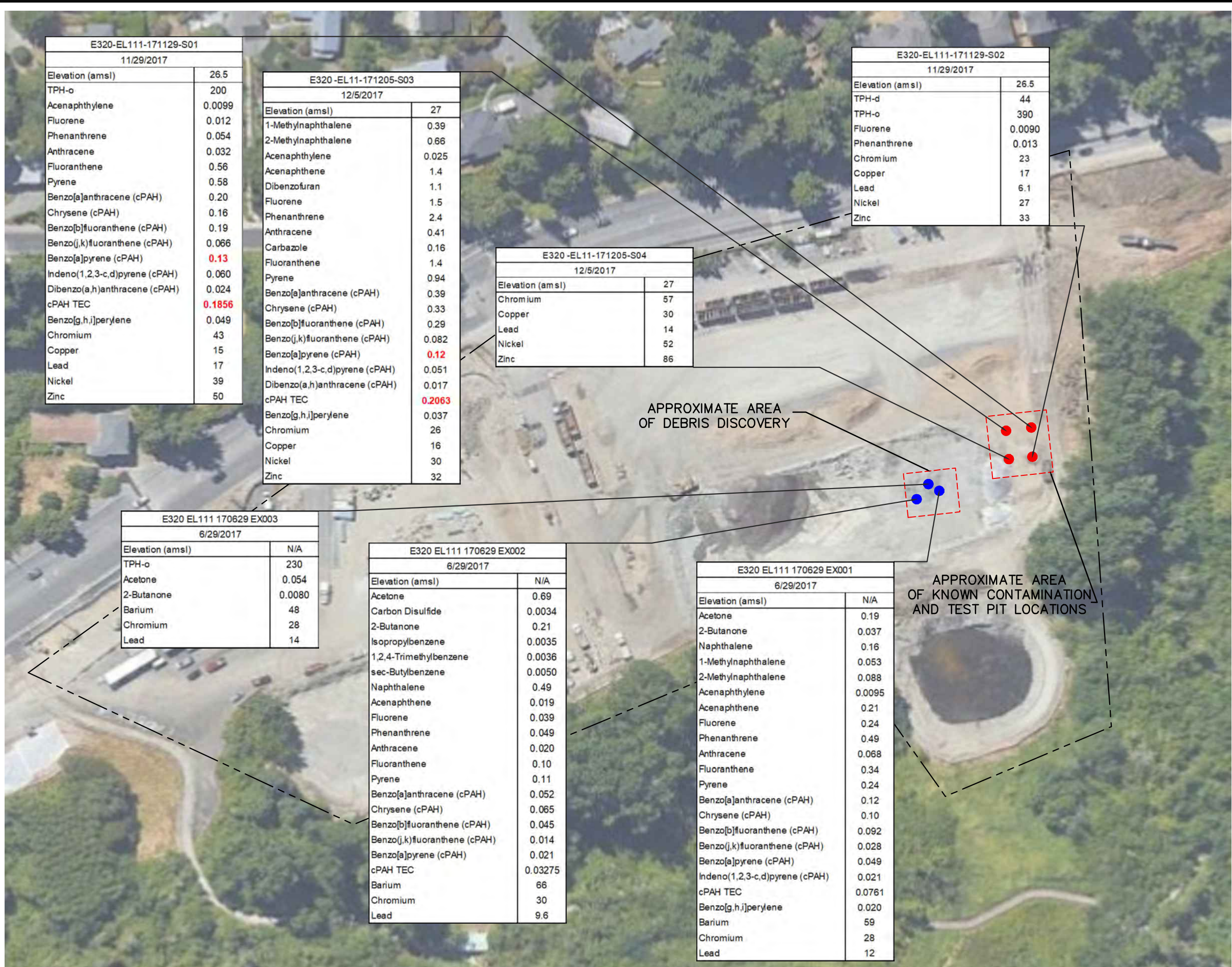


FIGURE 1

Site Location Map

E320-EL111
2500 BELLEVUE WAY SE
BELLEVUE, WASHINGTON



LEGEND

- APPROXIMATE PROPERTY LINE
- CONFIRMATION SOIL SAMPLING LOCATION
- CHARACTERIZATION SOIL SAMPLING LOCATION
- N/A NOT APPLICABLE
- TPH-o LUBE OIL RANGE HYDROCARBONS
- TPH-d DIESEL RANGE HYDROCARBONS
- cPAH CARCINOGENIC POLYCYCLIC AROMATIC HYDROCARBONS
- cPAH TEC cPAH TOXIC EQUIVALENT CONCENTRATION
- amsl FEET ABOVE MEAN SEA LEVEL
- ALL CONCENTRATIONS EXPRESSED IN MILLIGRAMS PER KILOGRAM (mg/kg)
- SAMPLE RESULTS IN RED INDICATE AN EXCEEDANCE OF APPLICABLE CLEANUP LEVEL

Note: This figure contains information in color. Black & white photocopies may not be suitable for review.

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Innovex Environmental
Colin Duffy

DRAWN BY

ICD
May 9, 2019

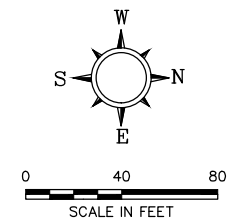
FIGURE 2

Soil Sample Location
and Detected
Analyte Results Map

E320-EL111
2500 BELLEVUE WAY SE
BELLEVUE, WASHINGTON

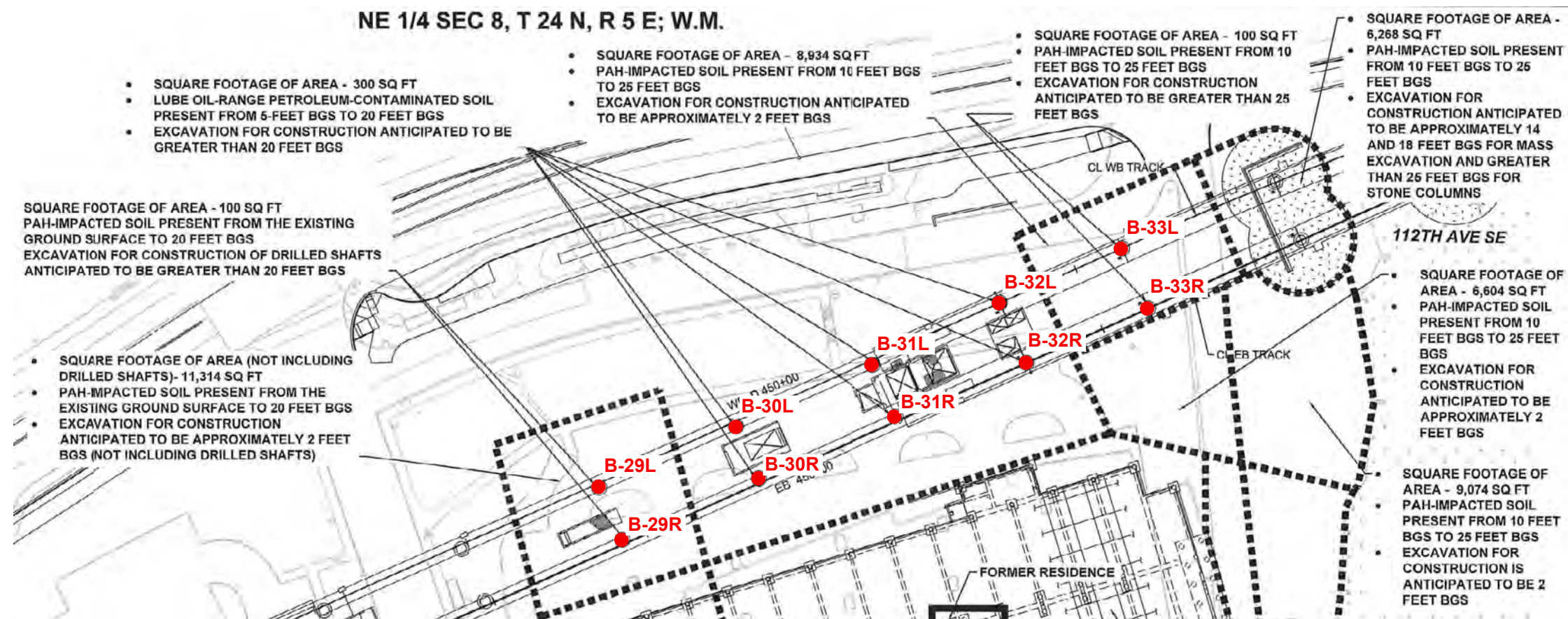


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(800) 988-7880



LEGEND

● B-33L DRILLED SHAFT COLUMN LOCATION



Note: This figure contains information in color. Black & white photocopies may not be suitable for review.

DESIGNED BY

Innovex Environmental

Colin Duffy

DRAWN BY

ICD

May 9, 2019

FIGURE 3

Drilled Shaft Column
Location Map

E320-EL111
2500 BELLEVUE WAY SE
BELLEVUE, WASHINGTON



16310 NE 80th St., Suite 300
Redmond, WA 98052
(800) 988-7880

TABLES

Table 1
Analytical Results for Analytes Detected in Soil
South Bellevue Station (EL111)

Sample Date	Sample ID	Elevation (feet amsl)	TPH-d		TPH-o		Acetone		Carbon Disulfide		2-Butanone		Isopropyl-benzene		1,2,4-Trimethyl-benzene	sec-Butyl-benzene		Naphtha-lene*	1-Methyl-naphtha-lene			
Characterization Samples																						
6/29/2017	E320 EL111 170629 EX001	--	58	U	120	U	0.19		0.0015	U	0.037		0.00098	U	0.00098	U	0.00098	U	0.16		0.053	U
6/29/2017	E320 EL111 170629 EX002	--	86	U	170	U	1.6		0.0034		0.21		0.0035		0.0036		0.0050		0.49		0.011	U
6/29/2017	E320 EL111 170629 EX003	--	27	U	230		0.054		0.0015	U	0.0080		0.0010	U	0.0010	U	0.0010	U	0.58	U	0.0072	U
Confirmation Samples																						
11/29/2017	E320-EL111-171129-S01	26.5	33	U	200		--		--		--		--		--		--		0.0088	U	0.0088	U
11/29/2017	E320-EL111-171129-S02	26.5	44		390		--		--		--		--		--		--		0.0082	U	0.0082	U
12/5/2017	E320 -EL11-171205-S03	27	70	U	140	U	--		--				--		--		--		0.87		0.39	
12/5/2017	E320 -EL11-171205-S04	27	67	U	130	U	--		--		--		--		--		--		0.0090	U	0.0090	U
MTCA Cleanup Levels			2,000 ^a		2,000 ^a		72,000 ^b		8,000 ^b		48,000 ^b		8,000 ^b		--	8,000 ^b		5.0 ^b		34.5 ^b		

Notes:

All values are reported in milligrams per kilogram (mg/kg).

See additional notes on last page.

Table 1
Analytical Results for Analytes Detected in Soil
South Bellevue Station (EL111)

Sample Date	Sample ID	Elevation (feet amsl)	2-Methyl-naphthalene	Acenaphthylene	Acenaphthene	Dibenzo-furan	Fluorene	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene
Characterization Samples												
6/29/2017	E320 EL111 170629 EX001	--	0.088	0.0095	0.21	--	0.24	0.49	0.068	--	0.34	0.24
6/29/2017	E320 EL111 170629 EX002	--	0.011 U	0.011 U	0.019	--	0.039	0.049	0.020	--	0.10	0.11
6/29/2017	E320 EL111 170629 EX003	--	0.0072 U	0.0072 U	0.0072 U	--	0.0072 U	0.0072 U	0.0072 U	--	0.0072 U	0.0072 U
Confirmation Samples												
11/29/2017	E320-EL111-171129-S01	26.5	0.0088 U	0.0099	0.0088 U	0.044 U	0.012	0.054	0.032	0.044 U	0.56	0.58
11/29/2017	E320-EL111-171129-S02	26.5	0.0082 U	0.0082 U	0.0082 U	0.041 U	0.0090	0.013	0.0082 U	0.041 U	0.0082 U	0.0082 U
12/5/2017	E320 -EL11-171205-S03	27	0.66	0.025	1.4	1.1	1.5	2.4	0.41	0.16	1.4	0.94
12/5/2017	E320 -EL11-171205-S04	27	0.0090 U	0.0090 U	0.0090 U	0.045 U	0.0090 U	0.0090 U	0.0090 U	0.045 U	0.0090 U	0.0090 U
MTCA Cleanup Levels			320 ^b	--	4,800 ^b	80 ^b	3,200 ^b	--	24,000 ^b	--	3,200 ^b	2,400 ^b

Notes:

All values are reported in milligrams per kilogram (mg/kg).

See additional notes on last page.

Table 1
Analytical Results for Analytes Detected in Soil
South Bellevue Station (EL111)

Sample Date	Sample ID	Elevation (feet amsl)	Benzo(a) anthracene (cPAH)	Chrysene (cPAH)	Benzo(b) fluoranthene (cPAH)	Benzo(j,k) fluoranthene (cPAH)	Benzo(a) pyrene (cPAH)	Indeno(1,2,3-cd)pyrene (cPAH)	Dibenzo(a,h) anthracene (cPAH)	cPAH TEC	Benzo[g,h,i] perylene
Characterization Samples											
6/29/2017	E320 EL111 170629 EX001	--	0.12	0.10	0.092	0.028	0.049	0.021	0.0077 U	0.0761	0.020
6/29/2017	E320 EL111 170629 EX002	--	0.052	0.065	0.045	0.014	0.021	0.011 U	0.011 U	0.03275	0.011 U
6/29/2017	E320 EL111 170629 EX003	--	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	0.0072 U	--	0.0072 U
Confirmation Samples											
11/29/2017	E320-EL111-171129-S01	26.5	0.20	0.16	0.19	0.066	0.13	0.060	0.024	0.1856	0.049
11/29/2017	E320-EL111-171129-S02	26.5	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	0.0082 U	--	0.0082 U
12/5/2017	E320 -EL11-171205-S03	27	0.39	0.33	0.29	0.082	0.12	0.051	0.017	0.2063	0.037
12/5/2017	E320 -EL11-171205-S04	27	0.0090 U	0.0090 U	0.0090 U	0.0090 U	0.0090 U	0.0090 U	0.0090 U	--	0.0090 U
MTCA Cleanup Levels			1.37 ^b	137 ^b	1.37 ^b	13.7 ^b	0.1 ^a	1.37 ^b	0.137 ^b	0.1 ^a	--

Notes:

All values are reported in milligrams per kilogram (mg/kg).

See additional notes on last page.

Table 1
Analytical Results for Analytes Detected in Soil
South Bellevue Station (EL111)

Sample Date	Sample ID	Elevation (feet amsl)	Barium		Chromium		Copper		Lead		Nickel		Zinc	
Characterization Samples														
6/29/2017	E320 EL111 170629 EX001	--	59		28		--		12		--		--	
6/29/2017	E320 EL111 170629 EX002	--	66		30		--		9.6		--		--	
6/29/2017	E320 EL111 170629 EX003	--	48		28		--		14		--		--	
Confirmation Samples														
11/29/2017	E320-EL111-171129-S01	26.5	--		43		15		17		39		50	
11/29/2017	E320-EL111-171129-S02	26.5	--		23		17		6.1		27		33	
12/5/2017	E320 -EL11-171205-S03	27	--		26		16		7.0	U	30		32	
12/5/2017	E320 -EL11-171205-S04	27	--		57		30		14		52		86	
MTCA Cleanup Levels			16,000 ^b		2000 ^{***a}		3,200 ^b		250 ^a		1,600 ^b		24,000 ^b	

Notes:

All values are reported in milligrams per kilogram (mg/kg).

See additional notes on last page.

Table 1
Analytical Results for Analytes Detected in Soil
South Bellevue Station (EL111)

Notes:

Bold values exceed one or more cleanup levels.

-- = not analyzed or not applicable

* Higher value from volatile or semivolatile analysis is reported for naphthalene.

** The listed cleanup levels are for trivalent chromium. Detected chromium is presumed to be trivalent chromium.

^a = MTCA Method A Cleanup Level (Unrestricted)

^b = MTCA Method B Cleanup Level (Direct Contact)

amsl = above mean sea level

cPAHs = polycyclic aromatic hydrocarbons. benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, and indeno (1,2-cd)pyrene

MTCA = Model Toxics Control Act

TEC = Toxic Equivalent Concentration

U = undetected at the laboratory reporting limit shown

APPENDIX A

Site Photographs

APPENDIX A
Sound Transit Parcel EL111
Bellevue, Washington

Photograph 1

Date: June 29, 2017

Photographed by: Mitch Williams

Description: View of Creosote
Stained Soil and Debris

View Direction: East



Photograph 2

Date: June 29, 2017

Photographed by: Mitch Williams

Description: View of Creosote
Stained Soil

View Direction: West



Photograph 3

Date: 8/14/17

Photographed by: Colin Duffy

Description: Drilling drilled shaft B-33R.

View Direction: Northeast



Photograph 4

Date: 8/14/17

Photographed by: Colin Duffy

Description: Contaminated Soil Containment Cell.

View Direction: South



Photograph 5

Date: 8/21/17

Photographed by: Colin Duffy

Description: Contaminated Soil
Containment Cell.

View Direction: West



Photograph 6

Date: November 29, 2017

Photographed by: Colin
Duffy

Description: View of
Excavating in the Northern
Portion of the Site

View Direction: Southeast



Photograph 7

Date: November 29, 2017

Photographed by: Colin Duffy

Description: View of Final Grade
Sampling Location S02

View Direction: East



APPENDIX B

Laboratory Analytical Reports



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

July 10, 2017

Glenn Hayman
INNOVEX Environmental Mgt., Inc.
16310 NE 80th St., Suite 300
Redmond, WA 98052

Re: Analytical Data for Project 40300
Laboratory Reference No. 1706-357

Dear Glenn:

Enclosed are the analytical results and associated quality control data for samples submitted on June 29, 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 line 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 10, 2017
Samples Submitted: June 29, 2017
Laboratory Reference: 1706-357
Project: 40300

Case Narrative

Samples were collected on June 29, 2017 and received by the laboratory on June 29, 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.

Volatiles EPA 8260C Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Sample E320 EL111 170629 EX002 was analyzed by low-level Method 5035A and yielded a low result for the final internal standard, 1,4-Dichlorobenzene-d4. The sample was then re-analyzed by low-level Method 5035A and yielded a result for Naphthalene that exceeded the calibration level. The sample was then analyzed by high-level Method 5035A (methanol extraction). The result for the high-level analysis was much less than expected. The sample was deemed non-homogenous. Therefore the results for both the low-level analysis and the high-level analysis are provided for client's information.

PAHs EPA 8270D/SIM Analysis

The 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.



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NWTPH-HCID

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320 EL111 170629 EX001						
Laboratory ID: 06-357-01						
Gasoline Range Organics	ND	23	NWTPH-HCID	6-30-17	6-30-17	
Diesel Range Organics	ND	58	NWTPH-HCID	6-30-17	6-30-17	
Lube Oil Range Organics	ND	120	NWTPH-HCID	6-30-17	6-30-17	
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	112	50-150				

Client ID: E320 EL111 170629 EX002

Laboratory ID: 06-357-02

Gasoline Range Organics	ND	34	NWTPH-HCID	6-30-17	6-30-17	
Diesel Range Organics	ND	86	NWTPH-HCID	6-30-17	6-30-17	
Lube Oil Range Organics	ND	170	NWTPH-HCID	6-30-17	6-30-17	
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	99	50-150				

Client ID: E320 EL111 170629 EX003

Laboratory ID: 06-357-03

Gasoline Range Organics	ND	22	NWTPH-HCID	6-30-17	6-30-17	
Diesel Range Organics	ND	54	NWTPH-HCID	6-30-17	6-30-17	
Lube Oil	Detected	110	NWTPH-HCID	6-30-17	6-30-17	
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	100	50-150				



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**NWTPH-HCID
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0630S1					
Gasoline Range Organics	ND	20	NWTPH-HCID	6-30-17	6-30-17	
Diesel Range Organics	ND	50	NWTPH-HCID	6-30-17	6-30-17	
Lube Oil Range Organics	ND	100	NWTPH-HCID	6-30-17	6-30-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>108</i>	<i>50-150</i>				



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NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	E320 EL111 170629 EX003					
Laboratory ID:	06-357-03					
Diesel Range Organics	ND	27	NWTPH-Dx	7-6-17	7-6-17	
Lube Oil	230	54	NWTPH-Dx	7-6-17	7-6-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	96	50-150				



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**NWTPH-Dx
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0706S1					
Diesel Range Organics	ND	25	NWTPH-Dx	7-6-17	7-6-17	
Lube Oil Range Organics	ND	50	NWTPH-Dx	7-6-17	7-6-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	93	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	07-014-15							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	
Surrogate:								
o-Terphenyl				96	95	50-150		



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VOLATILES EPA 8260C
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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320 EL111 170629 EX001						
Laboratory ID: 06-357-01						
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	6-30-17	6-30-17	
Chloromethane	ND	0.0049	EPA 8260C	6-30-17	6-30-17	
Vinyl Chloride	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Bromomethane	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Chloroethane	ND	0.0049	EPA 8260C	6-30-17	6-30-17	
Trichlorofluoromethane	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
1,1-Dichloroethene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Acetone	0.19	0.0098	EPA 8260C	6-30-17	6-30-17	
Iodomethane	ND	0.0071	EPA 8260C	6-30-17	6-30-17	
Carbon Disulfide	ND	0.0015	EPA 8260C	6-30-17	6-30-17	
Methylene Chloride	ND	0.0098	EPA 8260C	6-30-17	6-30-17	
(trans) 1,2-Dichloroethene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Methyl t-Butyl Ether	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
1,1-Dichloroethane	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Vinyl Acetate	ND	0.0049	EPA 8260C	6-30-17	6-30-17	
2,2-Dichloropropane	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
(cis) 1,2-Dichloroethene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
2-Butanone	0.037	0.0049	EPA 8260C	6-30-17	6-30-17	
Bromochloromethane	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Chloroform	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
1,1,1-Trichloroethane	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Carbon Tetrachloride	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
1,1-Dichloropropene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Benzene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
1,2-Dichloroethane	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Trichloroethene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
1,2-Dichloropropane	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Dibromomethane	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Bromodichloromethane	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
2-Chloroethyl Vinyl Ether	ND	0.0049	EPA 8260C	6-30-17	6-30-17	
(cis) 1,3-Dichloropropene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Methyl Isobutyl Ketone	ND	0.0049	EPA 8260C	6-30-17	6-30-17	
Toluene	ND	0.0049	EPA 8260C	6-30-17	6-30-17	
(trans) 1,3-Dichloropropene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320 EL111 170629 EX001						
Laboratory ID: 06-357-01						
1,1,2-Trichloroethane	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Tetrachloroethene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
1,3-Dichloropropane	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
2-Hexanone	ND	0.0049	EPA 8260C	6-30-17	6-30-17	
Dibromochloromethane	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
1,2-Dibromoethane	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Chlorobenzene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
1,1,1,2-Tetrachloroethane	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Ethylbenzene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
m,p-Xylene	ND	0.0020	EPA 8260C	6-30-17	6-30-17	
o-Xylene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Styrene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Bromoform	ND	0.0049	EPA 8260C	6-30-17	6-30-17	
Isopropylbenzene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Bromobenzene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
1,1,2,2-Tetrachloroethane	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
1,2,3-Trichloropropane	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
n-Propylbenzene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
2-Chlorotoluene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
4-Chlorotoluene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
1,3,5-Trimethylbenzene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
tert-Butylbenzene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
1,2,4-Trimethylbenzene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
sec-Butylbenzene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
1,3-Dichlorobenzene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
p-Isopropyltoluene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
1,4-Dichlorobenzene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
1,2-Dichlorobenzene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
n-Butylbenzene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
1,2-Dibromo-3-chloropropane	ND	0.0049	EPA 8260C	6-30-17	6-30-17	
1,2,4-Trichlorobenzene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
Hexachlorobutadiene	ND	0.0049	EPA 8260C	6-30-17	6-30-17	
Naphthalene	ND	0.0049	EPA 8260C	6-30-17	6-30-17	
1,2,3-Trichlorobenzene	ND	0.00098	EPA 8260C	6-30-17	6-30-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>133</i>	<i>73-134</i>				
<i>Toluene-d8</i>	<i>124</i>	<i>81-124</i>				
<i>4-Bromofluorobenzene</i>	<i>121</i>	<i>80-131</i>				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320 EL111 170629 EX002						
Laboratory ID: 06-357-02						
Dichlorodifluoromethane	ND	0.0025	EPA 8260C	7-5-17	7-5-17	
Chloromethane	ND	0.0096	EPA 8260C	7-5-17	7-5-17	
Vinyl Chloride	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Bromomethane	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Chloroethane	ND	0.0096	EPA 8260C	7-5-17	7-5-17	
Trichlorofluoromethane	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
1,1-Dichloroethene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Acetone	0.69	0.019	EPA 8260C	7-5-17	7-5-17	
Iodomethane	ND	0.012	EPA 8260C	7-5-17	7-5-17	
Carbon Disulfide	0.0034	0.0031	EPA 8260C	7-5-17	7-5-17	Y
Methylene Chloride	ND	0.019	EPA 8260C	7-5-17	7-5-17	
(trans) 1,2-Dichloroethene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Methyl t-Butyl Ether	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
1,1-Dichloroethane	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Vinyl Acetate	ND	0.0096	EPA 8260C	7-5-17	7-5-17	
2,2-Dichloropropane	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
(cis) 1,2-Dichloroethene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
2-Butanone	0.21	0.0096	EPA 8260C	7-5-17	7-5-17	
Bromochloromethane	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Chloroform	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
1,1,1-Trichloroethane	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Carbon Tetrachloride	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
1,1-Dichloropropene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Benzene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
1,2-Dichloroethane	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Trichloroethene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
1,2-Dichloropropane	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Dibromomethane	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Bromodichloromethane	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
2-Chloroethyl Vinyl Ether	ND	0.0096	EPA 8260C	7-5-17	7-5-17	
(cis) 1,3-Dichloropropene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Methyl Isobutyl Ketone	ND	0.0096	EPA 8260C	7-5-17	7-5-17	
Toluene	ND	0.0096	EPA 8260C	7-5-17	7-5-17	
(trans) 1,3-Dichloropropene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320 EL111 170629 EX002						
Laboratory ID: 06-357-02						
1,1,2-Trichloroethane	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Tetrachloroethene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
1,3-Dichloropropane	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
2-Hexanone	ND	0.0096	EPA 8260C	7-5-17	7-5-17	
Dibromochloromethane	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
1,2-Dibromoethane	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Chlorobenzene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
1,1,1,2-Tetrachloroethane	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Ethylbenzene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
m,p-Xylene	ND	0.0038	EPA 8260C	7-5-17	7-5-17	
o-Xylene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Styrene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Bromoform	ND	0.0096	EPA 8260C	7-5-17	7-5-17	
Isopropylbenzene	0.0035	0.0019	EPA 8260C	7-5-17	7-5-17	
Bromobenzene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
1,1,2,2-Tetrachloroethane	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
1,2,3-Trichloropropane	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
n-Propylbenzene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
2-Chlorotoluene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
4-Chlorotoluene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
1,3,5-Trimethylbenzene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
tert-Butylbenzene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
1,2,4-Trimethylbenzene	0.0036	0.0019	EPA 8260C	7-5-17	7-5-17	
sec-Butylbenzene	0.0050	0.0019	EPA 8260C	7-5-17	7-5-17	
1,3-Dichlorobenzene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
p-Isopropyltoluene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
1,4-Dichlorobenzene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
1,2-Dichlorobenzene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
n-Butylbenzene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
1,2-Dibromo-3-chloropropane	ND	0.0096	EPA 8260C	7-5-17	7-5-17	
1,2,4-Trichlorobenzene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Hexachlorobutadiene	ND	0.0096	EPA 8260C	7-5-17	7-5-17	
Naphthalene	0.49	0.0096	EPA 8260C	7-5-17	7-5-17	E
1,2,3-Trichlorobenzene	ND	0.0019	EPA 8260C	7-5-17	7-5-17	
Surrogate: Percent Recovery Control Limits						
Dibromofluoromethane	120	73-134				
Toluene-d8	112	81-124				
4-Bromofluorobenzene	95	80-131				



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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320 EL111 170629 EX002						
Laboratory ID: 06-357-02						
Dichlorodifluoromethane	ND	0.15	EPA 8260C	7-5-17	7-5-17	
Chloromethane	ND	0.58	EPA 8260C	7-5-17	7-5-17	
Vinyl Chloride	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Bromomethane	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Chloroethane	ND	0.58	EPA 8260C	7-5-17	7-5-17	
Trichlorofluoromethane	ND	0.12	EPA 8260C	7-5-17	7-5-17	
1,1-Dichloroethene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Acetone	1.6	1.2	EPA 8260C	7-5-17	7-5-17	
Iodomethane	ND	0.74	EPA 8260C	7-5-17	7-5-17	
Carbon Disulfide	ND	0.19	EPA 8260C	7-5-17	7-5-17	
Methylene Chloride	ND	1.2	EPA 8260C	7-5-17	7-5-17	
(trans) 1,2-Dichloroethene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Methyl t-Butyl Ether	ND	0.12	EPA 8260C	7-5-17	7-5-17	
1,1-Dichloroethane	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Vinyl Acetate	ND	0.58	EPA 8260C	7-5-17	7-5-17	
2,2-Dichloropropane	ND	0.12	EPA 8260C	7-5-17	7-5-17	
(cis) 1,2-Dichloroethene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
2-Butanone	ND	0.58	EPA 8260C	7-5-17	7-5-17	
Bromochloromethane	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Chloroform	ND	0.12	EPA 8260C	7-5-17	7-5-17	
1,1,1-Trichloroethane	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Carbon Tetrachloride	ND	0.12	EPA 8260C	7-5-17	7-5-17	
1,1-Dichloropropene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Benzene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
1,2-Dichloroethane	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Trichloroethene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
1,2-Dichloropropane	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Dibromomethane	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Bromodichloromethane	ND	0.12	EPA 8260C	7-5-17	7-5-17	
2-Chloroethyl Vinyl Ether	ND	0.58	EPA 8260C	7-5-17	7-5-17	
(cis) 1,3-Dichloropropene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Methyl Isobutyl Ketone	ND	0.58	EPA 8260C	7-5-17	7-5-17	
Toluene	ND	0.58	EPA 8260C	7-5-17	7-5-17	
(trans) 1,3-Dichloropropene	ND	0.12	EPA 8260C	7-5-17	7-5-17	



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 Project: 40300

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320 EL111 170629 EX002						
Laboratory ID: 06-357-02						
1,1,2-Trichloroethane	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Tetrachloroethene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
1,3-Dichloropropane	ND	0.12	EPA 8260C	7-5-17	7-5-17	
2-Hexanone	ND	0.58	EPA 8260C	7-5-17	7-5-17	
Dibromochloromethane	ND	0.12	EPA 8260C	7-5-17	7-5-17	
1,2-Dibromoethane	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Chlorobenzene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
1,1,1,2-Tetrachloroethane	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Ethylbenzene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
m,p-Xylene	ND	0.23	EPA 8260C	7-5-17	7-5-17	
o-Xylene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Styrene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Bromoform	ND	0.58	EPA 8260C	7-5-17	7-5-17	
Isopropylbenzene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Bromobenzene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
1,1,2,2-Tetrachloroethane	ND	0.12	EPA 8260C	7-5-17	7-5-17	
1,2,3-Trichloropropane	ND	0.12	EPA 8260C	7-5-17	7-5-17	
n-Propylbenzene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
2-Chlorotoluene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
4-Chlorotoluene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
1,3,5-Trimethylbenzene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
tert-Butylbenzene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
1,2,4-Trimethylbenzene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
sec-Butylbenzene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
1,3-Dichlorobenzene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
p-Isopropyltoluene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
1,4-Dichlorobenzene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
1,2-Dichlorobenzene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
n-Butylbenzene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
1,2-Dibromo-3-chloropropane	ND	0.58	EPA 8260C	7-5-17	7-5-17	
1,2,4-Trichlorobenzene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
Hexachlorobutadiene	ND	0.58	EPA 8260C	7-5-17	7-5-17	
Naphthalene	ND	0.58	EPA 8260C	7-5-17	7-5-17	
1,2,3-Trichlorobenzene	ND	0.12	EPA 8260C	7-5-17	7-5-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>108</i>	<i>73-134</i>				
<i>Toluene-d8</i>	<i>111</i>	<i>81-124</i>				
<i>4-Bromofluorobenzene</i>	<i>109</i>	<i>80-131</i>				



Date of Report: July 10, 2017
 Samples Submitted: June 29, 2017
 Laboratory Reference: 1706-357
 Project: 40300

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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320 EL111 170629 EX003						
Laboratory ID: 06-357-03						
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	6-30-17	6-30-17	
Chloromethane	ND	0.0051	EPA 8260C	6-30-17	6-30-17	
Vinyl Chloride	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Bromomethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Chloroethane	ND	0.0051	EPA 8260C	6-30-17	6-30-17	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Acetone	0.054	0.010	EPA 8260C	6-30-17	6-30-17	
Iodomethane	ND	0.0074	EPA 8260C	6-30-17	6-30-17	
Carbon Disulfide	ND	0.0015	EPA 8260C	6-30-17	6-30-17	
Methylene Chloride	ND	0.010	EPA 8260C	6-30-17	6-30-17	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Vinyl Acetate	ND	0.0051	EPA 8260C	6-30-17	6-30-17	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
2-Butanone	0.0080	0.0051	EPA 8260C	6-30-17	6-30-17	
Bromochloromethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Chloroform	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Benzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Trichloroethene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Dibromomethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Bromodichloromethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
2-Chloroethyl Vinyl Ether	ND	0.0051	EPA 8260C	6-30-17	6-30-17	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Methyl Isobutyl Ketone	ND	0.0051	EPA 8260C	6-30-17	6-30-17	
Toluene	ND	0.0051	EPA 8260C	6-30-17	6-30-17	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320 EL111 170629 EX003						
Laboratory ID: 06-357-03						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Tetrachloroethene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
2-Hexanone	ND	0.0051	EPA 8260C	6-30-17	6-30-17	
Dibromochloromethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Chlorobenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Ethylbenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
m,p-Xylene	ND	0.0020	EPA 8260C	6-30-17	6-30-17	
o-Xylene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Styrene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Bromoform	ND	0.0051	EPA 8260C	6-30-17	6-30-17	
Isopropylbenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Bromobenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
n-Propylbenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
2-Chlorotoluene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
4-Chlorotoluene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
tert-Butylbenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
sec-Butylbenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
n-Butylbenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,2-Dibromo-3-chloropropane	ND	0.0051	EPA 8260C	6-30-17	6-30-17	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Hexachlorobutadiene	ND	0.0051	EPA 8260C	6-30-17	6-30-17	
Naphthalene	ND	0.0051	EPA 8260C	6-30-17	6-30-17	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>116</i>	<i>73-134</i>				
<i>Toluene-d8</i>	<i>104</i>	<i>81-124</i>				
<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>80-131</i>				



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 Project: 40300

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0630S1					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	6-30-17	6-30-17	
Chloromethane	ND	0.0050	EPA 8260C	6-30-17	6-30-17	
Vinyl Chloride	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Bromomethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Chloroethane	ND	0.0050	EPA 8260C	6-30-17	6-30-17	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Acetone	ND	0.010	EPA 8260C	6-30-17	6-30-17	
Iodomethane	ND	0.0073	EPA 8260C	6-30-17	6-30-17	
Carbon Disulfide	ND	0.0015	EPA 8260C	6-30-17	6-30-17	
Methylene Chloride	ND	0.010	EPA 8260C	6-30-17	6-30-17	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Vinyl Acetate	ND	0.0050	EPA 8260C	6-30-17	6-30-17	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
2-Butanone	ND	0.0050	EPA 8260C	6-30-17	6-30-17	
Bromochloromethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Chloroform	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Benzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Trichloroethene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Dibromomethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Bromodichloromethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	6-30-17	6-30-17	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	6-30-17	6-30-17	
Toluene	ND	0.0050	EPA 8260C	6-30-17	6-30-17	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	



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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0630S1						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Tetrachloroethene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
2-Hexanone	ND	0.0050	EPA 8260C	6-30-17	6-30-17	
Dibromochloromethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Chlorobenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Ethylbenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
m,p-Xylene	ND	0.0020	EPA 8260C	6-30-17	6-30-17	
o-Xylene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Styrene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Bromoform	ND	0.0050	EPA 8260C	6-30-17	6-30-17	
Isopropylbenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Bromobenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
n-Propylbenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
2-Chlorotoluene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
4-Chlorotoluene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
tert-Butylbenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
sec-Butylbenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
n-Butylbenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	6-30-17	6-30-17	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	6-30-17	6-30-17	
Naphthalene	ND	0.0050	EPA 8260C	6-30-17	6-30-17	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	6-30-17	6-30-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	128	73-134				
Toluene-d8	121	81-124				
4-Bromofluorobenzene	122	80-131				



Date of Report: July 10, 2017
 Samples Submitted: June 29, 2017
 Laboratory Reference: 1706-357
 Project: 40300

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0705S1					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	7-5-17	7-5-17	
Chloromethane	ND	0.0050	EPA 8260C	7-5-17	7-5-17	
Vinyl Chloride	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Bromomethane	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Chloroethane	ND	0.0050	EPA 8260C	7-5-17	7-5-17	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Acetone	ND	0.010	EPA 8260C	7-5-17	7-5-17	
Iodomethane	ND	0.0064	EPA 8260C	7-5-17	7-5-17	
Carbon Disulfide	ND	0.0016	EPA 8260C	7-5-17	7-5-17	
Methylene Chloride	ND	0.010	EPA 8260C	7-5-17	7-5-17	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Vinyl Acetate	ND	0.0050	EPA 8260C	7-5-17	7-5-17	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
2-Butanone	ND	0.0050	EPA 8260C	7-5-17	7-5-17	
Bromochloromethane	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Chloroform	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Benzene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Trichloroethene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Dibromomethane	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Bromodichloromethane	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	7-5-17	7-5-17	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	7-5-17	7-5-17	
Toluene	ND	0.0050	EPA 8260C	7-5-17	7-5-17	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	



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VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0705S1						
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Tetrachloroethene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
2-Hexanone	ND	0.0050	EPA 8260C	7-5-17	7-5-17	
Dibromochloromethane	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Chlorobenzene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Ethylbenzene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
m,p-Xylene	ND	0.0020	EPA 8260C	7-5-17	7-5-17	
o-Xylene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Styrene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Bromoform	ND	0.0050	EPA 8260C	7-5-17	7-5-17	
Isopropylbenzene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Bromobenzene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
n-Propylbenzene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
2-Chlorotoluene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
4-Chlorotoluene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
tert-Butylbenzene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
sec-Butylbenzene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
n-Butylbenzene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	7-5-17	7-5-17	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	7-5-17	7-5-17	
Naphthalene	ND	0.0050	EPA 8260C	7-5-17	7-5-17	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	7-5-17	7-5-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	123	73-134				
Toluene-d8	116	81-124				
4-Bromofluorobenzene	117	80-131				



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VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery	Limits	Limit			
SPIKE BLANKS										
Laboratory ID:	SB0630S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0631	0.0627	0.0500	0.0500	126	125	66-127	1	15	
Benzene	0.0586	0.0567	0.0500	0.0500	117	113	76-122	3	15	
Trichloroethene	0.0484	0.0494	0.0500	0.0500	97	99	78-120	2	15	
Toluene	0.0567	0.0567	0.0500	0.0500	113	113	83-120	0	15	
Chlorobenzene	0.0491	0.0490	0.0500	0.0500	98	98	81-120	0	15	
Surrogate:										
Dibromofluoromethane					106	109	73-134			
Toluene-d8					99	106	81-124			
4-Bromofluorobenzene					101	107	80-131			



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VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits		RPD	RPD Limit	Flags
					Recovery						
SPIKE BLANKS											
Laboratory ID:	SB0705S1										
	SB	SBD	SB	SBD	SB	SBD					
1,1-Dichloroethene	0.0613	0.0623	0.0500	0.0500	123	125	66-127	2		15	
Benzene	0.0573	0.0604	0.0500	0.0500	115	121	76-122	5		15	
Trichloroethene	0.0496	0.0518	0.0500	0.0500	99	104	78-120	4		15	
Toluene	0.0570	0.0583	0.0500	0.0500	114	117	83-120	2		15	
Chlorobenzene	0.0486	0.0506	0.0500	0.0500	97	101	81-120	4		15	
Surrogate:											
Dibromofluoromethane					103	104	73-134				
Toluene-d8					99	100	81-124				
4-Bromofluorobenzene					99	99	80-131				



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PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320 EL111 170629 EX001						
Laboratory ID: 06-357-01						
Naphthalene	0.16	0.0077	EPA 8270D/SIM	7-5-17	7-6-17	
2-Methylnaphthalene	0.088	0.0077	EPA 8270D/SIM	7-5-17	7-6-17	
1-Methylnaphthalene	0.053	0.0077	EPA 8270D/SIM	7-5-17	7-6-17	
Acenaphthylene	0.0095	0.0077	EPA 8270D/SIM	7-5-17	7-6-17	
Acenaphthene	0.21	0.0077	EPA 8270D/SIM	7-5-17	7-6-17	
Fluorene	0.24	0.0077	EPA 8270D/SIM	7-5-17	7-6-17	
Phenanthrene	0.49	0.0077	EPA 8270D/SIM	7-5-17	7-6-17	
Anthracene	0.068	0.0077	EPA 8270D/SIM	7-5-17	7-6-17	
Fluoranthene	0.34	0.0077	EPA 8270D/SIM	7-5-17	7-6-17	
Pyrene	0.24	0.0077	EPA 8270D/SIM	7-5-17	7-6-17	
Benzo[a]anthracene	0.12	0.0077	EPA 8270D/SIM	7-5-17	7-6-17	
Chrysene	0.10	0.0077	EPA 8270D/SIM	7-5-17	7-6-17	
Benzo[b]fluoranthene	0.092	0.0077	EPA 8270D/SIM	7-5-17	7-6-17	
Benzo[j,k]fluoranthene	0.028	0.0077	EPA 8270D/SIM	7-5-17	7-6-17	
Benzo[a]pyrene	0.049	0.0077	EPA 8270D/SIM	7-5-17	7-6-17	
Indeno(1,2,3-c,d)pyrene	0.021	0.0077	EPA 8270D/SIM	7-5-17	7-6-17	
Dibenz[a,h]anthracene	ND	0.0077	EPA 8270D/SIM	7-5-17	7-6-17	
Benzo[g,h,i]perylene	0.020	0.0077	EPA 8270D/SIM	7-5-17	7-6-17	
<i>Surrogate: Percent Recovery Control Limits</i>						
2-Fluorobiphenyl	83	32 - 122				
Pyrene-d10	84	33 - 125				
Terphenyl-d14	104	36 - 118				



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PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320 EL111 170629 EX002						
Laboratory ID: 06-357-02						
Naphthalene	ND	0.011	EPA 8270D/SIM	7-5-17	7-6-17	
2-Methylnaphthalene	ND	0.011	EPA 8270D/SIM	7-5-17	7-6-17	
1-Methylnaphthalene	ND	0.011	EPA 8270D/SIM	7-5-17	7-6-17	
Acenaphthylene	ND	0.011	EPA 8270D/SIM	7-5-17	7-6-17	
Acenaphthene	0.019	0.011	EPA 8270D/SIM	7-5-17	7-6-17	
Fluorene	0.039	0.011	EPA 8270D/SIM	7-5-17	7-6-17	
Phenanthrene	0.049	0.011	EPA 8270D/SIM	7-5-17	7-6-17	
Anthracene	0.020	0.011	EPA 8270D/SIM	7-5-17	7-6-17	
Fluoranthene	0.10	0.011	EPA 8270D/SIM	7-5-17	7-6-17	
Pyrene	0.11	0.011	EPA 8270D/SIM	7-5-17	7-6-17	
Benzo[a]anthracene	0.052	0.011	EPA 8270D/SIM	7-5-17	7-6-17	
Chrysene	0.065	0.011	EPA 8270D/SIM	7-5-17	7-6-17	
Benzo[b]fluoranthene	0.045	0.011	EPA 8270D/SIM	7-5-17	7-6-17	
Benzo[j,k]fluoranthene	0.014	0.011	EPA 8270D/SIM	7-5-17	7-6-17	
Benzo[a]pyrene	0.021	0.011	EPA 8270D/SIM	7-5-17	7-6-17	
Indeno(1,2,3-c,d)pyrene	ND	0.011	EPA 8270D/SIM	7-5-17	7-6-17	
Dibenz[a,h]anthracene	ND	0.011	EPA 8270D/SIM	7-5-17	7-6-17	
Benzo[g,h,i]perylene	ND	0.011	EPA 8270D/SIM	7-5-17	7-6-17	
<i>Surrogate: Percent Recovery Control Limits</i>						
2-Fluorobiphenyl	60	32 - 122				
Pyrene-d10	61	33 - 125				
Terphenyl-d14	74	36 - 118				



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PAHs EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320 EL111 170629 EX003						
Laboratory ID: 06-357-03						
Naphthalene	ND	0.0072	EPA 8270D/SIM	7-5-17	7-6-17	
2-Methylnaphthalene	ND	0.0072	EPA 8270D/SIM	7-5-17	7-6-17	
1-Methylnaphthalene	ND	0.0072	EPA 8270D/SIM	7-5-17	7-6-17	
Acenaphthylene	ND	0.0072	EPA 8270D/SIM	7-5-17	7-6-17	
Acenaphthene	ND	0.0072	EPA 8270D/SIM	7-5-17	7-6-17	
Fluorene	ND	0.0072	EPA 8270D/SIM	7-5-17	7-6-17	
Phenanthrene	ND	0.0072	EPA 8270D/SIM	7-5-17	7-6-17	
Anthracene	ND	0.0072	EPA 8270D/SIM	7-5-17	7-6-17	
Fluoranthene	ND	0.0072	EPA 8270D/SIM	7-5-17	7-6-17	
Pyrene	ND	0.0072	EPA 8270D/SIM	7-5-17	7-6-17	
Benzo[a]anthracene	ND	0.0072	EPA 8270D/SIM	7-5-17	7-6-17	
Chrysene	ND	0.0072	EPA 8270D/SIM	7-5-17	7-6-17	
Benzo[b]fluoranthene	ND	0.0072	EPA 8270D/SIM	7-5-17	7-6-17	
Benzo[j,k]fluoranthene	ND	0.0072	EPA 8270D/SIM	7-5-17	7-6-17	
Benzo[a]pyrene	ND	0.0072	EPA 8270D/SIM	7-5-17	7-6-17	
Indeno(1,2,3-c,d)pyrene	ND	0.0072	EPA 8270D/SIM	7-5-17	7-6-17	
Dibenz[a,h]anthracene	ND	0.0072	EPA 8270D/SIM	7-5-17	7-6-17	
Benzo[g,h,i]perylene	ND	0.0072	EPA 8270D/SIM	7-5-17	7-6-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>82</i>	<i>32 - 122</i>				
<i>Pyrene-d10</i>	<i>87</i>	<i>33 - 125</i>				
<i>Terphenyl-d14</i>	<i>107</i>	<i>36 - 118</i>				



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

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB0705S1						
Naphthalene	ND	0.0067	EPA 8270D/SIM	7-5-17	7-5-17	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	7-5-17	7-5-17	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	7-5-17	7-5-17	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	7-5-17	7-5-17	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	7-5-17	7-5-17	
Fluorene	ND	0.0067	EPA 8270D/SIM	7-5-17	7-5-17	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	7-5-17	7-5-17	
Anthracene	ND	0.0067	EPA 8270D/SIM	7-5-17	7-5-17	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	7-5-17	7-5-17	
Pyrene	ND	0.0067	EPA 8270D/SIM	7-5-17	7-5-17	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	7-5-17	7-5-17	
Chrysene	ND	0.0067	EPA 8270D/SIM	7-5-17	7-5-17	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	7-5-17	7-5-17	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	7-5-17	7-5-17	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	7-5-17	7-5-17	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270D/SIM	7-5-17	7-5-17	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	7-5-17	7-5-17	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	7-5-17	7-5-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	96	32 - 122				
Pyrene-d10	111	33 - 125				
Terphenyl-d14	123	36 - 118				Q



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 Project: 40300

**PAHs EPA 8270D/SIM
 MS/MSD 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:	07-001-08									
	MS	MSD	MS	MSD		MS	MSD			
Naphthalene	0.0646	0.0695	0.0833	0.0833	ND	78	83	39 - 112	7	27
Acenaphthylene	0.0755	0.0774	0.0833	0.0833	ND	91	93	40 - 121	2	34
Acenaphthene	0.0701	0.0704	0.0833	0.0833	ND	84	85	44 - 113	0	28
Fluorene	0.0690	0.0761	0.0833	0.0833	ND	83	91	43 - 119	10	27
Phenanthrene	0.0699	0.0754	0.0833	0.0833	ND	84	91	35 - 124	8	30
Anthracene	0.0777	0.0818	0.0833	0.0833	ND	93	98	30 - 140	5	26
Fluoranthene	0.0811	0.0860	0.0833	0.0833	ND	97	103	29 - 136	6	32
Pyrene	0.0794	0.0847	0.0833	0.0833	ND	95	102	35 - 128	6	33
Benzo[a]anthracene	0.0753	0.0790	0.0833	0.0833	ND	90	95	30 - 143	5	31
Chrysene	0.0715	0.0761	0.0833	0.0833	ND	86	91	32 - 129	6	33
Benzo[b]fluoranthene	0.0840	0.0908	0.0833	0.0833	ND	101	109	23 - 140	8	29
Benzo(j,k)fluoranthene	0.0833	0.0847	0.0833	0.0833	ND	100	102	32 - 119	2	30
Benzo[a]pyrene	0.0732	0.0761	0.0833	0.0833	ND	88	91	31 - 131	4	32
Indeno(1,2,3-c,d)pyrene	0.0770	0.0818	0.0833	0.0833	ND	92	98	31 - 130	6	28
Dibenz[a,h]anthracene	0.0722	0.0757	0.0833	0.0833	ND	87	91	40 - 119	5	27
Benzo[g,h,i]perylene	0.0849	0.0897	0.0833	0.0833	ND	102	108	39 - 119	5	29
Surrogate:										
2-Fluorobiphenyl						79	83	32 - 122		
Pyrene-d10						90	96	33 - 125		
Terphenyl-d14						96	102	36 - 118		



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 Project: 40300

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	06-357-01					
Client ID:	E320 EL111 170629 EX001					
Arsenic	ND	12	6010C	6-30-17	6-30-17	
Barium	59	2.9	6010C	6-30-17	6-30-17	
Cadmium	ND	0.58	6010C	6-30-17	6-30-17	
Chromium	28	0.58	6010C	6-30-17	6-30-17	
Lead	12	5.8	6010C	6-30-17	6-30-17	
Mercury	ND	0.29	7471B	7-5-17	7-5-17	
Selenium	ND	12	6010C	6-30-17	6-30-17	
Silver	ND	1.2	6010C	6-30-17	6-30-17	

Lab ID:	06-357-02					
Client ID:	E320 EL111 170629 EX002					
Arsenic	ND	17	6010C	6-30-17	6-30-17	
Barium	66	4.3	6010C	6-30-17	6-30-17	
Cadmium	ND	0.86	6010C	6-30-17	6-30-17	
Chromium	30	0.86	6010C	6-30-17	6-30-17	
Lead	9.6	8.6	6010C	6-30-17	6-30-17	
Mercury	ND	0.43	7471B	7-5-17	7-5-17	
Selenium	ND	17	6010C	6-30-17	6-30-17	
Silver	ND	1.7	6010C	6-30-17	6-30-17	



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 Project: 40300

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	06-357-03					
Client ID:	E320 EL111 170629 EX003					
Arsenic	ND	11	6010C	6-30-17	6-30-17	
Barium	48	2.7	6010C	6-30-17	6-30-17	
Cadmium	ND	0.54	6010C	6-30-17	6-30-17	
Chromium	28	0.54	6010C	6-30-17	6-30-17	
Lead	14	5.4	6010C	6-30-17	6-30-17	
Mercury	ND	0.27	7471B	7-5-17	7-5-17	
Selenium	ND	11	6010C	6-30-17	6-30-17	
Silver	ND	1.1	6010C	6-30-17	6-30-17	



Date of Report: July 10, 2017
Samples Submitted: June 29, 2017
Laboratory Reference: 1706-357
Project: 40300

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

Date Extracted: 6-30&7-5-17

Date Analyzed: 6-30&7-5-17

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: MB0630SM1&MB0705S1

Analyte	Method	Result	PQL
Arsenic	6010C	ND	10
Barium	6010C	ND	2.5
Cadmium	6010C	ND	0.50
Chromium	6010C	ND	0.50
Lead	6010C	ND	5.0
Mercury	7471B	ND	0.25
Selenium	6010C	ND	10
Silver	6010C	ND	1.0



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 Samples Submitted: June 29, 2017
 Laboratory Reference: 1706-357
 Project: 40300

**TOTAL METALS
 EPA 6010C/7471B
 DUPLICATE QUALITY CONTROL**

Date Extracted: 6-30&7-5-17
 Date Analyzed: 6-30&7-5-17

Matrix: Soil
 Units: mg/kg (ppm)

Lab ID: 06-350-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	ND	ND	NA	10	
Barium	34.7	35.6	3	2.5	
Cadmium	ND	ND	NA	0.50	
Chromium	21.6	26.5	20	0.50	
Lead	25.4	21.1	19	5.0	
Mercury	ND	ND	NA	0.25	
Selenium	ND	ND	NA	10	
Silver	ND	ND	NA	1.0	



Date of Report: July 10, 2017
 Samples Submitted: June 29, 2017
 Laboratory Reference: 1706-357
 Project: 40300

**TOTAL METALS
 EPA 6010C/7471B
 MS/MSD QUALITY CONTROL**

Date Extracted: 6-30&7-5-17

Date Analyzed: 6-30&7-5-17

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 06-350-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	96.5	97	101	101	5	
Barium	100	131	96	133	98	2	
Cadmium	50.0	46.8	94	47.5	95	2	
Chromium	100	110	88	112	91	2	
Lead	250	241	86	252	91	4	
Mercury	0.500	0.532	106	0.527	105	1	
Selenium	100	96.6	97	96.8	97	0	
Silver	25.0	19.7	79	20.0	80	2	



Date of Report: July 10, 2017
Samples Submitted: June 29, 2017
Laboratory Reference: 1706-357
Project: 40300

% MOISTURE

Date Analyzed: 6-30-17

Client ID	Lab ID	% Moisture
E320 EL111 170629 EX001	06-357-01	14
E320 EL111 170629 EX002	06-357-02	42
E320 EL111 170629 EX003	06-357-03	7





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

December 13, 2017

Glenn Hayman
INNOVEX Environmental Mgt., Inc.
16310 NE 80th St., Suite 300
Redmond, WA 98052

Re: Analytical Data for Project 40300
Laboratory Reference No. 1712-006

Dear Glenn:

Enclosed are the analytical results and associated quality control data for samples submitted on December 1, 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 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 13, 2017
Samples Submitted: December 1, 2017
Laboratory Reference: 1712-006
Project: 40300

Case Narrative

Samples were collected on November 29 and December 1, 2017 and received by the laboratory on December 1, 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: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

NWTPH-HCID

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320-EL111-171129-S01						
Laboratory ID: 12-006-01						
Gasoline Range Organics	ND	26	NWTPH-HCID	12-4-17	12-5-17	
Diesel Range Organics	ND	66	NWTPH-HCID	12-4-17	12-5-17	
Lube Oil Range Organics	Detected	130	NWTPH-HCID	12-4-17	12-5-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>110</i>	<i>50-150</i>				

Client ID: E320-EL111-171129-S02						
Laboratory ID: 12-006-02						
Gasoline Range Organics	ND	25	NWTPH-HCID	12-4-17	12-5-17	
Diesel Range Organics	ND	61	NWTPH-HCID	12-4-17	12-5-17	
Lube Oil Range Organics	Detected	120	NWTPH-HCID	12-4-17	12-5-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>109</i>	<i>50-150</i>				



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

**NWTPH-HCID
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1204S3					
Gasoline Range Organics	ND	20	NWTPH-HCID	12-4-17	12-5-17	
Diesel Range Organics	ND	50	NWTPH-HCID	12-4-17	12-5-17	
Lube Oil Range Organics	ND	100	NWTPH-HCID	12-4-17	12-5-17	
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	110	50-150				



Date of Report: December 13, 2017
Samples Submitted: December 1, 2017
Laboratory Reference: 1712-006
Project: 40300

NWTPH-Gx

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	E335-EL279-171201-DW01					
Laboratory ID:	12-006-03					
Gasoline	ND	100	NWTPH-Gx	12-5-17	12-5-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	83	66-114				



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

**NWTPH-Gx
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1205W3					
Gasoline	ND	100	NWTPH-Gx	12-5-17	12-5-17	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	93	66-114				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-011-04							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
Surrogate:								
Fluorobenzene				80	86	66-114		



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

NWTPH-Dx

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	E335-EL279-171201-DW01					
Laboratory ID:	12-006-03					
Diesel Range Organics	ND	0.25	NWTPH-Dx	12-4-17	12-6-17	
Lube Oil Range Organics	ND	0.21	NWTPH-Dx	12-4-17	12-6-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>101</i>	<i>50-150</i>				



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

**NWTPH-Dx
 QUALITY CONTROL**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1204W1					
Diesel Range Organics	ND	0.25	NWTPH-Dx	12-4-17	12-5-17	
Lube Oil Range Organics	ND	0.16	NWTPH-Dx	12-4-17	12-5-17	
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	78	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	11-350-03							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	
Surrogate:								
<i>o</i> -Terphenyl				81	79	50-150		



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

NWTPH-Dx

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	E320-EL111-171129-S01					
Laboratory ID:	12-006-01					
Diesel Range Organics	ND	33	NWTPH-Dx	12-7-17	12-11-17	
Lube Oil Range Organics	200	66	NWTPH-Dx	12-7-17	12-11-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	86	50-150				
Client ID:	E320-EL111-171129-S02					
Laboratory ID:	12-006-02					
Diesel Range Organics	44	31	NWTPH-Dx	12-7-17	12-11-17	N
Lube Oil Range Organics	390	61	NWTPH-Dx	12-7-17	12-11-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	102	50-150				



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

NWTPH-Dx QUALITY CONTROL

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1207S1					
Diesel Range Organics	ND	25	NWTPH-Dx	12-7-17	12-7-17	
Lube Oil Range Organics	ND	50	NWTPH-Dx	12-7-17	12-7-17	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	92	50-150				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	12-068-03							
	ORIG	DUP						
Diesel Range	ND	ND	NA	NA	NA	NA	NA	
Lube Oil Range	ND	ND	NA	NA	NA	NA	NA	
Surrogate:								
o-Terphenyl				72	86	50-150		



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

VOLATILES EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E335-EL279-171201-DW01						
Laboratory ID: 12-006-03						
Dichlorodifluoromethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Chloromethane	ND	1.0	EPA 8260C	12-1-17	12-1-17	
Vinyl Chloride	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Bromomethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Chloroethane	ND	1.0	EPA 8260C	12-1-17	12-1-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Acetone	ND	5.0	EPA 8260C	12-1-17	12-1-17	
Iodomethane	ND	1.0	EPA 8260C	12-1-17	12-1-17	
Carbon Disulfide	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-1-17	12-1-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Vinyl Acetate	ND	1.0	EPA 8260C	12-1-17	12-1-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
2-Butanone	ND	5.0	EPA 8260C	12-1-17	12-1-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Chloroform	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Benzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Trichloroethene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Dibromomethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
2-Chloroethyl Vinyl Ether	ND	2.3	EPA 8260C	12-1-17	12-1-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	12-1-17	12-1-17	
Toluene	ND	1.0	EPA 8260C	12-1-17	12-1-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-1-17	12-1-17	



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

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Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

VOLATILES EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E335-EL279-171201-DW01						
Laboratory ID: 12-006-03						
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
2-Hexanone	ND	2.0	EPA 8260C	12-1-17	12-1-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Ethylbenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
m,p-Xylene	ND	0.40	EPA 8260C	12-1-17	12-1-17	
o-Xylene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Styrene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Bromoform	ND	1.0	EPA 8260C	12-1-17	12-1-17	
Isopropylbenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Bromobenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
n-Propylbenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
n-Butylbenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-1-17	12-1-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Naphthalene	ND	1.0	EPA 8260C	12-1-17	12-1-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>104</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>				



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Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

VOLATILES by 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:	MB1201W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Chloromethane	ND	1.0	EPA 8260C	12-1-17	12-1-17	
Vinyl Chloride	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Bromomethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Chloroethane	ND	1.0	EPA 8260C	12-1-17	12-1-17	
Trichlorofluoromethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,1-Dichloroethene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Acetone	ND	5.0	EPA 8260C	12-1-17	12-1-17	
Iodomethane	ND	1.0	EPA 8260C	12-1-17	12-1-17	
Carbon Disulfide	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Methylene Chloride	ND	1.0	EPA 8260C	12-1-17	12-1-17	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,1-Dichloroethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Vinyl Acetate	ND	1.0	EPA 8260C	12-1-17	12-1-17	
2,2-Dichloropropane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
2-Butanone	ND	5.0	EPA 8260C	12-1-17	12-1-17	
Bromochloromethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Chloroform	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Carbon Tetrachloride	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,1-Dichloropropene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Benzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,2-Dichloroethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Trichloroethene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,2-Dichloropropane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Dibromomethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Bromodichloromethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
2-Chloroethyl Vinyl Ether	ND	2.3	EPA 8260C	12-1-17	12-1-17	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	12-1-17	12-1-17	
Toluene	ND	1.0	EPA 8260C	12-1-17	12-1-17	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	12-1-17	12-1-17	



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

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

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB1201W1						
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Tetrachloroethene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,3-Dichloropropane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
2-Hexanone	ND	2.0	EPA 8260C	12-1-17	12-1-17	
Dibromochloromethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,2-Dibromoethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Chlorobenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Ethylbenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
m,p-Xylene	ND	0.40	EPA 8260C	12-1-17	12-1-17	
o-Xylene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Styrene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Bromoform	ND	1.0	EPA 8260C	12-1-17	12-1-17	
Isopropylbenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Bromobenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	12-1-17	12-1-17	
n-Propylbenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
2-Chlorotoluene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
4-Chlorotoluene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
tert-Butylbenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
sec-Butylbenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
p-Isopropyltoluene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
n-Butylbenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	12-1-17	12-1-17	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Hexachlorobutadiene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Naphthalene	ND	1.0	EPA 8260C	12-1-17	12-1-17	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	12-1-17	12-1-17	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	101	75-127				
Toluene-d8	99	80-127				
4-Bromofluorobenzene	100	78-125				



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Water

Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					Recovery		Limits		Limit	
SPIKE BLANKS										
Laboratory ID:	SB1201W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	10.1	9.81	10.0	10.0	101	98	63-126	3	21	
Benzene	10.3	10.2	10.0	10.0	103	102	78-122	1	19	
Trichloroethene	10.1	9.90	10.0	10.0	101	99	63-120	2	20	
Toluene	10.7	10.5	10.0	10.0	107	105	79-124	2	19	
Chlorobenzene	10.5	10.4	10.0	10.0	105	104	78-120	1	19	
Surrogate:										
Dibromofluoromethane					97	104	75-127			
Toluene-d8					99	98	80-127			
4-Bromofluorobenzene					98	100	78-125			



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

SEMIVOLATILES EPA 8270D/SIM
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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320-EL111-171129-S01						
Laboratory ID: 12-006-01						
n-Nitrosodimethylamine	ND	0.044	EPA 8270D	12-5-17	12-5-17	
Pyridine	ND	0.44	EPA 8270D	12-5-17	12-5-17	
Phenol	ND	0.044	EPA 8270D	12-5-17	12-5-17	
Aniline	ND	0.22	EPA 8270D	12-5-17	12-5-17	
bis(2-Chloroethyl)ether	ND	0.044	EPA 8270D	12-5-17	12-5-17	
2-Chlorophenol	ND	0.044	EPA 8270D	12-5-17	12-5-17	
1,3-Dichlorobenzene	ND	0.044	EPA 8270D	12-5-17	12-5-17	
1,4-Dichlorobenzene	ND	0.044	EPA 8270D	12-5-17	12-5-17	
Benzyl alcohol	ND	0.22	EPA 8270D	12-5-17	12-5-17	
1,2-Dichlorobenzene	ND	0.044	EPA 8270D	12-5-17	12-5-17	
2-Methylphenol (o-Cresol)	ND	0.044	EPA 8270D	12-5-17	12-5-17	
bis(2-Chloroisopropyl)ether	ND	0.044	EPA 8270D	12-5-17	12-5-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.044	EPA 8270D	12-5-17	12-5-17	
n-Nitroso-di-n-propylamine	ND	0.044	EPA 8270D	12-5-17	12-5-17	
Hexachloroethane	ND	0.044	EPA 8270D	12-5-17	12-5-17	
Nitrobenzene	ND	0.044	EPA 8270D	12-5-17	12-5-17	
Isophorone	ND	0.044	EPA 8270D	12-5-17	12-5-17	
2-Nitrophenol	ND	0.044	EPA 8270D	12-5-17	12-5-17	
2,4-Dimethylphenol	ND	0.044	EPA 8270D	12-5-17	12-5-17	
bis(2-Chloroethoxy)methane	ND	0.044	EPA 8270D	12-5-17	12-5-17	
2,4-Dichlorophenol	ND	0.044	EPA 8270D	12-5-17	12-5-17	
1,2,4-Trichlorobenzene	ND	0.044	EPA 8270D	12-5-17	12-5-17	
Naphthalene	ND	0.0088	EPA 8270D/SIM	12-5-17	12-5-17	
4-Chloroaniline	ND	0.22	EPA 8270D	12-5-17	12-5-17	
Hexachlorobutadiene	ND	0.044	EPA 8270D	12-5-17	12-5-17	
4-Chloro-3-methylphenol	ND	0.044	EPA 8270D	12-5-17	12-5-17	
2-Methylnaphthalene	ND	0.0088	EPA 8270D/SIM	12-5-17	12-5-17	
1-Methylnaphthalene	ND	0.0088	EPA 8270D/SIM	12-5-17	12-5-17	
Hexachlorocyclopentadiene	ND	0.044	EPA 8270D	12-5-17	12-5-17	
2,4,6-Trichlorophenol	ND	0.044	EPA 8270D	12-5-17	12-5-17	
2,3-Dichloroaniline	ND	0.044	EPA 8270D	12-5-17	12-5-17	
2,4,5-Trichlorophenol	ND	0.044	EPA 8270D	12-5-17	12-5-17	
2-Chloronaphthalene	ND	0.044	EPA 8270D	12-5-17	12-5-17	
2-Nitroaniline	ND	0.044	EPA 8270D	12-5-17	12-5-17	
1,4-Dinitrobenzene	ND	0.044	EPA 8270D	12-5-17	12-5-17	
Dimethylphthalate	ND	0.044	EPA 8270D	12-5-17	12-5-17	
1,3-Dinitrobenzene	ND	0.044	EPA 8270D	12-5-17	12-5-17	
2,6-Dinitrotoluene	ND	0.044	EPA 8270D	12-5-17	12-5-17	
1,2-Dinitrobenzene	ND	0.044	EPA 8270D	12-5-17	12-5-17	
Acenaphthylene	0.0099	0.0088	EPA 8270D/SIM	12-5-17	12-5-17	
3-Nitroaniline	ND	0.044	EPA 8270D	12-5-17	12-5-17	



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 Project: 40300

SEMIVOLATILES EPA 8270D/SIM
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320-EL111-171129-S01						
Laboratory ID: 12-006-01						
2,4-Dinitrophenol	ND	0.22	EPA 8270D	12-5-17	12-5-17	
Acenaphthene	ND	0.0088	EPA 8270D/SIM	12-5-17	12-5-17	
4-Nitrophenol	ND	0.044	EPA 8270D	12-5-17	12-5-17	
2,4-Dinitrotoluene	ND	0.044	EPA 8270D	12-5-17	12-5-17	
Dibenzofuran	ND	0.044	EPA 8270D	12-5-17	12-5-17	
2,3,5,6-Tetrachlorophenol	ND	0.044	EPA 8270D	12-5-17	12-5-17	
2,3,4,6-Tetrachlorophenol	ND	0.044	EPA 8270D	12-5-17	12-5-17	
Diethylphthalate	ND	0.22	EPA 8270D	12-5-17	12-5-17	
4-Chlorophenyl-phenylether	ND	0.044	EPA 8270D	12-5-17	12-5-17	
4-Nitroaniline	ND	0.044	EPA 8270D	12-5-17	12-5-17	
Fluorene	0.012	0.0088	EPA 8270D/SIM	12-5-17	12-5-17	
4,6-Dinitro-2-methylphenol	ND	0.22	EPA 8270D	12-5-17	12-5-17	
n-Nitrosodiphenylamine	ND	0.044	EPA 8270D	12-5-17	12-5-17	
1,2-Diphenylhydrazine	ND	0.044	EPA 8270D	12-5-17	12-5-17	
4-Bromophenyl-phenylether	ND	0.044	EPA 8270D	12-5-17	12-5-17	
Hexachlorobenzene	ND	0.044	EPA 8270D	12-5-17	12-5-17	
Pentachlorophenol	ND	0.22	EPA 8270D	12-5-17	12-5-17	
Phenanthrene	0.054	0.044	EPA 8270D	12-5-17	12-5-17	
Anthracene	0.032	0.0088	EPA 8270D/SIM	12-5-17	12-5-17	
Carbazole	ND	0.044	EPA 8270D	12-5-17	12-5-17	
Di-n-butylphthalate	ND	0.22	EPA 8270D	12-5-17	12-5-17	
Fluoranthene	0.56	0.044	EPA 8270D	12-5-17	12-5-17	
Benzidine	ND	0.44	EPA 8270D	12-5-17	12-5-17	
Pyrene	0.58	0.044	EPA 8270D	12-5-17	12-5-17	
Butylbenzylphthalate	ND	0.22	EPA 8270D	12-5-17	12-5-17	
bis-2-Ethylhexyladipate	ND	0.22	EPA 8270D	12-5-17	12-5-17	
3,3'-Dichlorobenzidine	ND	0.22	EPA 8270D	12-5-17	12-5-17	
Benzo[a]anthracene	0.20	0.044	EPA 8270D	12-5-17	12-5-17	
Chrysene	0.16	0.044	EPA 8270D	12-5-17	12-5-17	
bis(2-Ethylhexyl)phthalate	ND	0.22	EPA 8270D	12-5-17	12-5-17	
Di-n-octylphthalate	ND	0.22	EPA 8270D	12-5-17	12-5-17	
Benzo[b]fluoranthene	0.19	0.044	EPA 8270D	12-5-17	12-5-17	
Benzo(j,k)fluoranthene	0.066	0.044	EPA 8270D	12-5-17	12-5-17	
Benzo[a]pyrene	0.13	0.044	EPA 8270D	12-5-17	12-5-17	
Indeno[1,2,3-cd]pyrene	0.060	0.044	EPA 8270D	12-5-17	12-5-17	
Dibenz[a,h]anthracene	0.024	0.0088	EPA 8270D/SIM	12-5-17	12-5-17	
Benzo[g,h,i]perylene	0.049	0.044	EPA 8270D	12-5-17	12-5-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorophenol	63	18 - 113				
Phenol-d6	66	19 - 119				
Nitrobenzene-d5	66	19 - 119				
2-Fluorobiphenyl	66	33 - 109				
2,4,6-Tribromophenol	69	19 - 121				
Terphenyl-d14	64	30 - 116				



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

SEMIVOLATILES EPA 8270D/SIM
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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320-EL111-171129-S02						
Laboratory ID: 12-006-02						
n-Nitrosodimethylamine	ND	0.041	EPA 8270D	12-5-17	12-5-17	
Pyridine	ND	0.41	EPA 8270D	12-5-17	12-5-17	
Phenol	ND	0.041	EPA 8270D	12-5-17	12-5-17	
Aniline	ND	0.20	EPA 8270D	12-5-17	12-5-17	
bis(2-Chloroethyl)ether	ND	0.041	EPA 8270D	12-5-17	12-5-17	
2-Chlorophenol	ND	0.041	EPA 8270D	12-5-17	12-5-17	
1,3-Dichlorobenzene	ND	0.041	EPA 8270D	12-5-17	12-5-17	
1,4-Dichlorobenzene	ND	0.041	EPA 8270D	12-5-17	12-5-17	
Benzyl alcohol	ND	0.20	EPA 8270D	12-5-17	12-5-17	
1,2-Dichlorobenzene	ND	0.041	EPA 8270D	12-5-17	12-5-17	
2-Methylphenol (o-Cresol)	ND	0.041	EPA 8270D	12-5-17	12-5-17	
bis(2-Chloroisopropyl)ether	ND	0.041	EPA 8270D	12-5-17	12-5-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.041	EPA 8270D	12-5-17	12-5-17	
n-Nitroso-di-n-propylamine	ND	0.041	EPA 8270D	12-5-17	12-5-17	
Hexachloroethane	ND	0.041	EPA 8270D	12-5-17	12-5-17	
Nitrobenzene	ND	0.041	EPA 8270D	12-5-17	12-5-17	
Isophorone	ND	0.041	EPA 8270D	12-5-17	12-5-17	
2-Nitrophenol	ND	0.041	EPA 8270D	12-5-17	12-5-17	
2,4-Dimethylphenol	ND	0.041	EPA 8270D	12-5-17	12-5-17	
bis(2-Chloroethoxy)methane	ND	0.041	EPA 8270D	12-5-17	12-5-17	
2,4-Dichlorophenol	ND	0.041	EPA 8270D	12-5-17	12-5-17	
1,2,4-Trichlorobenzene	ND	0.041	EPA 8270D	12-5-17	12-5-17	
Naphthalene	ND	0.0082	EPA 8270D/SIM	12-5-17	12-5-17	
4-Chloroaniline	ND	0.20	EPA 8270D	12-5-17	12-5-17	
Hexachlorobutadiene	ND	0.041	EPA 8270D	12-5-17	12-5-17	
4-Chloro-3-methylphenol	ND	0.041	EPA 8270D	12-5-17	12-5-17	
2-Methylnaphthalene	ND	0.0082	EPA 8270D/SIM	12-5-17	12-5-17	
1-Methylnaphthalene	ND	0.0082	EPA 8270D/SIM	12-5-17	12-5-17	
Hexachlorocyclopentadiene	ND	0.041	EPA 8270D	12-5-17	12-5-17	
2,4,6-Trichlorophenol	ND	0.041	EPA 8270D	12-5-17	12-5-17	
2,3-Dichloroaniline	ND	0.041	EPA 8270D	12-5-17	12-5-17	
2,4,5-Trichlorophenol	ND	0.041	EPA 8270D	12-5-17	12-5-17	
2-Chloronaphthalene	ND	0.041	EPA 8270D	12-5-17	12-5-17	
2-Nitroaniline	ND	0.041	EPA 8270D	12-5-17	12-5-17	
1,4-Dinitrobenzene	ND	0.041	EPA 8270D	12-5-17	12-5-17	
Dimethylphthalate	ND	0.041	EPA 8270D	12-5-17	12-5-17	
1,3-Dinitrobenzene	ND	0.041	EPA 8270D	12-5-17	12-5-17	
2,6-Dinitrotoluene	ND	0.041	EPA 8270D	12-5-17	12-5-17	
1,2-Dinitrobenzene	ND	0.041	EPA 8270D	12-5-17	12-5-17	
Acenaphthylene	ND	0.0082	EPA 8270D/SIM	12-5-17	12-5-17	
3-Nitroaniline	ND	0.041	EPA 8270D	12-5-17	12-5-17	



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SEMIVOLATILES EPA 8270D/SIM
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320-EL111-171129-S02						
Laboratory ID: 12-006-02						
2,4-Dinitrophenol	ND	0.20	EPA 8270D	12-5-17	12-5-17	
Acenaphthene	ND	0.0082	EPA 8270D/SIM	12-5-17	12-5-17	
4-Nitrophenol	ND	0.041	EPA 8270D	12-5-17	12-5-17	
2,4-Dinitrotoluene	ND	0.041	EPA 8270D	12-5-17	12-5-17	
Dibenzofuran	ND	0.041	EPA 8270D	12-5-17	12-5-17	
2,3,5,6-Tetrachlorophenol	ND	0.041	EPA 8270D	12-5-17	12-5-17	
2,3,4,6-Tetrachlorophenol	ND	0.041	EPA 8270D	12-5-17	12-5-17	
Diethylphthalate	ND	0.20	EPA 8270D	12-5-17	12-5-17	
4-Chlorophenyl-phenylether	ND	0.041	EPA 8270D	12-5-17	12-5-17	
4-Nitroaniline	ND	0.041	EPA 8270D	12-5-17	12-5-17	
Fluorene	0.0090	0.0082	EPA 8270D/SIM	12-5-17	12-5-17	
4,6-Dinitro-2-methylphenol	ND	0.20	EPA 8270D	12-5-17	12-5-17	
n-Nitrosodiphenylamine	ND	0.041	EPA 8270D	12-5-17	12-5-17	
1,2-Diphenylhydrazine	ND	0.041	EPA 8270D	12-5-17	12-5-17	
4-Bromophenyl-phenylether	ND	0.041	EPA 8270D	12-5-17	12-5-17	
Hexachlorobenzene	ND	0.041	EPA 8270D	12-5-17	12-5-17	
Pentachlorophenol	ND	0.20	EPA 8270D	12-5-17	12-5-17	
Phenanthrene	0.013	0.0082	EPA 8270D/SIM	12-5-17	12-5-17	
Anthracene	ND	0.0082	EPA 8270D/SIM	12-5-17	12-5-17	
Carbazole	ND	0.041	EPA 8270D	12-5-17	12-5-17	
Di-n-butylphthalate	ND	0.20	EPA 8270D	12-5-17	12-5-17	
Fluoranthene	ND	0.0082	EPA 8270D/SIM	12-5-17	12-5-17	
Benzidine	ND	0.41	EPA 8270D	12-5-17	12-5-17	
Pyrene	ND	0.0082	EPA 8270D/SIM	12-5-17	12-5-17	
Butylbenzylphthalate	ND	0.20	EPA 8270D	12-5-17	12-5-17	
bis-2-Ethylhexyladipate	ND	0.20	EPA 8270D	12-5-17	12-5-17	
3,3'-Dichlorobenzidine	ND	0.20	EPA 8270D	12-5-17	12-5-17	
Benzo[a]anthracene	ND	0.0082	EPA 8270D/SIM	12-5-17	12-5-17	
Chrysene	ND	0.0082	EPA 8270D/SIM	12-5-17	12-5-17	
bis(2-Ethylhexyl)phthalate	ND	0.20	EPA 8270D	12-5-17	12-5-17	
Di-n-octylphthalate	ND	0.20	EPA 8270D	12-5-17	12-5-17	
Benzo[b]fluoranthene	ND	0.0082	EPA 8270D/SIM	12-5-17	12-5-17	
Benzo(j,k)fluoranthene	ND	0.0082	EPA 8270D/SIM	12-5-17	12-5-17	
Benzo[a]pyrene	ND	0.0082	EPA 8270D/SIM	12-5-17	12-5-17	
Indeno[1,2,3-cd]pyrene	ND	0.0082	EPA 8270D/SIM	12-5-17	12-5-17	
Dibenz[a,h]anthracene	ND	0.0082	EPA 8270D/SIM	12-5-17	12-5-17	
Benzo[g,h,i]perylene	ND	0.0082	EPA 8270D/SIM	12-5-17	12-5-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorophenol	55	18 - 113				
Phenol-d6	56	19 - 119				
Nitrobenzene-d5	60	19 - 119				
2-Fluorobiphenyl	60	33 - 109				
2,4,6-Tribromophenol	61	19 - 121				
Terphenyl-d14	58	30 - 116				



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

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

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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1205S1					
n-Nitrosodimethylamine	ND	0.033	EPA 8270D	12-5-17	12-5-17	
Pyridine	ND	0.33	EPA 8270D	12-5-17	12-5-17	
Phenol	ND	0.033	EPA 8270D	12-5-17	12-5-17	
Aniline	ND	0.17	EPA 8270D	12-5-17	12-5-17	
bis(2-Chloroethyl)ether	ND	0.033	EPA 8270D	12-5-17	12-5-17	
2-Chlorophenol	ND	0.033	EPA 8270D	12-5-17	12-5-17	
1,3-Dichlorobenzene	ND	0.033	EPA 8270D	12-5-17	12-5-17	
1,4-Dichlorobenzene	ND	0.033	EPA 8270D	12-5-17	12-5-17	
Benzyl alcohol	ND	0.17	EPA 8270D	12-5-17	12-5-17	
1,2-Dichlorobenzene	ND	0.033	EPA 8270D	12-5-17	12-5-17	
2-Methylphenol (o-Cresol)	ND	0.033	EPA 8270D	12-5-17	12-5-17	
bis(2-Chloroisopropyl)ether	ND	0.033	EPA 8270D	12-5-17	12-5-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.033	EPA 8270D	12-5-17	12-5-17	
n-Nitroso-di-n-propylamine	ND	0.033	EPA 8270D	12-5-17	12-5-17	
Hexachloroethane	ND	0.033	EPA 8270D	12-5-17	12-5-17	
Nitrobenzene	ND	0.033	EPA 8270D	12-5-17	12-5-17	
Isophorone	ND	0.033	EPA 8270D	12-5-17	12-5-17	
2-Nitrophenol	ND	0.033	EPA 8270D	12-5-17	12-5-17	
2,4-Dimethylphenol	ND	0.033	EPA 8270D	12-5-17	12-5-17	
bis(2-Chloroethoxy)methane	ND	0.033	EPA 8270D	12-5-17	12-5-17	
2,4-Dichlorophenol	ND	0.033	EPA 8270D	12-5-17	12-5-17	
1,2,4-Trichlorobenzene	ND	0.033	EPA 8270D	12-5-17	12-5-17	
Naphthalene	ND	0.0067	EPA 8270D/SIM	12-5-17	12-5-17	
4-Chloroaniline	ND	0.17	EPA 8270D	12-5-17	12-5-17	
Hexachlorobutadiene	ND	0.033	EPA 8270D	12-5-17	12-5-17	
4-Chloro-3-methylphenol	ND	0.033	EPA 8270D	12-5-17	12-5-17	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	12-5-17	12-5-17	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	12-5-17	12-5-17	
Hexachlorocyclopentadiene	ND	0.033	EPA 8270D	12-5-17	12-5-17	
2,4,6-Trichlorophenol	ND	0.033	EPA 8270D	12-5-17	12-5-17	
2,3-Dichloroaniline	ND	0.033	EPA 8270D	12-5-17	12-5-17	
2,4,5-Trichlorophenol	ND	0.033	EPA 8270D	12-5-17	12-5-17	
2-Chloronaphthalene	ND	0.033	EPA 8270D	12-5-17	12-5-17	
2-Nitroaniline	ND	0.033	EPA 8270D	12-5-17	12-5-17	
1,4-Dinitrobenzene	ND	0.033	EPA 8270D	12-5-17	12-5-17	
Dimethylphthalate	ND	0.033	EPA 8270D	12-5-17	12-5-17	
1,3-Dinitrobenzene	ND	0.033	EPA 8270D	12-5-17	12-5-17	
2,6-Dinitrotoluene	ND	0.033	EPA 8270D	12-5-17	12-5-17	
1,2-Dinitrobenzene	ND	0.033	EPA 8270D	12-5-17	12-5-17	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	12-5-17	12-5-17	
3-Nitroaniline	ND	0.033	EPA 8270D	12-5-17	12-5-17	



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
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**SEMIVOLATILES EPA 8270D/SIM
 METHOD BLANK QUALITY CONTROL**

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB1205S1						
2,4-Dinitrophenol	ND	0.17	EPA 8270D	12-5-17	12-5-17	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	12-5-17	12-5-17	
4-Nitrophenol	ND	0.033	EPA 8270D	12-5-17	12-5-17	
2,4-Dinitrotoluene	ND	0.033	EPA 8270D	12-5-17	12-5-17	
Dibenzofuran	ND	0.033	EPA 8270D	12-5-17	12-5-17	
2,3,5,6-Tetrachlorophenol	ND	0.033	EPA 8270D	12-5-17	12-5-17	
2,3,4,6-Tetrachlorophenol	ND	0.033	EPA 8270D	12-5-17	12-5-17	
Diethylphthalate	ND	0.17	EPA 8270D	12-5-17	12-5-17	
4-Chlorophenyl-phenylether	ND	0.033	EPA 8270D	12-5-17	12-5-17	
4-Nitroaniline	ND	0.033	EPA 8270D	12-5-17	12-5-17	
Fluorene	ND	0.0067	EPA 8270D/SIM	12-5-17	12-5-17	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	12-5-17	12-5-17	
n-Nitrosodiphenylamine	ND	0.033	EPA 8270D	12-5-17	12-5-17	
1,2-Diphenylhydrazine	ND	0.033	EPA 8270D	12-5-17	12-5-17	
4-Bromophenyl-phenylether	ND	0.033	EPA 8270D	12-5-17	12-5-17	
Hexachlorobenzene	ND	0.033	EPA 8270D	12-5-17	12-5-17	
Pentachlorophenol	ND	0.17	EPA 8270D	12-5-17	12-5-17	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	12-5-17	12-5-17	
Anthracene	ND	0.0067	EPA 8270D/SIM	12-5-17	12-5-17	
Carbazole	ND	0.033	EPA 8270D	12-5-17	12-5-17	
Di-n-butylphthalate	ND	0.17	EPA 8270D	12-5-17	12-5-17	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	12-5-17	12-5-17	
Benzidine	ND	0.33	EPA 8270D	12-5-17	12-5-17	
Pyrene	ND	0.0067	EPA 8270D/SIM	12-5-17	12-5-17	
Butylbenzylphthalate	ND	0.17	EPA 8270D	12-5-17	12-5-17	
bis-2-Ethylhexyladipate	ND	0.17	EPA 8270D	12-5-17	12-5-17	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	12-5-17	12-5-17	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	12-5-17	12-5-17	
Chrysene	ND	0.0067	EPA 8270D/SIM	12-5-17	12-5-17	
bis(2-Ethylhexyl)phthalate	ND	0.17	EPA 8270D	12-5-17	12-5-17	
Di-n-octylphthalate	ND	0.17	EPA 8270D	12-5-17	12-5-17	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	12-5-17	12-5-17	
Benzo[j,k]fluoranthene	ND	0.0067	EPA 8270D/SIM	12-5-17	12-5-17	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	12-5-17	12-5-17	
Indeno[1,2,3-cd]pyrene	ND	0.0067	EPA 8270D/SIM	12-5-17	12-5-17	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	12-5-17	12-5-17	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	12-5-17	12-5-17	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	61	18 - 113				
Phenol-d6	66	19 - 119				
Nitrobenzene-d5	62	19 - 119				
2-Fluorobiphenyl	64	33 - 109				
2,4,6-Tribromophenol	71	19 - 121				
Terphenyl-d14	66	30 - 116				



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

**SEMIVOLATILES 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:	SB1205S1									
	SB	SBD	SB	SBD	SB	SBD				
Phenol	0.938	0.927	1.33	1.33	71	70	39 - 109	1	36	
2-Chlorophenol	0.894	0.884	1.33	1.33	67	66	42 - 105	1	35	
1,4-Dichlorobenzene	0.439	0.429	0.667	0.667	66	64	31 - 103	2	37	
n-Nitroso-di-n-propylamine	0.494	0.509	0.667	0.667	74	76	36 - 104	3	34	
1,2,4-Trichlorobenzene	0.439	0.450	0.667	0.667	66	67	32 - 104	2	38	
4-Chloro-3-methylphenol	0.948	0.989	1.33	1.33	71	74	48 - 107	4	31	
Acenaphthene	0.415	0.424	0.667	0.667	62	64	38 - 102	2	33	
4-Nitrophenol	0.953	0.999	1.33	1.33	72	75	27 - 121	5	35	
2,4-Dinitrotoluene	0.401	0.424	0.667	0.667	60	64	36 - 103	6	34	
Pentachlorophenol	0.868	0.904	1.33	1.33	65	68	21 - 114	4	37	
Pyrene	0.437	0.452	0.667	0.667	66	68	46 - 108	3	31	
Surrogate:										
2-Fluorophenol					71	70	18 - 113			
Phenol-d6					75	72	19 - 119			
Nitrobenzene-d5					72	72	19 - 119			
2-Fluorobiphenyl					68	69	33 - 109			
2,4,6-Tribromophenol					74	77	19 - 121			
Terphenyl-d14					67	68	30 - 116			



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

PAHs EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E335-EL279-171201-DW01						
Laboratory ID: 12-006-03						
Naphthalene	ND	0.096	EPA 8270D/SIM	12-4-17	12-4-17	
2-Methylnaphthalene	ND	0.096	EPA 8270D/SIM	12-4-17	12-4-17	
1-Methylnaphthalene	ND	0.096	EPA 8270D/SIM	12-4-17	12-4-17	
Acenaphthylene	ND	0.096	EPA 8270D/SIM	12-4-17	12-4-17	
Acenaphthene	ND	0.096	EPA 8270D/SIM	12-4-17	12-4-17	
Fluorene	ND	0.096	EPA 8270D/SIM	12-4-17	12-4-17	
Phenanthrene	ND	0.096	EPA 8270D/SIM	12-4-17	12-4-17	
Anthracene	ND	0.096	EPA 8270D/SIM	12-4-17	12-4-17	
Fluoranthene	ND	0.096	EPA 8270D/SIM	12-4-17	12-4-17	
Pyrene	ND	0.096	EPA 8270D/SIM	12-4-17	12-4-17	
Benzo[a]anthracene	ND	0.0096	EPA 8270D/SIM	12-4-17	12-4-17	
Chrysene	ND	0.0096	EPA 8270D/SIM	12-4-17	12-4-17	
Benzo[b]fluoranthene	ND	0.0096	EPA 8270D/SIM	12-4-17	12-4-17	
Benzo[j,k]fluoranthene	ND	0.0096	EPA 8270D/SIM	12-4-17	12-4-17	
Benzo[a]pyrene	ND	0.0096	EPA 8270D/SIM	12-4-17	12-4-17	
Indeno(1,2,3-c,d)pyrene	ND	0.0096	EPA 8270D/SIM	12-4-17	12-4-17	
Dibenz[a,h]anthracene	ND	0.0096	EPA 8270D/SIM	12-4-17	12-4-17	
Benzo[g,h,i]perylene	ND	0.0096	EPA 8270D/SIM	12-4-17	12-4-17	
<i>Surrogate: Percent Recovery Control Limits</i>						
2-Fluorobiphenyl	70	25 - 107				
Pyrene-d10	81	28 - 103				
Terphenyl-d14	88	36 - 129				



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

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

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB1204W1						
Naphthalene	ND	0.10	EPA 8270D/SIM	12-4-17	12-4-17	
2-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	12-4-17	12-4-17	
1-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	12-4-17	12-4-17	
Acenaphthylene	ND	0.10	EPA 8270D/SIM	12-4-17	12-4-17	
Acenaphthene	ND	0.10	EPA 8270D/SIM	12-4-17	12-4-17	
Fluorene	ND	0.10	EPA 8270D/SIM	12-4-17	12-4-17	
Phenanthrene	ND	0.10	EPA 8270D/SIM	12-4-17	12-4-17	
Anthracene	ND	0.10	EPA 8270D/SIM	12-4-17	12-4-17	
Fluoranthene	ND	0.10	EPA 8270D/SIM	12-4-17	12-4-17	
Pyrene	ND	0.10	EPA 8270D/SIM	12-4-17	12-4-17	
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	12-4-17	12-4-17	
Chrysene	ND	0.010	EPA 8270D/SIM	12-4-17	12-4-17	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	12-4-17	12-4-17	
Benzo[j,k]fluoranthene	ND	0.010	EPA 8270D/SIM	12-4-17	12-4-17	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	12-4-17	12-4-17	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	12-4-17	12-4-17	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	12-4-17	12-4-17	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270D/SIM	12-4-17	12-4-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorobiphenyl	60	25 - 107				
Pyrene-d10	81	28 - 103				
Terphenyl-d14	90	36 - 129				



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

**PAHs 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:	SB1204W1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.410	0.419	0.500	0.500	82	84	27 - 106	2	35	
Acenaphthylene	0.480	0.483	0.500	0.500	96	97	20 - 117	1	34	
Acenaphthene	0.457	0.477	0.500	0.500	91	95	30 - 114	4	32	
Fluorene	0.482	0.503	0.500	0.500	96	101	36 - 116	4	28	
Phenanthrene	0.493	0.493	0.500	0.500	99	99	31 - 122	0	26	
Anthracene	0.500	0.504	0.500	0.500	100	101	33 - 144	1	26	
Fluoranthene	0.534	0.526	0.500	0.500	107	105	44 - 120	2	25	
Pyrene	0.538	0.533	0.500	0.500	108	107	40 - 130	1	29	
Benzo[a]anthracene	0.586	0.568	0.500	0.500	117	114	47 - 131	3	27	
Chrysene	0.520	0.514	0.500	0.500	104	103	48 - 120	1	29	
Benzo[b]fluoranthene	0.560	0.545	0.500	0.500	112	109	42 - 128	3	29	
Benzo(j,k)fluoranthene	0.539	0.521	0.500	0.500	108	104	46 - 121	3	27	
Benzo[a]pyrene	0.553	0.535	0.500	0.500	111	107	34 - 121	3	29	
Indeno(1,2,3-c,d)pyrene	0.545	0.530	0.500	0.500	109	106	39 - 128	3	28	
Dibenz[a,h]anthracene	0.544	0.530	0.500	0.500	109	106	39 - 125	3	30	
Benzo[g,h,i]perylene	0.539	0.515	0.500	0.500	108	103	41 - 122	5	29	
Surrogate:										
2-Fluorobiphenyl					70	62	25 - 107			
Pyrene-d10					88	81	28 - 103			
Terphenyl-d14					101	93	36 - 129			



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

PCBs EPA 8082A

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320-EL111-171129-S01						
Laboratory ID: 12-006-01						
Aroclor 1016	ND	0.066	EPA 8082A	12-4-17	12-5-17	
Aroclor 1221	ND	0.066	EPA 8082A	12-4-17	12-5-17	
Aroclor 1232	ND	0.066	EPA 8082A	12-4-17	12-5-17	
Aroclor 1242	ND	0.066	EPA 8082A	12-4-17	12-5-17	
Aroclor 1248	ND	0.066	EPA 8082A	12-4-17	12-5-17	
Aroclor 1254	ND	0.066	EPA 8082A	12-4-17	12-5-17	
Aroclor 1260	ND	0.066	EPA 8082A	12-4-17	12-5-17	
<i>Surrogate: Percent Recovery Control Limits</i>						
<i>DCB 69 40-134</i>						

Client ID: E320-EL111-171129-S02						
Laboratory ID: 12-006-02						
Aroclor 1016	ND	0.061	EPA 8082A	12-4-17	12-5-17	
Aroclor 1221	ND	0.061	EPA 8082A	12-4-17	12-5-17	
Aroclor 1232	ND	0.061	EPA 8082A	12-4-17	12-5-17	
Aroclor 1242	ND	0.061	EPA 8082A	12-4-17	12-5-17	
Aroclor 1248	ND	0.061	EPA 8082A	12-4-17	12-5-17	
Aroclor 1254	ND	0.061	EPA 8082A	12-4-17	12-5-17	
Aroclor 1260	ND	0.061	EPA 8082A	12-4-17	12-5-17	
<i>Surrogate: Percent Recovery Control Limits</i>						
<i>DCB 67 40-134</i>						



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

**PCBs EPA 8082A
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1204S1					
Aroclor 1016	ND	0.050	EPA 8082A	12-4-17	12-4-17	
Aroclor 1221	ND	0.050	EPA 8082A	12-4-17	12-4-17	
Aroclor 1232	ND	0.050	EPA 8082A	12-4-17	12-4-17	
Aroclor 1242	ND	0.050	EPA 8082A	12-4-17	12-4-17	
Aroclor 1248	ND	0.050	EPA 8082A	12-4-17	12-4-17	
Aroclor 1254	ND	0.050	EPA 8082A	12-4-17	12-4-17	
Aroclor 1260	ND	0.050	EPA 8082A	12-4-17	12-4-17	
Surrogate:	Percent Recovery	Control Limits				
DCB	57	40-134				

Analyte	Result				Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	12-006-01										
	MS	MSD	MS	MSD		MS	MSD				
Aroclor 1260	0.361	0.391	0.500	0.500	ND	72	78	34-126	8	16	
Surrogate:											
DCB						69	67	40-134			



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

TOTAL METALS
EPA 6010C/6020A/7471B

Matrix: Soil
 Units: mg/kg (ppm)

				Date	Date	
Analyte	Result	PQL	EPA Method	Prepared	Analyzed	Flags
Lab ID:	12-006-01					
Client ID:	E320-EL111-171129-S01					
Antimony	ND	6.6	6010C	12-4-17	12-5-17	
Arsenic	ND	13	6010C	12-4-17	12-5-17	
Beryllium	ND	0.66	6010C	12-4-17	12-5-17	
Cadmium	ND	0.66	6010C	12-4-17	12-5-17	
Chromium	43	0.66	6010C	12-4-17	12-5-17	
Copper	15	1.3	6010C	12-4-17	12-5-17	
Lead	17	6.6	6010C	12-4-17	12-5-17	
Mercury	ND	0.33	7471B	12-4-17	12-4-17	
Nickel	39	3.3	6010C	12-4-17	12-5-17	
Selenium	ND	13	6010C	12-4-17	12-5-17	
Silver	ND	1.3	6010C	12-4-17	12-5-17	
Thallium	ND	3.3	6020A	12-4-17	12-6-17	
Zinc	50	3.3	6010C	12-4-17	12-5-17	



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

TOTAL METALS
EPA 6010C/6020A/7471B

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	12-006-02					
Client ID:	E320-EL111-171129-S02					
Antimony	ND	6.1	6010C	12-4-17	12-5-17	
Arsenic	ND	12	6010C	12-4-17	12-5-17	
Beryllium	ND	0.61	6010C	12-4-17	12-5-17	
Cadmium	ND	0.61	6010C	12-4-17	12-5-17	
Chromium	23	0.61	6010C	12-4-17	12-5-17	
Copper	17	1.2	6010C	12-4-17	12-5-17	
Lead	6.1	6.1	6010C	12-4-17	12-5-17	
Mercury	ND	0.31	7471B	12-4-17	12-4-17	
Nickel	27	3.1	6010C	12-4-17	12-5-17	
Selenium	ND	12	6010C	12-4-17	12-5-17	
Silver	ND	1.2	6010C	12-4-17	12-5-17	
Thallium	ND	3.1	6020A	12-4-17	12-6-17	
Zinc	33	3.1	6010C	12-4-17	12-5-17	



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

**TOTAL METALS
 EPA 6010C/6020A/7471B
 METHOD BLANK QUALITY CONTROL**

Date Extracted: 12-4-17
 Date Analyzed: 12-4,5&6-17

Matrix: Soil
 Units: mg/kg (ppm)

Lab ID: MB1204SH1&MB1204S1

Analyte	Method	Result	PQL
Antimony	6010C	ND	5.0
Arsenic	6010C	ND	10
Beryllium	6010C	ND	0.50
Cadmium	6010C	ND	0.50
Chromium	6010C	ND	0.50
Copper	6010C	ND	1.0
Lead	6010C	ND	5.0
Mercury	7471B	ND	0.25
Nickel	6010C	ND	2.5
Selenium	6010C	ND	10
Silver	6010C	ND	1.0
Thallium	6020A	ND	2.5
Zinc	6010C	ND	2.5



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

**TOTAL METALS
 EPA 6010C/6020A/7471B
 DUPLICATE QUALITY CONTROL**

Date Extracted: 12-4-17
 Date Analyzed: 12-4,5&6-17

Matrix: Soil
 Units: mg/kg (ppm)

Lab ID: 12-006-02

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Antimony	ND	ND	NA	5.0	
Arsenic	ND	ND	NA	10	
Beryllium	ND	ND	NA	0.50	
Cadmium	ND	ND	NA	0.50	
Chromium	19.0	23.1	19	0.50	
Copper	14.2	12.9	10	1.0	
Lead	5.00	ND	NA	5.0	
Mercury	ND	ND	NA	0.25	
Nickel	22.3	24.8	10	2.5	
Selenium	ND	ND	NA	10	
Silver	ND	ND	NA	1.0	
Thallium	ND	ND	NA	2.5	
Zinc	26.8	29.1	8	2.5	



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

**TOTAL METALS
 EPA 6010C/6020A/7471B
 MS/MSD QUALITY CONTROL**

Date Extracted: 12-4-17
 Date Analyzed: 12-4,5&6-17

Matrix: Soil
 Units: mg/kg (ppm)

Lab ID: 12-006-02

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Antimony	100	92.4	92	91.9	92	0	
Arsenic	100	105	105	105	105	0	
Beryllium	50.0	49.5	99	49	98	1	
Cadmium	50.0	49.7	99	49.1	98	1	
Chromium	100	115	96	111	92	4	
Copper	50.0	63.9	99	63.4	98	1	
Lead	250	242	95	238	93	2	
Mercury	0.500	0.465	93	0.468	94	1	
Nickel	100	119	96	116	94	2	
Selenium	100	107	107	104	104	3	
Silver	25.0	23.4	93	23.3	93	0	
Thallium	50.0	43.3	87	44.3	89	2	
Zinc	100	122	95	126	99	3	



Date of Report: December 13, 2017
Samples Submitted: December 1, 2017
Laboratory Reference: 1712-006
Project: 40300

TOTAL METALS
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

				Date	Date	
Analyte	Result	PQL	EPA Method	Prepared	Analyzed	Flags
Lab ID:	12-006-03					
Client ID:	E335-EL279-171201-DW01					
Arsenic	1.8	0.50	200.8	12-5-17	12-5-17	
Chromium	1.3	1.0	200.8	12-5-17	12-5-17	
Lead	ND	0.50	200.8	12-5-17	12-5-17	



Date of Report: December 13, 2017
Samples Submitted: December 1, 2017
Laboratory Reference: 1712-006
Project: 40300

**TOTAL METALS
EPA 200.8
METHOD BLANK QUALITY CONTROL**

Date Extracted: 12-5-17
Date Analyzed: 12-5-17

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB1205WH1

Analyte	Method	Result	PQL
Arsenic	200.8	ND	0.50
Chromium	200.8	ND	1.0
Lead	200.8	ND	0.50



Date of Report: December 13, 2017
Samples Submitted: December 1, 2017
Laboratory Reference: 1712-006
Project: 40300

**TOTAL METALS
EPA 200.8
DUPLICATE QUALITY CONTROL**

Date Extracted: 12-5-17
Date Analyzed: 12-5-17

Matrix: Water
Units: ug/L (ppb)

Lab ID: 12-006-03

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	1.78	1.90	6	0.50	
Chromium	1.33	1.31	2	1.0	
Lead	ND	ND	NA	0.50	



Date of Report: December 13, 2017
 Samples Submitted: December 1, 2017
 Laboratory Reference: 1712-006
 Project: 40300

**TOTAL METALS
 EPA 200.8
 MS/MSD QUALITY CONTROL**

Date Extracted: 12-5-17

Date Analyzed: 12-5-17

Matrix: Water

Units: ug/L (ppb)

Lab ID: 12-006-03

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	111	109	110	108	1	
Chromium	100	104	103	104	103	0	
Lead	100	102	102	102	102	1	



Date of Report: December 13, 2017
Samples Submitted: December 1, 2017
Laboratory Reference: 1712-006
Project: 40300

% MOISTURE

Date Analyzed: 12-4-17

Client ID	Lab ID	% Moisture
E320-EL111-171129-S01	12-006-01	24
E320-EL111-171129-S02	12-006-02	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





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Laboratory Number: 12-006

NWTPH-HCID	with follow up
NWTPH-Gx/BTEX	
NWTPH-Gx	
NWTPH-Dx	(☐ Acid / SG Clean-up)
Volatiles 8260C	see notes
Halogenated Volatiles 8260C	
EDB EPA 8011 (Waters Only)	
Semivolatiles 8270D/SIM	(with low-level PAHs)
PAHs 8270D/SIM (low-level)	see notes
PCBs 8082A	
Organochlorine Pesticides 8081B	
Organophosphorus Pesticides 8270D/SIM	
Chlorinated Acid Herbicides 8151A	
Total PCRA Metals	PP
Total MTCA Metals	
TCLP Metals	
HEM (oil and grease) 1664A	
metals - As, Cr, Pb	
% Moisture	

[illegible]

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished		INNOVEX	12/11/17	1205	Email Glenn See attached table for specific VOC/PAH analysis & special detection limits for water samples
Received		OSI	12/11/17	1205	
Relinquished					
Received					
Relinquished					
Received					Data Package: Standard ☒ Level III ☐ Level IV ☐
Reviewed/Date		Reviewed/Date			
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☒					



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

December 12, 2017

Glenn Hayman
INNOVEX Environmental Mgt., Inc.
16310 NE 80th St., Suite 300
Redmond, WA 98052

Re: Analytical Data for Project 40300
Laboratory Reference No. 1712-035

Dear Glenn:

Enclosed are the analytical results and associated quality control data for samples submitted on December 5, 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 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 12, 2017
Samples Submitted: December 5, 2017
Laboratory Reference: 1712-035
Project: 40300

Case Narrative

Samples were collected on December 5, 2017 and received by the laboratory on December 5, 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: December 12, 2017
 Samples Submitted: December 5, 2017
 Laboratory Reference: 1712-035
 Project: 40300

NWTPH-HCID

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320-EL111-171205-S03						
Laboratory ID: 12-035-01						
Gasoline Range Organics	ND	28	NWTPH-HCID	12-6-17	12-8-17	
Diesel Range Organics	ND	70	NWTPH-HCID	12-6-17	12-8-17	
Lube Oil Range Organics	ND	140	NWTPH-HCID	12-6-17	12-8-17	
Surrogate:	Percent Recovery	Control Limits				
<i>o-Terphenyl</i>	118	50-150				

Client ID: E320-EL111-171205-S04						
Laboratory ID: 12-035-02						
Gasoline Range Organics	ND	27	NWTPH-HCID	12-6-17	12-8-17	
Diesel Range Organics	ND	67	NWTPH-HCID	12-6-17	12-8-17	
Lube Oil Range Organics	ND	130	NWTPH-HCID	12-6-17	12-8-17	
Surrogate:	Percent Recovery	Control Limits				
<i>o-Terphenyl</i>	105	50-150				



Date of Report: December 12, 2017
 Samples Submitted: December 5, 2017
 Laboratory Reference: 1712-035
 Project: 40300

**NWTPH-HCID
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1206S3					
Gasoline Range Organics	ND	20	NWTPH-HCID	12-6-17	12-8-17	
Diesel Range Organics	ND	50	NWTPH-HCID	12-6-17	12-8-17	
Lube Oil Range Organics	ND	100	NWTPH-HCID	12-6-17	12-8-17	
Surrogate:	Percent Recovery	Control Limits				
<i>o</i>-Terphenyl	117	50-150				



Date of Report: December 12, 2017
 Samples Submitted: December 5, 2017
 Laboratory Reference: 1712-035
 Project: 40300

SEMIVOLATILES EPA 8270D/SIM
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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320-EL111-171205-S03						
Laboratory ID: 12-035-01						
n-Nitrosodimethylamine	ND	0.047	EPA 8270D	12-8-17	12-11-17	
Pyridine	ND	0.47	EPA 8270D	12-8-17	12-11-17	
Phenol	ND	0.047	EPA 8270D	12-8-17	12-11-17	
Aniline	ND	0.23	EPA 8270D	12-8-17	12-11-17	
bis(2-Chloroethyl)ether	ND	0.047	EPA 8270D	12-8-17	12-11-17	
2-Chlorophenol	ND	0.047	EPA 8270D	12-8-17	12-11-17	
1,3-Dichlorobenzene	ND	0.047	EPA 8270D	12-8-17	12-11-17	
1,4-Dichlorobenzene	ND	0.047	EPA 8270D	12-8-17	12-11-17	
Benzyl alcohol	ND	0.23	EPA 8270D	12-8-17	12-11-17	
1,2-Dichlorobenzene	ND	0.047	EPA 8270D	12-8-17	12-11-17	
2-Methylphenol (o-Cresol)	ND	0.047	EPA 8270D	12-8-17	12-11-17	
bis(2-Chloroisopropyl)ether	ND	0.047	EPA 8270D	12-8-17	12-11-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.047	EPA 8270D	12-8-17	12-11-17	
n-Nitroso-di-n-propylamine	ND	0.047	EPA 8270D	12-8-17	12-11-17	
Hexachloroethane	ND	0.047	EPA 8270D	12-8-17	12-11-17	
Nitrobenzene	ND	0.047	EPA 8270D	12-8-17	12-11-17	
Isophorone	ND	0.047	EPA 8270D	12-8-17	12-11-17	
2-Nitrophenol	ND	0.047	EPA 8270D	12-8-17	12-11-17	
2,4-Dimethylphenol	ND	0.047	EPA 8270D	12-8-17	12-11-17	
bis(2-Chloroethoxy)methane	ND	0.047	EPA 8270D	12-8-17	12-11-17	
2,4-Dichlorophenol	ND	0.047	EPA 8270D	12-8-17	12-11-17	
1,2,4-Trichlorobenzene	ND	0.047	EPA 8270D	12-8-17	12-11-17	
Naphthalene	0.87	0.047	EPA 8270D	12-8-17	12-11-17	
4-Chloroaniline	ND	0.23	EPA 8270D	12-8-17	12-11-17	
Hexachlorobutadiene	ND	0.047	EPA 8270D	12-8-17	12-11-17	
4-Chloro-3-methylphenol	ND	0.047	EPA 8270D	12-8-17	12-11-17	
2-Methylnaphthalene	0.66	0.047	EPA 8270D	12-8-17	12-11-17	
1-Methylnaphthalene	0.39	0.047	EPA 8270D	12-8-17	12-11-17	
Hexachlorocyclopentadiene	ND	0.047	EPA 8270D	12-8-17	12-11-17	
2,4,6-Trichlorophenol	ND	0.047	EPA 8270D	12-8-17	12-11-17	
2,3-Dichloroaniline	ND	0.047	EPA 8270D	12-8-17	12-11-17	
2,4,5-Trichlorophenol	ND	0.047	EPA 8270D	12-8-17	12-11-17	
2-Chloronaphthalene	ND	0.047	EPA 8270D	12-8-17	12-11-17	
2-Nitroaniline	ND	0.047	EPA 8270D	12-8-17	12-11-17	
1,4-Dinitrobenzene	ND	0.047	EPA 8270D	12-8-17	12-11-17	
Dimethylphthalate	ND	0.047	EPA 8270D	12-8-17	12-11-17	
1,3-Dinitrobenzene	ND	0.047	EPA 8270D	12-8-17	12-11-17	
2,6-Dinitrotoluene	ND	0.047	EPA 8270D	12-8-17	12-11-17	
1,2-Dinitrobenzene	ND	0.047	EPA 8270D	12-8-17	12-11-17	
Acenaphthylene	0.025	0.0094	EPA 8270D/SIM	12-8-17	12-12-17	
3-Nitroaniline	ND	0.047	EPA 8270D	12-8-17	12-11-17	



Date of Report: December 12, 2017
 Samples Submitted: December 5, 2017
 Laboratory Reference: 1712-035
 Project: 40300

SEMIVOLATILES EPA 8270D/SIM
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320-EL111-171205-S03						
Laboratory ID: 12-035-01						
2,4-Dinitrophenol	ND	0.23	EPA 8270D	12-8-17	12-11-17	
Acenaphthene	1.4	0.047	EPA 8270D	12-8-17	12-11-17	
4-Nitrophenol	ND	0.047	EPA 8270D	12-8-17	12-11-17	
2,4-Dinitrotoluene	ND	0.047	EPA 8270D	12-8-17	12-11-17	
Dibenzofuran	1.1	0.047	EPA 8270D	12-8-17	12-11-17	
2,3,5,6-Tetrachlorophenol	ND	0.047	EPA 8270D	12-8-17	12-11-17	
2,3,4,6-Tetrachlorophenol	ND	0.047	EPA 8270D	12-8-17	12-11-17	
Diethylphthalate	ND	0.23	EPA 8270D	12-8-17	12-11-17	
4-Chlorophenyl-phenylether	ND	0.047	EPA 8270D	12-8-17	12-11-17	
4-Nitroaniline	ND	0.047	EPA 8270D	12-8-17	12-11-17	
Fluorene	1.5	0.047	EPA 8270D	12-8-17	12-11-17	
4,6-Dinitro-2-methylphenol	ND	0.23	EPA 8270D	12-8-17	12-11-17	
n-Nitrosodiphenylamine	ND	0.047	EPA 8270D	12-8-17	12-11-17	
1,2-Diphenylhydrazine	ND	0.047	EPA 8270D	12-8-17	12-11-17	
4-Bromophenyl-phenylether	ND	0.047	EPA 8270D	12-8-17	12-11-17	
Hexachlorobenzene	ND	0.047	EPA 8270D	12-8-17	12-11-17	
Pentachlorophenol	ND	0.23	EPA 8270D	12-8-17	12-11-17	
Phenanthrene	2.4	0.047	EPA 8270D	12-8-17	12-11-17	
Anthracene	0.41	0.047	EPA 8270D	12-8-17	12-11-17	
Carbazole	0.16	0.047	EPA 8270D	12-8-17	12-11-17	
Di-n-butylphthalate	ND	0.23	EPA 8270D	12-8-17	12-11-17	
Fluoranthene	1.4	0.047	EPA 8270D	12-8-17	12-11-17	
Benzidine	ND	0.47	EPA 8270D	12-8-17	12-11-17	
Pyrene	0.94	0.047	EPA 8270D	12-8-17	12-11-17	
Butylbenzylphthalate	ND	0.23	EPA 8270D	12-8-17	12-11-17	
bis-2-Ethylhexyladipate	ND	0.23	EPA 8270D	12-8-17	12-11-17	
3,3'-Dichlorobenzidine	ND	0.23	EPA 8270D	12-8-17	12-11-17	
Benzo[a]anthracene	0.39	0.047	EPA 8270D	12-8-17	12-11-17	
Chrysene	0.33	0.047	EPA 8270D	12-8-17	12-11-17	
bis(2-Ethylhexyl)phthalate	ND	0.23	EPA 8270D	12-8-17	12-11-17	
Di-n-octylphthalate	ND	0.23	EPA 8270D	12-8-17	12-11-17	
Benzo[b]fluoranthene	0.29	0.047	EPA 8270D	12-8-17	12-11-17	
Benzo(j,k)fluoranthene	0.082	0.047	EPA 8270D	12-8-17	12-11-17	
Benzo[a]pyrene	0.12	0.047	EPA 8270D	12-8-17	12-11-17	
Indeno[1,2,3-cd]pyrene	0.051	0.0094	EPA 8270D/SIM	12-8-17	12-12-17	
Dibenz[a,h]anthracene	0.017	0.0094	EPA 8270D/SIM	12-8-17	12-12-17	
Benzo[g,h,i]perylene	0.037	0.0094	EPA 8270D/SIM	12-8-17	12-12-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorophenol	49	18 - 113				
Phenol-d6	56	19 - 119				
Nitrobenzene-d5	65	19 - 119				
2-Fluorobiphenyl	59	33 - 109				
2,4,6-Tribromophenol	60	19 - 121				
Terphenyl-d14	59	30 - 116				



Date of Report: December 12, 2017
 Samples Submitted: December 5, 2017
 Laboratory Reference: 1712-035
 Project: 40300

SEMIVOLATILES EPA 8270D/SIM
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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320-EL111-171205-S04						
Laboratory ID: 12-035-02						
n-Nitrosodimethylamine	ND	0.045	EPA 8270D	12-8-17	12-8-17	
Pyridine	ND	0.45	EPA 8270D	12-8-17	12-8-17	
Phenol	ND	0.045	EPA 8270D	12-8-17	12-8-17	
Aniline	ND	0.22	EPA 8270D	12-8-17	12-8-17	
bis(2-Chloroethyl)ether	ND	0.045	EPA 8270D	12-8-17	12-8-17	
2-Chlorophenol	ND	0.045	EPA 8270D	12-8-17	12-8-17	
1,3-Dichlorobenzene	ND	0.045	EPA 8270D	12-8-17	12-8-17	
1,4-Dichlorobenzene	ND	0.045	EPA 8270D	12-8-17	12-8-17	
Benzyl alcohol	ND	0.22	EPA 8270D	12-8-17	12-8-17	
1,2-Dichlorobenzene	ND	0.045	EPA 8270D	12-8-17	12-8-17	
2-Methylphenol (o-Cresol)	ND	0.045	EPA 8270D	12-8-17	12-8-17	
bis(2-Chloroisopropyl)ether	ND	0.045	EPA 8270D	12-8-17	12-8-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.045	EPA 8270D	12-8-17	12-8-17	
n-Nitroso-di-n-propylamine	ND	0.045	EPA 8270D	12-8-17	12-8-17	
Hexachloroethane	ND	0.045	EPA 8270D	12-8-17	12-8-17	
Nitrobenzene	ND	0.045	EPA 8270D	12-8-17	12-8-17	
Isophorone	ND	0.045	EPA 8270D	12-8-17	12-8-17	
2-Nitrophenol	ND	0.045	EPA 8270D	12-8-17	12-8-17	
2,4-Dimethylphenol	ND	0.045	EPA 8270D	12-8-17	12-8-17	
bis(2-Chloroethoxy)methane	ND	0.045	EPA 8270D	12-8-17	12-8-17	
2,4-Dichlorophenol	ND	0.045	EPA 8270D	12-8-17	12-8-17	
1,2,4-Trichlorobenzene	ND	0.045	EPA 8270D	12-8-17	12-8-17	
Naphthalene	ND	0.0090	EPA 8270D/SIM	12-8-17	12-8-17	
4-Chloroaniline	ND	0.22	EPA 8270D	12-8-17	12-8-17	
Hexachlorobutadiene	ND	0.045	EPA 8270D	12-8-17	12-8-17	
4-Chloro-3-methylphenol	ND	0.045	EPA 8270D	12-8-17	12-8-17	
2-Methylnaphthalene	ND	0.0090	EPA 8270D/SIM	12-8-17	12-8-17	
1-Methylnaphthalene	ND	0.0090	EPA 8270D/SIM	12-8-17	12-8-17	
Hexachlorocyclopentadiene	ND	0.045	EPA 8270D	12-8-17	12-8-17	
2,4,6-Trichlorophenol	ND	0.045	EPA 8270D	12-8-17	12-8-17	
2,3-Dichloroaniline	ND	0.045	EPA 8270D	12-8-17	12-8-17	
2,4,5-Trichlorophenol	ND	0.045	EPA 8270D	12-8-17	12-8-17	
2-Chloronaphthalene	ND	0.045	EPA 8270D	12-8-17	12-8-17	
2-Nitroaniline	ND	0.045	EPA 8270D	12-8-17	12-8-17	
1,4-Dinitrobenzene	ND	0.045	EPA 8270D	12-8-17	12-8-17	
Dimethylphthalate	ND	0.045	EPA 8270D	12-8-17	12-8-17	
1,3-Dinitrobenzene	ND	0.045	EPA 8270D	12-8-17	12-8-17	
2,6-Dinitrotoluene	ND	0.045	EPA 8270D	12-8-17	12-8-17	
1,2-Dinitrobenzene	ND	0.045	EPA 8270D	12-8-17	12-8-17	
Acenaphthylene	ND	0.0090	EPA 8270D/SIM	12-8-17	12-8-17	
3-Nitroaniline	ND	0.045	EPA 8270D	12-8-17	12-8-17	



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SEMIVOLATILES EPA 8270D/SIM
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320-EL111-171205-S04						
Laboratory ID: 12-035-02						
2,4-Dinitrophenol	ND	0.22	EPA 8270D	12-8-17	12-8-17	
Acenaphthene	ND	0.0090	EPA 8270D/SIM	12-8-17	12-8-17	
4-Nitrophenol	ND	0.045	EPA 8270D	12-8-17	12-8-17	
2,4-Dinitrotoluene	ND	0.045	EPA 8270D	12-8-17	12-8-17	
Dibenzofuran	ND	0.045	EPA 8270D	12-8-17	12-8-17	
2,3,5,6-Tetrachlorophenol	ND	0.045	EPA 8270D	12-8-17	12-8-17	
2,3,4,6-Tetrachlorophenol	ND	0.045	EPA 8270D	12-8-17	12-8-17	
Diethylphthalate	ND	0.22	EPA 8270D	12-8-17	12-8-17	
4-Chlorophenyl-phenylether	ND	0.045	EPA 8270D	12-8-17	12-8-17	
4-Nitroaniline	ND	0.045	EPA 8270D	12-8-17	12-8-17	
Fluorene	ND	0.0090	EPA 8270D/SIM	12-8-17	12-8-17	
4,6-Dinitro-2-methylphenol	ND	0.22	EPA 8270D	12-8-17	12-8-17	
n-Nitrosodiphenylamine	ND	0.045	EPA 8270D	12-8-17	12-8-17	
1,2-Diphenylhydrazine	ND	0.045	EPA 8270D	12-8-17	12-8-17	
4-Bromophenyl-phenylether	ND	0.045	EPA 8270D	12-8-17	12-8-17	
Hexachlorobenzene	ND	0.045	EPA 8270D	12-8-17	12-8-17	
Pentachlorophenol	ND	0.22	EPA 8270D	12-8-17	12-8-17	
Phenanthrene	ND	0.0090	EPA 8270D/SIM	12-8-17	12-8-17	
Anthracene	ND	0.0090	EPA 8270D/SIM	12-8-17	12-8-17	
Carbazole	ND	0.045	EPA 8270D	12-8-17	12-8-17	
Di-n-butylphthalate	ND	0.22	EPA 8270D	12-8-17	12-8-17	
Fluoranthene	ND	0.0090	EPA 8270D/SIM	12-8-17	12-8-17	
Benzidine	ND	0.45	EPA 8270D	12-8-17	12-8-17	
Pyrene	ND	0.0090	EPA 8270D/SIM	12-8-17	12-8-17	
Butylbenzylphthalate	ND	0.22	EPA 8270D	12-8-17	12-8-17	
bis-2-Ethylhexyladipate	ND	0.22	EPA 8270D	12-8-17	12-8-17	
3,3'-Dichlorobenzidine	ND	0.22	EPA 8270D	12-8-17	12-8-17	
Benzo[a]anthracene	ND	0.0090	EPA 8270D/SIM	12-8-17	12-8-17	
Chrysene	ND	0.0090	EPA 8270D/SIM	12-8-17	12-8-17	
bis(2-Ethylhexyl)phthalate	ND	0.22	EPA 8270D	12-8-17	12-8-17	
Di-n-octylphthalate	ND	0.22	EPA 8270D	12-8-17	12-8-17	
Benzo[b]fluoranthene	ND	0.0090	EPA 8270D/SIM	12-8-17	12-8-17	
Benzo(j,k)fluoranthene	ND	0.0090	EPA 8270D/SIM	12-8-17	12-8-17	
Benzo[a]pyrene	ND	0.0090	EPA 8270D/SIM	12-8-17	12-8-17	
Indeno[1,2,3-cd]pyrene	ND	0.0090	EPA 8270D/SIM	12-8-17	12-8-17	
Dibenz[a,h]anthracene	ND	0.0090	EPA 8270D/SIM	12-8-17	12-8-17	
Benzo[g,h,i]perylene	ND	0.0090	EPA 8270D/SIM	12-8-17	12-8-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorophenol	57	18 - 113				
Phenol-d6	63	19 - 119				
Nitrobenzene-d5	69	19 - 119				
2-Fluorobiphenyl	60	33 - 109				
2,4,6-Tribromophenol	71	19 - 121				
Terphenyl-d14	61	30 - 116				



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SEMIVOLATILES EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
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Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1208S1					
n-Nitrosodimethylamine	ND	0.033	EPA 8270D	12-8-17	12-8-17	
Pyridine	ND	0.33	EPA 8270D	12-8-17	12-8-17	
Phenol	ND	0.033	EPA 8270D	12-8-17	12-8-17	
Aniline	ND	0.17	EPA 8270D	12-8-17	12-8-17	
bis(2-Chloroethyl)ether	ND	0.033	EPA 8270D	12-8-17	12-8-17	
2-Chlorophenol	ND	0.033	EPA 8270D	12-8-17	12-8-17	
1,3-Dichlorobenzene	ND	0.033	EPA 8270D	12-8-17	12-8-17	
1,4-Dichlorobenzene	ND	0.033	EPA 8270D	12-8-17	12-8-17	
Benzyl alcohol	ND	0.17	EPA 8270D	12-8-17	12-8-17	
1,2-Dichlorobenzene	ND	0.033	EPA 8270D	12-8-17	12-8-17	
2-Methylphenol (o-Cresol)	ND	0.033	EPA 8270D	12-8-17	12-8-17	
bis(2-Chloroisopropyl)ether	ND	0.033	EPA 8270D	12-8-17	12-8-17	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.033	EPA 8270D	12-8-17	12-8-17	
n-Nitroso-di-n-propylamine	ND	0.033	EPA 8270D	12-8-17	12-8-17	
Hexachloroethane	ND	0.033	EPA 8270D	12-8-17	12-8-17	
Nitrobenzene	ND	0.033	EPA 8270D	12-8-17	12-8-17	
Isophorone	ND	0.033	EPA 8270D	12-8-17	12-8-17	
2-Nitrophenol	ND	0.033	EPA 8270D	12-8-17	12-8-17	
2,4-Dimethylphenol	ND	0.033	EPA 8270D	12-8-17	12-8-17	
bis(2-Chloroethoxy)methane	ND	0.033	EPA 8270D	12-8-17	12-8-17	
2,4-Dichlorophenol	ND	0.033	EPA 8270D	12-8-17	12-8-17	
1,2,4-Trichlorobenzene	ND	0.033	EPA 8270D	12-8-17	12-8-17	
Naphthalene	ND	0.0067	EPA 8270D/SIM	12-8-17	12-8-17	
4-Chloroaniline	ND	0.17	EPA 8270D	12-8-17	12-8-17	
Hexachlorobutadiene	ND	0.033	EPA 8270D	12-8-17	12-8-17	
4-Chloro-3-methylphenol	ND	0.033	EPA 8270D	12-8-17	12-8-17	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	12-8-17	12-8-17	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	12-8-17	12-8-17	
Hexachlorocyclopentadiene	ND	0.033	EPA 8270D	12-8-17	12-8-17	
2,4,6-Trichlorophenol	ND	0.033	EPA 8270D	12-8-17	12-8-17	
2,3-Dichloroaniline	ND	0.033	EPA 8270D	12-8-17	12-8-17	
2,4,5-Trichlorophenol	ND	0.033	EPA 8270D	12-8-17	12-8-17	
2-Chloronaphthalene	ND	0.033	EPA 8270D	12-8-17	12-8-17	
2-Nitroaniline	ND	0.033	EPA 8270D	12-8-17	12-8-17	
1,4-Dinitrobenzene	ND	0.033	EPA 8270D	12-8-17	12-8-17	
Dimethylphthalate	ND	0.033	EPA 8270D	12-8-17	12-8-17	
1,3-Dinitrobenzene	ND	0.033	EPA 8270D	12-8-17	12-8-17	
2,6-Dinitrotoluene	ND	0.033	EPA 8270D	12-8-17	12-8-17	
1,2-Dinitrobenzene	ND	0.033	EPA 8270D	12-8-17	12-8-17	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	12-8-17	12-8-17	
3-Nitroaniline	ND	0.033	EPA 8270D	12-8-17	12-8-17	



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SEMIVOLATILES EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1208S1					
2,4-Dinitrophenol	ND	0.17	EPA 8270D	12-8-17	12-8-17	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	12-8-17	12-8-17	
4-Nitrophenol	ND	0.033	EPA 8270D	12-8-17	12-8-17	
2,4-Dinitrotoluene	ND	0.033	EPA 8270D	12-8-17	12-8-17	
Dibenzofuran	ND	0.033	EPA 8270D	12-8-17	12-8-17	
2,3,5,6-Tetrachlorophenol	ND	0.033	EPA 8270D	12-8-17	12-8-17	
2,3,4,6-Tetrachlorophenol	ND	0.033	EPA 8270D	12-8-17	12-8-17	
Diethylphthalate	ND	0.17	EPA 8270D	12-8-17	12-8-17	
4-Chlorophenyl-phenylether	ND	0.033	EPA 8270D	12-8-17	12-8-17	
4-Nitroaniline	ND	0.033	EPA 8270D	12-8-17	12-8-17	
Fluorene	ND	0.0067	EPA 8270D/SIM	12-8-17	12-8-17	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	12-8-17	12-8-17	
n-Nitrosodiphenylamine	ND	0.033	EPA 8270D	12-8-17	12-8-17	
1,2-Diphenylhydrazine	ND	0.033	EPA 8270D	12-8-17	12-8-17	
4-Bromophenyl-phenylether	ND	0.033	EPA 8270D	12-8-17	12-8-17	
Hexachlorobenzene	ND	0.033	EPA 8270D	12-8-17	12-8-17	
Pentachlorophenol	ND	0.17	EPA 8270D	12-8-17	12-8-17	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	12-8-17	12-8-17	
Anthracene	ND	0.0067	EPA 8270D/SIM	12-8-17	12-8-17	
Carbazole	ND	0.033	EPA 8270D	12-8-17	12-8-17	
Di-n-butylphthalate	ND	0.17	EPA 8270D	12-8-17	12-8-17	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	12-8-17	12-8-17	
Benzidine	ND	0.33	EPA 8270D	12-8-17	12-8-17	
Pyrene	ND	0.0067	EPA 8270D/SIM	12-8-17	12-8-17	
Butylbenzylphthalate	ND	0.17	EPA 8270D	12-8-17	12-8-17	
bis-2-Ethylhexyladipate	ND	0.17	EPA 8270D	12-8-17	12-8-17	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	12-8-17	12-8-17	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	12-8-17	12-8-17	
Chrysene	ND	0.0067	EPA 8270D/SIM	12-8-17	12-8-17	
bis(2-Ethylhexyl)phthalate	ND	0.17	EPA 8270D	12-8-17	12-8-17	
Di-n-octylphthalate	ND	0.17	EPA 8270D	12-8-17	12-8-17	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	12-8-17	12-8-17	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	12-8-17	12-8-17	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	12-8-17	12-8-17	
Indeno[1,2,3-cd]pyrene	ND	0.0067	EPA 8270D/SIM	12-8-17	12-8-17	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	12-8-17	12-8-17	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	12-8-17	12-8-17	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorophenol	83	18 - 113				
Phenol-d6	89	19 - 119				
Nitrobenzene-d5	92	19 - 119				
2-Fluorobiphenyl	91	33 - 109				
2,4,6-Tribromophenol	95	19 - 121				
Terphenyl-d14	90	30 - 116				



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 Laboratory Reference: 1712-035
 Project: 40300

**SEMIVOLATILES EPA 8270D/SIM
 MS/MSD 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:	12-004-21									
	MS	MSD	MS	MSD		MS	MSD			
Phenol	0.993	1.08	1.33	1.33	ND	75	81	25 - 103	8	36
2-Chlorophenol	0.941	1.03	1.33	1.33	ND	71	77	21 - 109	9	38
1,4-Dichlorobenzene	0.442	0.498	0.667	0.667	ND	66	75	20 - 110	12	40
n-Nitroso-di-n-propylamine	0.505	0.535	0.667	0.667	ND	76	80	20 - 111	6	38
1,2,4-Trichlorobenzene	0.470	0.514	0.667	0.667	ND	70	77	20 - 107	9	40
4-Chloro-3-methylphenol	1.05	1.11	1.33	1.33	ND	79	83	30 - 111	6	29
Acenaphthene	0.505	0.502	0.667	0.667	ND	76	75	27 - 109	1	30
4-Nitrophenol	1.13	1.12	1.33	1.33	ND	85	84	20 - 119	1	29
2,4-Dinitrotoluene	0.484	0.477	0.667	0.667	ND	73	72	32 - 103	1	30
Pentachlorophenol	1.17	1.16	1.33	1.33	ND	88	87	20 - 127	1	31
Pyrene	0.509	0.509	0.667	0.667	ND	76	76	37 - 111	0	28
Surrogate:										
2-Fluorophenol						74	84	18 - 113		
Phenol-d6						80	86	19 - 119		
Nitrobenzene-d5						83	88	19 - 119		
2-Fluorobiphenyl						80	82	33 - 109		
2,4,6-Tribromophenol						90	89	19 - 121		
Terphenyl-d14						82	83	30 - 116		



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 Samples Submitted: December 5, 2017
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PCBs EPA 8082A

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID: E320-EL111-171205-S03						
Laboratory ID: 12-035-01						
Aroclor 1016	ND	0.070	EPA 8082A	12-7-17	12-8-17	
Aroclor 1221	ND	0.070	EPA 8082A	12-7-17	12-8-17	
Aroclor 1232	ND	0.070	EPA 8082A	12-7-17	12-8-17	
Aroclor 1242	ND	0.070	EPA 8082A	12-7-17	12-8-17	
Aroclor 1248	ND	0.070	EPA 8082A	12-7-17	12-8-17	
Aroclor 1254	ND	0.070	EPA 8082A	12-7-17	12-8-17	
Aroclor 1260	ND	0.070	EPA 8082A	12-7-17	12-8-17	

Surrogate: *Percent Recovery* *Control Limits*
DCB *64* *40-134*

Client ID: E320-EL111-171205-S04						
Laboratory ID: 12-035-02						
Aroclor 1016	ND	0.067	EPA 8082A	12-7-17	12-8-17	
Aroclor 1221	ND	0.067	EPA 8082A	12-7-17	12-8-17	
Aroclor 1232	ND	0.067	EPA 8082A	12-7-17	12-8-17	
Aroclor 1242	ND	0.067	EPA 8082A	12-7-17	12-8-17	
Aroclor 1248	ND	0.067	EPA 8082A	12-7-17	12-8-17	
Aroclor 1254	ND	0.067	EPA 8082A	12-7-17	12-8-17	
Aroclor 1260	ND	0.067	EPA 8082A	12-7-17	12-8-17	

Surrogate: *Percent Recovery* *Control Limits*
DCB *62* *40-134*



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 Project: 40300

**PCBs EPA 8082A
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1207S1					
Aroclor 1016	ND	0.050	EPA 8082A	12-7-17	12-7-17	
Aroclor 1221	ND	0.050	EPA 8082A	12-7-17	12-7-17	
Aroclor 1232	ND	0.050	EPA 8082A	12-7-17	12-7-17	
Aroclor 1242	ND	0.050	EPA 8082A	12-7-17	12-7-17	
Aroclor 1248	ND	0.050	EPA 8082A	12-7-17	12-7-17	
Aroclor 1254	ND	0.050	EPA 8082A	12-7-17	12-7-17	
Aroclor 1260	ND	0.050	EPA 8082A	12-7-17	12-7-17	
Surrogate:	Percent Recovery	Control Limits				
DCB	51	40-134				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES										
Laboratory ID:	12-004-13									
	MS	MSD	MS	MSD		MS	MSD			
Aroclor 1260	0.397	0.434	0.500	0.500	ND	79	87	34-126	9	16
Surrogate:										
DCB						61	59	40-134		



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 Project: 40300

TOTAL METALS
EPA 6010C/6020A/7471B

Matrix: Soil
 Units: mg/kg (ppm)

				Date	Date	
Analyte	Result	PQL	EPA Method	Prepared	Analyzed	Flags
Lab ID:	12-035-01					
Client ID:	E320-EL111-171205-S03					
Antimony	ND	7.0	6010C	12-11-17	12-11-17	
Arsenic	ND	14	6010C	12-11-17	12-11-17	
Beryllium	ND	0.70	6010C	12-11-17	12-11-17	
Cadmium	ND	0.70	6010C	12-11-17	12-11-17	
Chromium	26	0.70	6010C	12-11-17	12-11-17	
Copper	16	1.4	6010C	12-11-17	12-11-17	
Lead	ND	7.0	6010C	12-11-17	12-11-17	
Mercury	ND	0.35	7471B	12-11-17	12-11-17	
Nickel	30	3.5	6010C	12-11-17	12-11-17	
Selenium	ND	14	6010C	12-11-17	12-11-17	
Silver	ND	1.4	6010C	12-11-17	12-11-17	
Thallium	ND	3.5	6020A	12-11-17	12-11-17	
Zinc	32	3.5	6010C	12-11-17	12-11-17	



Date of Report: December 12, 2017
 Samples Submitted: December 5, 2017
 Laboratory Reference: 1712-035
 Project: 40300

TOTAL METALS
EPA 6010C/6020A/7471B

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	12-035-02					
Client ID:	E320-EL111-171205-S04					
Antimony	ND	6.7	6010C	12-11-17	12-11-17	
Arsenic	ND	13	6010C	12-11-17	12-11-17	
Beryllium	ND	0.67	6010C	12-11-17	12-11-17	
Cadmium	ND	0.67	6010C	12-11-17	12-11-17	
Chromium	57	0.67	6010C	12-11-17	12-11-17	
Copper	30	1.3	6010C	12-11-17	12-11-17	
Lead	14	6.7	6010C	12-11-17	12-11-17	
Mercury	ND	0.34	7471B	12-11-17	12-11-17	
Nickel	52	3.4	6010C	12-11-17	12-11-17	
Selenium	ND	13	6010C	12-11-17	12-11-17	
Silver	ND	1.3	6010C	12-11-17	12-11-17	
Thallium	ND	3.4	6020A	12-11-17	12-11-17	
Zinc	86	3.4	6010C	12-11-17	12-11-17	



Date of Report: December 12, 2017
 Samples Submitted: December 5, 2017
 Laboratory Reference: 1712-035
 Project: 40300

**TOTAL METALS
 EPA 6010C/6020A
 METHOD BLANK QUALITY CONTROL**

Date Extracted: 12-11-17
 Date Analyzed: 12-11-17

 Matrix: Soil
 Units: mg/kg (ppm)

 Lab ID: MB1211SH1

Analyte	Method	Result	PQL
Antimony	6010C	ND	5.0
Arsenic	6010C	ND	10
Beryllium	6010C	ND	0.50
Cadmium	6010C	ND	0.50
Chromium	6010C	ND	0.50
Copper	6010C	ND	1.0
Lead	6010C	ND	5.0
Nickel	6010C	ND	2.5
Selenium	6010C	ND	10
Silver	6010C	ND	1.0
Thallium	6020A	ND	2.5
Zinc	6010C	ND	2.5



Date of Report: December 12, 2017
Samples Submitted: December 5, 2017
Laboratory Reference: 1712-035
Project: 40300

**TOTAL MERCURY
EPA 7471B
METHOD BLANK QUALITY CONTROL**

Date Extracted: 12-11-17
Date Analyzed: 12-11-17

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB1211S1

Analyte	Method	Result	PQL
Mercury	7471B	ND	0.25



Date of Report: December 12, 2017
 Samples Submitted: December 5, 2017
 Laboratory Reference: 1712-035
 Project: 40300

**TOTAL METALS
 EPA 6010C/6020A
 DUPLICATE QUALITY CONTROL**

Date Extracted: 12-11-17
 Date Analyzed: 12-11-17

 Matrix: Soil
 Units: mg/kg (ppm)

 Lab ID: 12-035-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Antimony	ND	ND	NA	5.0	
Arsenic	ND	ND	NA	10	
Beryllium	ND	ND	NA	0.50	
Cadmium	ND	ND	NA	0.50	
Chromium	18.9	19.8	5	0.50	
Copper	11.4	12.9	13	1.0	
Lead	ND	5.15	NA	5.0	
Nickel	21.1	22.8	8	2.5	
Selenium	ND	ND	NA	10	
Silver	ND	ND	NA	1.0	
Thallium	ND	ND	NA	2.5	
Zinc	22.7	24.9	9	2.5	



Date of Report: December 12, 2017
Samples Submitted: December 5, 2017
Laboratory Reference: 1712-035
Project: 40300

**TOTAL MERCURY
EPA 7471B
DUPLICATE QUALITY CONTROL**

Date Extracted: 12-11-17
Date Analyzed: 12-11-17

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 12-003-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	ND	ND	NA	0.25	



Date of Report: December 12, 2017
 Samples Submitted: December 5, 2017
 Laboratory Reference: 1712-035
 Project: 40300

**TOTAL METALS
 EPA 6010C/6020A
 MS/MSD QUALITY CONTROL**

Date Extracted: 12-11-17

Date Analyzed: 12-11-17

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 12-035-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Antimony	100	87.7	88	86.7	87	1	
Arsenic	100	98.5	98	101	101	3	
Beryllium	50.0	47.6	95	48.6	97	2	
Cadmium	50.0	45.9	92	46.8	94	2	
Chromium	100	114	95	113	94	1	
Copper	50.0	61.3	100	63.6	105	4	
Lead	250	234	93	236	95	1	
Nickel	100	115	94	117	96	2	
Selenium	100	97.1	97	100	100	3	
Silver	25.0	22.4	90	23.0	92	3	
Thallium	50.0	43.0	86	44.3	89	3	
Zinc	100	117	95	121	99	3	



Date of Report: December 12, 2017
Samples Submitted: December 5, 2017
Laboratory Reference: 1712-035
Project: 40300

TOTAL MERCURY
EPA 7471B
MS/MSD QUALITY CONTROL

Date Extracted: 12-11-17

Date Analyzed: 12-11-17

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 12-003-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Mercury	0.500	0.541	108	0.535	107	1	



Date of Report: December 12, 2017
Samples Submitted: December 5, 2017
Laboratory Reference: 1712-035
Project: 40300

% MOISTURE

Date Analyzed: 12-6-17

Client ID	Lab ID	% Moisture
E320-EL111-171205-S03	12-035-01	29
E320-EL111-171205-S04	12-035-02	26





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





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

Chain of Custody

Page 1 of 1

Analytical Laboratory Testing Services 14648 NE 95th Street • Redmond, WA 98052 Phone: (425) 883-3881 • www.on-site-env.com									
Company: INNOVEX									
Project Number: 40300									
Project Name: E320									
Project Manager: Glen Hayman									
Sampled by: Colin Doff									
Turnaround Request (in working days) (Check One) ☐ Same Day ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ Standard (7 Days) (TPH analysis 5 Days) ☒ 5 Day (other)									
Number of Containers									
Laboratory Number: 12-035									
NWTPH-HCID with follow up									
NWTPH-Gx/BTEX									
NWTPH-Gx									
NWTPH-Dx (☐ 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 PCRA Metals PP									
Total MTCA Metals									
TCLP Metals									
HEM (oil and grease) 1664A									
Data Package: Standard ☒ Level III ☐ Level IV ☐									
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☒									



3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

O'Neill Service Group

Brady Hanson
17619 NE 67th Court, Suite 100
Redmond, WA 98052

RE: E320

Work Order Number: 1706027

June 07, 2017

Attention Brady Hanson:

Fremont Analytical, Inc. received 13 sample(s) on 6/2/2017 for the analyses presented in the following report.

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.
Hydrocarbon Identification by NWTPH-HCID
Mercury by EPA Method 7471
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)
Sample Moisture (Percent Moisture)
Semi-Volatile Organic Compounds by EPA Method 8270
Total Metals by EPA Method 6020
Volatile Organic Compounds by EPA Method 8260C

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,

Mike Ridgeway
Laboratory Director

DoD/ELAP Certification #L2371, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)

CLIENT: O'Neill Service Group
Project: E320
Work Order: 1706027

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1706027-001	PR-TR-3-2	06/02/2017 10:20 AM	06/02/2017 2:24 PM
1706027-002	PR-TR-3-6-PLUG	06/02/2017 10:45 AM	06/02/2017 2:24 PM
1706027-003	PR-TR-3-8	06/02/2017 10:52 AM	06/02/2017 2:24 PM
1706027-004	PR-TR-2-2	06/02/2017 11:20 AM	06/02/2017 2:24 PM
1706027-005	PR-TR-2-12	06/02/2017 11:46 AM	06/02/2017 2:24 PM
1706027-006	PR-TP-1-2	06/02/2017 12:39 PM	06/02/2017 2:24 PM
1706027-007	PR-TP-1-10	06/02/2017 12:57 PM	06/02/2017 2:24 PM
1706027-008	PR-TR-3-4	06/02/2017 10:29 AM	06/02/2017 2:24 PM
1706027-009	PR-TR-2-4	06/02/2017 11:25 AM	06/02/2017 2:24 PM
1706027-010	PR-TR-2-6	06/02/2017 11:30 AM	06/02/2017 2:24 PM
1706027-011	PR-TR-2-8	06/02/2017 11:40 AM	06/02/2017 2:24 PM
1706027-012	PR-TP-1-4	06/02/2017 12:44 PM	06/02/2017 2:24 PM
1706027-013	PR-TP-1-6	06/02/2017 12:49 PM	06/02/2017 2:24 PM

CLIENT: O'Neill Service Group**Project:** E320

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 Reporting Limit
- 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
- R - High relative percent difference observed

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

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 10:20:00 AM

Project: E320

Lab ID: 1706027-001

Matrix: Soil

Client Sample ID: PR-TR-3-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 17248 Analyst: SB

Diesel (Fuel Oil)	ND	19.5		mg/Kg-dry	1	6/3/2017 12:57:40 AM
Heavy Oil	171	48.9		mg/Kg-dry	1	6/3/2017 12:57:40 AM
Surr: 2-Fluorobiphenyl	96.0	50-150		%Rec	1	6/3/2017 12:57:40 AM
Surr: o-Terphenyl	94.3	50-150		%Rec	1	6/3/2017 12:57:40 AM

Hydrocarbon Identification by NWTPH-HCID

Batch ID: 17248 Analyst: SB

Gasoline	ND	19.5		mg/Kg-dry	1	6/3/2017 12:57:40 AM
Mineral Spirits	ND	29.3		mg/Kg-dry	1	6/3/2017 12:57:40 AM
Kerosene	ND	48.9		mg/Kg-dry	1	6/3/2017 12:57:40 AM
Diesel (Fuel Oil)	ND	48.9		mg/Kg-dry	1	6/3/2017 12:57:40 AM
Heavy Oil	DETECT	97.7		mg/Kg-dry	1	6/3/2017 12:57:40 AM
Mineral Oil	ND	97.7		mg/Kg-dry	1	6/3/2017 12:57:40 AM
Surr: 2-Fluorobiphenyl	96.0	50-150		%Rec	1	6/3/2017 12:57:40 AM
Surr: o-Terphenyl	94.3	50-150		%Rec	1	6/3/2017 12:57:40 AM

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Batch ID: 17250 Analyst: BT

Naphthalene	ND	38.1		µg/Kg-dry	1	6/2/2017 10:06:04 PM
2-Methylnaphthalene	ND	38.1		µg/Kg-dry	1	6/2/2017 10:06:04 PM
1-Methylnaphthalene	ND	38.1		µg/Kg-dry	1	6/2/2017 10:06:04 PM
Acenaphthylene	ND	38.1		µg/Kg-dry	1	6/2/2017 10:06:04 PM
Acenaphthene	ND	38.1		µg/Kg-dry	1	6/2/2017 10:06:04 PM
Fluorene	ND	38.1		µg/Kg-dry	1	6/2/2017 10:06:04 PM
Phenanthrene	ND	38.1		µg/Kg-dry	1	6/2/2017 10:06:04 PM
Anthracene	ND	38.1		µg/Kg-dry	1	6/2/2017 10:06:04 PM
Fluoranthene	ND	38.1		µg/Kg-dry	1	6/2/2017 10:06:04 PM
Pyrene	ND	38.1		µg/Kg-dry	1	6/2/2017 10:06:04 PM
Benz(a)anthracene	ND	38.1		µg/Kg-dry	1	6/2/2017 10:06:04 PM
Chrysene	ND	38.1		µg/Kg-dry	1	6/2/2017 10:06:04 PM
Benzo(b)fluoranthene	ND	38.1		µg/Kg-dry	1	6/2/2017 10:06:04 PM
Benzo(k)fluoranthene	ND	38.1		µg/Kg-dry	1	6/2/2017 10:06:04 PM
Benzo(a)pyrene	ND	38.1		µg/Kg-dry	1	6/2/2017 10:06:04 PM
Indeno(1,2,3-cd)pyrene	ND	38.1		µg/Kg-dry	1	6/2/2017 10:06:04 PM
Dibenz(a,h)anthracene	ND	38.1		µg/Kg-dry	1	6/2/2017 10:06:04 PM
Benzo(g,h,i)perylene	ND	38.1		µg/Kg-dry	1	6/2/2017 10:06:04 PM
Surr: 2-Fluorobiphenyl	66.3	24.5-139		%Rec	1	6/2/2017 10:06:04 PM
Surr: Terphenyl-d14 (surr)	74.3	44.3-176		%Rec	1	6/2/2017 10:06:04 PM



Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 10:20:00 AM

Project: E320

Lab ID: 1706027-001

Matrix: Soil

Client Sample ID: PR-TR-3-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0561	Q	mg/Kg-dry	1	6/6/2017 3:06:34 AM
Chloromethane	ND	0.0561		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Vinyl chloride	ND	0.00187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Bromomethane	ND	0.0841	Q	mg/Kg-dry	1	6/6/2017 3:06:34 AM
Trichlorofluoromethane (CFC-11)	ND	0.0467	Q	mg/Kg-dry	1	6/6/2017 3:06:34 AM
Chloroethane	ND	0.0561	Q	mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,1-Dichloroethene	ND	0.0467	Q	mg/Kg-dry	1	6/6/2017 3:06:34 AM
Methylene chloride	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
trans-1,2-Dichloroethene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Methyl tert-butyl ether (MTBE)	ND	0.0467		mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,1-Dichloroethane	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
2,2-Dichloropropane	ND	0.0467	Q	mg/Kg-dry	1	6/6/2017 3:06:34 AM
cis-1,2-Dichloroethene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Chloroform	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,1,1-Trichloroethane (TCA)	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,1-Dichloropropene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Carbon tetrachloride	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,2-Dichloroethane (EDC)	ND	0.0280		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Benzene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Trichloroethene (TCE)	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,2-Dichloropropane	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Bromodichloromethane	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Dibromomethane	ND	0.0374		mg/Kg-dry	1	6/6/2017 3:06:34 AM
cis-1,3-Dichloropropene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Toluene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
trans-1,3-Dichloropropylene	ND	0.0280		mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,1,2-Trichloroethane	ND	0.0280		mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,3-Dichloropropane	ND	0.0467		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Tetrachloroethene (PCE)	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Dibromochloromethane	ND	0.0280		mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,2-Dibromoethane (EDB)	ND	0.00467		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Chlorobenzene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,1,1,2-Tetrachloroethane	ND	0.0280		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Ethylbenzene	ND	0.0280		mg/Kg-dry	1	6/6/2017 3:06:34 AM
m,p-Xylene	0.0263	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
o-Xylene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Styrene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Isopropylbenzene	ND	0.0748		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Bromoform	ND	0.0187	Q	mg/Kg-dry	1	6/6/2017 3:06:34 AM



Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 10:20:00 AM

Project: E320

Lab ID: 1706027-001

Matrix: Soil

Client Sample ID: PR-TR-3-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

1,1,2,2-Tetrachloroethane	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
n-Propylbenzene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Bromobenzene	ND	0.0280		mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,3,5-Trimethylbenzene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
2-Chlorotoluene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
4-Chlorotoluene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
tert-Butylbenzene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,2,3-Trichloropropane	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,2,4-Trichlorobenzene	ND	0.0467		mg/Kg-dry	1	6/6/2017 3:06:34 AM
sec-Butylbenzene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
4-Isopropyltoluene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,3-Dichlorobenzene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,4-Dichlorobenzene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
n-Butylbenzene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,2-Dichlorobenzene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,2-Dibromo-3-chloropropane	ND	0.467		mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,2,4-Trimethylbenzene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Hexachlorobutadiene	ND	0.0935		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Naphthalene	ND	0.0280		mg/Kg-dry	1	6/6/2017 3:06:34 AM
1,2,3-Trichlorobenzene	ND	0.0187		mg/Kg-dry	1	6/6/2017 3:06:34 AM
Surr: Dibromofluoromethane	88.8	56.5-129		%Rec	1	6/6/2017 3:06:34 AM
Surr: Toluene-d8	63.1	64.5-151	S	%Rec	1	6/6/2017 3:06:34 AM
Surr: 1-Bromo-4-fluorobenzene	99.8	63.1-141		%Rec	1	6/6/2017 3:06:34 AM

NOTES:

S - Outlying surrogate recovery(ies) observed. All other laboratory and field samples recovered within range.

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample Moisture (Percent Moisture)

Batch ID: R36583

Analyst: BB

Percent Moisture	7.14	0.500		wt%	1	6/5/2017 8:13:47 AM
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Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 10:45:00 AM

Project: E320

Lab ID: 1706027-002

Matrix: Soil

Client Sample ID: PR-TR-3-6-PLUG

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 17248 Analyst: SB

Diesel (Fuel Oil)	ND	24.0		mg/Kg-dry	1	6/3/2017 1:29:29 AM
Heavy Oil	ND	59.9		mg/Kg-dry	1	6/3/2017 1:29:29 AM
Creosote	1,900	59.9		mg/Kg-dry	1	6/3/2017 1:29:29 AM
Surr: 2-Fluorobiphenyl	112	50-150		%Rec	1	6/3/2017 1:29:29 AM
Surr: o-Terphenyl	105	50-150		%Rec	1	6/3/2017 1:29:29 AM

Hydrocarbon Identification by NWTPH-HCID

Batch ID: 17248 Analyst: SB

Gasoline	ND	24.0		mg/Kg-dry	1	6/3/2017 1:29:29 AM
Mineral Spirits	ND	36.0		mg/Kg-dry	1	6/3/2017 1:29:29 AM
Kerosene	ND	59.9		mg/Kg-dry	1	6/3/2017 1:29:29 AM
Diesel (Fuel Oil)	ND	59.9		mg/Kg-dry	1	6/3/2017 1:29:29 AM
Heavy Oil	ND	120		mg/Kg-dry	1	6/3/2017 1:29:29 AM
Mineral Oil	ND	120		mg/Kg-dry	1	6/3/2017 1:29:29 AM
Creosote	DETECT	120		-dry	1	6/3/2017 1:29:29 AM
Surr: 2-Fluorobiphenyl	112	50-150		%Rec	1	6/3/2017 1:29:29 AM
Surr: o-Terphenyl	105	50-150		%Rec	1	6/3/2017 1:29:29 AM

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 17262 Analyst: SG

Phenol	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Bis(2-chloroethyl) ether	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
2-Chlorophenol	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
1,3-Dichlorobenzene	ND	78.6		µg/Kg-dry	1	6/6/2017 12:00:09 AM
1,4-Dichlorobenzene	ND	78.6		µg/Kg-dry	1	6/6/2017 12:00:09 AM
1,2-Dichlorobenzene	ND	78.6		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Benzyl alcohol	ND	105	Q	µg/Kg-dry	1	6/6/2017 12:00:09 AM
2-Methylphenol (o-cresol)	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Hexachloroethane	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
N-Nitrosodi-n-propylamine	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Nitrobenzene	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Isophorone	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
3&4-Methylphenol (m, p-cresol)	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
2-Nitrophenol	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
2,4-Dimethylphenol	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Bis(2-chloroethoxy)methane	ND	78.6		µg/Kg-dry	1	6/6/2017 12:00:09 AM
2,4-Dichlorophenol	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
1,2,4-Trichlorobenzene	ND	78.6		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Naphthalene	19,700	5,240	D	µg/Kg-dry	100	6/6/2017 3:01:11 PM



Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 10:45:00 AM

Project: E320

Lab ID: 1706027-002

Matrix: Soil

Client Sample ID: PR-TR-3-6-PLUG

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 17262

Analyst: SG

4-Chloroaniline	ND	78.6		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Hexachlorobutadiene	ND	78.6		µg/Kg-dry	1	6/6/2017 12:00:09 AM
4-Chloro-3-methylphenol	ND	210		µg/Kg-dry	1	6/6/2017 12:00:09 AM
2-Methylnaphthalene	23,300	5,240	D	µg/Kg-dry	100	6/6/2017 3:01:11 PM
1-Methylnaphthalene	11,100	5,240	D	µg/Kg-dry	100	6/6/2017 3:01:11 PM
Hexachlorocyclopentadiene	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
2,4,6-Trichlorophenol	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
2,4,5-Trichlorophenol	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
2-Chloronaphthalene	ND	78.6		µg/Kg-dry	1	6/6/2017 12:00:09 AM
2-Nitroaniline	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Acenaphthene	59,900	5,240	D	µg/Kg-dry	100	6/6/2017 3:01:11 PM
Dimethylphthalate	237	105	BQ	µg/Kg-dry	1	6/6/2017 12:00:09 AM
2,6-Dinitrotoluene	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Acenaphthylene	481	52.4		µg/Kg-dry	1	6/6/2017 12:00:09 AM
2,4-Dinitrophenol	ND	210		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Dibenzofuran	40,000	7,860	D	µg/Kg-dry	100	6/6/2017 3:01:11 PM
2,4-Dinitrotoluene	1,110	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
4-Nitrophenol	ND	524		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Fluorene	53,500	5,240	D	µg/Kg-dry	100	6/6/2017 3:01:11 PM
4-Chlorophenyl phenyl ether	ND	78.6		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Diethylphthalate	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
4,6-Dinitro-2-methylphenol	ND	210		µg/Kg-dry	1	6/6/2017 12:00:09 AM
4-Bromophenyl phenyl ether	ND	78.6		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Hexachlorobenzene	ND	78.6		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Pentachlorophenol	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Phenanthrene	106,000	5,240	D	µg/Kg-dry	100	6/6/2017 3:01:11 PM
Anthracene	8,790	5,240	D	µg/Kg-dry	100	6/6/2017 3:01:11 PM
Carbazole	3,360	78.6		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Di-n-butylphthalate	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Fluoranthene	55,300	5,240	D	µg/Kg-dry	100	6/6/2017 3:01:11 PM
Pyrene	35,400	5,240	D	µg/Kg-dry	100	6/6/2017 3:01:11 PM
Butyl Benzylphthalate	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
bis(2-Ethylhexyl)adipate	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Benz (a) anthracene	15,800	5,240	D	µg/Kg-dry	100	6/6/2017 3:01:11 PM
Chrysene	16,100	5,240	D	µg/Kg-dry	100	6/6/2017 3:01:11 PM
bis (2-Ethylhexyl) phthalate	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Di-n-octyl phthalate	ND	105		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Benzo (b) fluoranthene	10,500	5,240	D	µg/Kg-dry	100	6/6/2017 3:01:11 PM
Benzo (k) fluoranthene	2,600	52.4		µg/Kg-dry	1	6/6/2017 12:00:09 AM



Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 10:45:00 AM

Project: E320

Lab ID: 1706027-002

Matrix: Soil

Client Sample ID: PR-TR-3-6-PLUG

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 17262

Analyst: SG

Benzo (a) pyrene	4,350	52.4		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Indeno (1,2,3-cd) pyrene	947	52.4		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Dibenz (a,h) anthracene	356	52.4		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Benzo (g,h,i) perylene	827	52.4		µg/Kg-dry	1	6/6/2017 12:00:09 AM
Surr: 2,4,6-Tribromophenol	69.1	11.1-127		%Rec	1	6/6/2017 12:00:09 AM
Surr: 2-Fluorobiphenyl	59.6	15-123		%Rec	1	6/6/2017 12:00:09 AM
Surr: Nitrobenzene-d5	56.9	10-133		%Rec	1	6/6/2017 12:00:09 AM
Surr: Phenol-d6	63.5	11.6-133		%Rec	1	6/6/2017 12:00:09 AM
Surr: p-Terphenyl	68.8	26.7-159		%Rec	1	6/6/2017 12:00:09 AM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0601	Q	mg/Kg-dry	1	6/6/2017 10:42:23 AM
Chloromethane	ND	0.0601		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Vinyl chloride	ND	0.00200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Bromomethane	ND	0.0901	Q	mg/Kg-dry	1	6/6/2017 10:42:23 AM
Trichlorofluoromethane (CFC-11)	ND	0.0501	Q	mg/Kg-dry	1	6/6/2017 10:42:23 AM
Chloroethane	ND	0.0601	Q	mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,1-Dichloroethene	ND	0.0501	Q	mg/Kg-dry	1	6/6/2017 10:42:23 AM
Methylene chloride	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
trans-1,2-Dichloroethene	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Methyl tert-butyl ether (MTBE)	ND	0.0501		mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,1-Dichloroethane	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
2,2-Dichloropropane	ND	0.0501	Q	mg/Kg-dry	1	6/6/2017 10:42:23 AM
cis-1,2-Dichloroethene	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Chloroform	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,1,1-Trichloroethane (TCA)	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,1-Dichloropropene	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Carbon tetrachloride	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,2-Dichloroethane (EDC)	ND	0.0300		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Benzene	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Trichloroethene (TCE)	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,2-Dichloropropane	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Bromodichloromethane	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Dibromomethane	ND	0.0401		mg/Kg-dry	1	6/6/2017 10:42:23 AM
cis-1,3-Dichloropropene	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM



Analytical Report

Work Order: 1706027

Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 10:45:00 AM

Project: E320

Lab ID: 1706027-002

Matrix: Soil

Client Sample ID: PR-TR-3-6-PLUG

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

Toluene	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
trans-1,3-Dichloropropylene	ND	0.0300		mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,1,2-Trichloroethane	ND	0.0300		mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,3-Dichloropropane	ND	0.0501		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Tetrachloroethene (PCE)	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Dibromochloromethane	ND	0.0300		mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,2-Dibromoethane (EDB)	ND	0.00501		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Chlorobenzene	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,1,1,2-Tetrachloroethane	ND	0.0300		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Ethylbenzene	ND	0.0300		mg/Kg-dry	1	6/6/2017 10:42:23 AM
m,p-Xylene	0.0444	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
o-Xylene	0.0226	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Styrene	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Isopropylbenzene	ND	0.0801		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Bromoform	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,1,2,2-Tetrachloroethane	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
n-Propylbenzene	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Bromobenzene	ND	0.0300		mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,3,5-Trimethylbenzene	0.0663	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
2-Chlorotoluene	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
4-Chlorotoluene	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
tert-Butylbenzene	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,2,3-Trichloropropane	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,2,4-Trichlorobenzene	ND	0.0501		mg/Kg-dry	1	6/6/2017 10:42:23 AM
sec-Butylbenzene	0.0599	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
4-Isopropyltoluene	0.0810	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,3-Dichlorobenzene	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,4-Dichlorobenzene	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
n-Butylbenzene	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,2-Dichlorobenzene	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,2-Dibromo-3-chloropropane	ND	0.501		mg/Kg-dry	1	6/6/2017 10:42:23 AM
1,2,4-Trimethylbenzene	0.129	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Hexachlorobutadiene	ND	0.100		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Naphthalene	27.5	0.601	D	mg/Kg-dry	20	6/6/2017 8:19:40 AM
1,2,3-Trichlorobenzene	ND	0.0200		mg/Kg-dry	1	6/6/2017 10:42:23 AM
Surr: Dibromofluoromethane	88.1	56.5-129		%Rec	1	6/6/2017 10:42:23 AM
Surr: Toluene-d8	99.5	64.5-151		%Rec	1	6/6/2017 10:42:23 AM
Surr: 1-Bromo-4-fluorobenzene	104	63.1-141		%Rec	1	6/6/2017 10:42:23 AM



Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 10:45:00 AM

Project: E320

Lab ID: 1706027-002

Matrix: Soil

Client Sample ID: PR-TR-3-6-PLUG

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Mercury by EPA Method 7471

Batch ID: 17256

Analyst: WF

Mercury	ND	0.281		mg/Kg-dry	1	6/6/2017 5:19:00 PM
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Total Metals by EPA Method 6020

Batch ID: 17261

Analyst: TN

Arsenic	4.00	0.0938		mg/Kg-dry	1	6/5/2017 2:48:20 PM
Barium	106	0.469		mg/Kg-dry	1	6/5/2017 2:48:20 PM
Cadmium	ND	0.188		mg/Kg-dry	1	6/5/2017 2:48:20 PM
Chromium	45.0	0.0938		mg/Kg-dry	1	6/5/2017 2:48:20 PM
Lead	18.5	0.188		mg/Kg-dry	1	6/5/2017 2:48:20 PM
Selenium	1.15	0.469		mg/Kg-dry	1	6/5/2017 2:48:20 PM
Silver	ND	0.0938		mg/Kg-dry	1	6/5/2017 2:48:20 PM

Sample Moisture (Percent Moisture)

Batch ID: R36583

Analyst: BB

Percent Moisture	19.2	0.500		wt%	1	6/5/2017 8:13:47 AM
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Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 10:52:00 AM

Project: E320

Lab ID: 1706027-003

Matrix: Soil

Client Sample ID: PR-TR-3-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Hydrocarbon Identification by NWTPH-HCID

Batch ID: 17248

Analyst: SB

Gasoline	ND	22.9		mg/Kg-dry	1	6/3/2017 2:33:12 AM
Mineral Spirits	ND	34.4		mg/Kg-dry	1	6/3/2017 2:33:12 AM
Kerosene	ND	57.4		mg/Kg-dry	1	6/3/2017 2:33:12 AM
Diesel (Fuel Oil)	ND	57.4		mg/Kg-dry	1	6/3/2017 2:33:12 AM
Heavy Oil	ND	115		mg/Kg-dry	1	6/3/2017 2:33:12 AM
Mineral Oil	ND	115		mg/Kg-dry	1	6/3/2017 2:33:12 AM
Surr: 2-Fluorobiphenyl	87.3	50-150		%Rec	1	6/3/2017 2:33:12 AM
Surr: o-Terphenyl	85.1	50-150		%Rec	1	6/3/2017 2:33:12 AM

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Batch ID: 17250

Analyst: BT

Naphthalene	1,960	45.2		µg/Kg-dry	1	6/2/2017 10:28:09 PM
2-Methylnaphthalene	3,310	45.2		µg/Kg-dry	1	6/2/2017 10:28:09 PM
1-Methylnaphthalene	1,790	45.2		µg/Kg-dry	1	6/2/2017 10:28:09 PM
Acenaphthylene	90.4	45.2		µg/Kg-dry	1	6/2/2017 10:28:09 PM
Acenaphthene	7,950	452	D	µg/Kg-dry	10	6/6/2017 12:22:06 AM
Fluorene	8,210	452	D	µg/Kg-dry	10	6/6/2017 12:22:06 AM
Phenanthrene	14,300	452	D	µg/Kg-dry	10	6/6/2017 12:22:06 AM
Anthracene	1,360	45.2		µg/Kg-dry	1	6/2/2017 10:28:09 PM
Fluoranthene	9,400	452	D	µg/Kg-dry	10	6/6/2017 12:22:06 AM
Pyrene	6,100	452	D	µg/Kg-dry	10	6/6/2017 12:22:06 AM
Benz(a)anthracene	2,770	45.2		µg/Kg-dry	1	6/2/2017 10:28:09 PM
Chrysene	1,490	45.2		µg/Kg-dry	1	6/2/2017 10:28:09 PM
Benzo(b)fluoranthene	2,420	45.2		µg/Kg-dry	1	6/2/2017 10:28:09 PM
Benzo(k)fluoranthene	821	45.2		µg/Kg-dry	1	6/2/2017 10:28:09 PM
Benzo(a)pyrene	1,010	45.2		µg/Kg-dry	1	6/2/2017 10:28:09 PM
Indeno(1,2,3-cd)pyrene	241	45.2		µg/Kg-dry	1	6/2/2017 10:28:09 PM
Dibenz(a,h)anthracene	112	45.2		µg/Kg-dry	1	6/2/2017 10:28:09 PM
Benzo(g,h,i)perylene	191	45.2		µg/Kg-dry	1	6/2/2017 10:28:09 PM
Surr: 2-Fluorobiphenyl	56.4	24.5-139		%Rec	1	6/2/2017 10:28:09 PM
Surr: Terphenyl-d14 (surr)	65.0	44.3-176		%Rec	1	6/2/2017 10:28:09 PM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0682	Q	mg/Kg-dry	1	6/6/2017 12:37:07 PM
Chloromethane	ND	0.0682		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Vinyl chloride	ND	0.00227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Bromomethane	ND	0.102	Q	mg/Kg-dry	1	6/6/2017 12:37:07 PM
Trichlorofluoromethane (CFC-11)	ND	0.0568	Q	mg/Kg-dry	1	6/6/2017 12:37:07 PM



Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 10:52:00 AM

Project: E320

Lab ID: 1706027-003

Matrix: Soil

Client Sample ID: PR-TR-3-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

Chloroethane	ND	0.0682	Q	mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,1-Dichloroethene	ND	0.0568	Q	mg/Kg-dry	1	6/6/2017 12:37:07 PM
Methylene chloride	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
trans-1,2-Dichloroethene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Methyl tert-butyl ether (MTBE)	ND	0.0568		mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,1-Dichloroethane	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
2,2-Dichloropropane	ND	0.0568	Q	mg/Kg-dry	1	6/6/2017 12:37:07 PM
cis-1,2-Dichloroethene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Chloroform	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,1,1-Trichloroethane (TCA)	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,1-Dichloropropene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Carbon tetrachloride	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,2-Dichloroethane (EDC)	ND	0.0341		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Benzene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Trichloroethene (TCE)	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,2-Dichloropropane	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Bromodichloromethane	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Dibromomethane	ND	0.0455		mg/Kg-dry	1	6/6/2017 12:37:07 PM
cis-1,3-Dichloropropene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Toluene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
trans-1,3-Dichloropropylene	ND	0.0341		mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,1,2-Trichloroethane	ND	0.0341		mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,3-Dichloropropane	ND	0.0568		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Tetrachloroethene (PCE)	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Dibromochloromethane	ND	0.0341		mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,2-Dibromoethane (EDB)	ND	0.00568		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Chlorobenzene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,1,1,2-Tetrachloroethane	ND	0.0341		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Ethylbenzene	ND	0.0341		mg/Kg-dry	1	6/6/2017 12:37:07 PM
m,p-Xylene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
o-Xylene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Styrene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Isopropylbenzene	ND	0.0909		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Bromoform	ND	0.0227	Q	mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,1,2,2-Tetrachloroethane	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
n-Propylbenzene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Bromobenzene	ND	0.0341		mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,3,5-Trimethylbenzene	0.0362	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
2-Chlorotoluene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM



Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 10:52:00 AM

Project: E320

Lab ID: 1706027-003

Matrix: Soil

Client Sample ID: PR-TR-3-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

4-Chlorotoluene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
tert-Butylbenzene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,2,3-Trichloropropane	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,2,4-Trichlorobenzene	ND	0.0568		mg/Kg-dry	1	6/6/2017 12:37:07 PM
sec-Butylbenzene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
4-Isopropyltoluene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,3-Dichlorobenzene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,4-Dichlorobenzene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
n-Butylbenzene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,2-Dichlorobenzene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,2-Dibromo-3-chloropropane	ND	0.568		mg/Kg-dry	1	6/6/2017 12:37:07 PM
1,2,4-Trimethylbenzene	0.0419	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Hexachlorobutadiene	ND	0.114		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Naphthalene	4.27	0.341	D	mg/Kg-dry	10	6/6/2017 6:02:54 PM
1,2,3-Trichlorobenzene	ND	0.0227		mg/Kg-dry	1	6/6/2017 12:37:07 PM
Surr: Dibromofluoromethane	91.5	56.5-129		%Rec	1	6/6/2017 12:37:07 PM
Surr: Toluene-d8	97.8	64.5-151		%Rec	1	6/6/2017 12:37:07 PM
Surr: 1-Bromo-4-fluorobenzene	101	63.1-141		%Rec	1	6/6/2017 12:37:07 PM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample Moisture (Percent Moisture)

Batch ID: R36583

Analyst: BB

Percent Moisture	20.3	0.500		wt%	1	6/5/2017 8:13:47 AM
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Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 11:20:00 AM

Project: E320

Lab ID: 1706027-004

Matrix: Soil

Client Sample ID: PR-TR-2-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Hydrocarbon Identification by NWTPH-HCID

Batch ID: 17248

Analyst: SB

Gasoline	ND	20.6		mg/Kg-dry	1	6/3/2017 3:05:02 AM
Mineral Spirits	ND	30.9		mg/Kg-dry	1	6/3/2017 3:05:02 AM
Kerosene	ND	51.6		mg/Kg-dry	1	6/3/2017 3:05:02 AM
Diesel (Fuel Oil)	ND	51.6		mg/Kg-dry	1	6/3/2017 3:05:02 AM
Heavy Oil	ND	103		mg/Kg-dry	1	6/3/2017 3:05:02 AM
Mineral Oil	ND	103		mg/Kg-dry	1	6/3/2017 3:05:02 AM
Surr: 2-Fluorobiphenyl	104	50-150		%Rec	1	6/3/2017 3:05:02 AM
Surr: o-Terphenyl	99.4	50-150		%Rec	1	6/3/2017 3:05:02 AM

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Batch ID: 17250

Analyst: BT

Naphthalene	ND	37.2		µg/Kg-dry	1	6/2/2017 10:50:20 PM
2-Methylnaphthalene	ND	37.2		µg/Kg-dry	1	6/2/2017 10:50:20 PM
1-Methylnaphthalene	ND	37.2		µg/Kg-dry	1	6/2/2017 10:50:20 PM
Acenaphthylene	ND	37.2		µg/Kg-dry	1	6/2/2017 10:50:20 PM
Acenaphthene	ND	37.2		µg/Kg-dry	1	6/2/2017 10:50:20 PM
Fluorene	ND	37.2		µg/Kg-dry	1	6/2/2017 10:50:20 PM
Phenanthrene	84.5	37.2		µg/Kg-dry	1	6/2/2017 10:50:20 PM
Anthracene	ND	37.2		µg/Kg-dry	1	6/2/2017 10:50:20 PM
Fluoranthene	65.4	37.2		µg/Kg-dry	1	6/2/2017 10:50:20 PM
Pyrene	44.5	37.2		µg/Kg-dry	1	6/2/2017 10:50:20 PM
Benz(a)anthracene	ND	37.2		µg/Kg-dry	1	6/2/2017 10:50:20 PM
Chrysene	ND	37.2		µg/Kg-dry	1	6/2/2017 10:50:20 PM
Benzo(b)fluoranthene	ND	37.2		µg/Kg-dry	1	6/2/2017 10:50:20 PM
Benzo(k)fluoranthene	ND	37.2		µg/Kg-dry	1	6/2/2017 10:50:20 PM
Benzo(a)pyrene	ND	37.2		µg/Kg-dry	1	6/2/2017 10:50:20 PM
Indeno(1,2,3-cd)pyrene	ND	37.2		µg/Kg-dry	1	6/2/2017 10:50:20 PM
Dibenz(a,h)anthracene	ND	37.2		µg/Kg-dry	1	6/2/2017 10:50:20 PM
Benzo(g,h,i)perylene	ND	37.2		µg/Kg-dry	1	6/2/2017 10:50:20 PM
Surr: 2-Fluorobiphenyl	61.9	24.5-139		%Rec	1	6/2/2017 10:50:20 PM
Surr: Terphenyl-d14 (surr)	76.6	44.3-176		%Rec	1	6/2/2017 10:50:20 PM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0639	Q	mg/Kg-dry	1	6/6/2017 3:35:05 AM
Chloromethane	ND	0.0639		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Vinyl chloride	ND	0.00213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Bromomethane	ND	0.0958	Q	mg/Kg-dry	1	6/6/2017 3:35:05 AM
Trichlorofluoromethane (CFC-11)	ND	0.0532	Q	mg/Kg-dry	1	6/6/2017 3:35:05 AM



Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 11:20:00 AM

Project: E320

Lab ID: 1706027-004

Matrix: Soil

Client Sample ID: PR-TR-2-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

Chloroethane	ND	0.0639	Q	mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,1-Dichloroethene	ND	0.0532	Q	mg/Kg-dry	1	6/6/2017 3:35:05 AM
Methylene chloride	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
trans-1,2-Dichloroethene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Methyl tert-butyl ether (MTBE)	ND	0.0532		mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,1-Dichloroethane	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
2,2-Dichloropropane	ND	0.0532	Q	mg/Kg-dry	1	6/6/2017 3:35:05 AM
cis-1,2-Dichloroethene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Chloroform	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,1,1-Trichloroethane (TCA)	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,1-Dichloropropene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Carbon tetrachloride	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,2-Dichloroethane (EDC)	ND	0.0319		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Benzene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Trichloroethene (TCE)	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,2-Dichloropropane	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Bromodichloromethane	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Dibromomethane	ND	0.0426		mg/Kg-dry	1	6/6/2017 3:35:05 AM
cis-1,3-Dichloropropene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Toluene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
trans-1,3-Dichloropropylene	ND	0.0319		mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,1,2-Trichloroethane	ND	0.0319		mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,3-Dichloropropane	ND	0.0532		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Tetrachloroethene (PCE)	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Dibromochloromethane	ND	0.0319		mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,2-Dibromoethane (EDB)	ND	0.00532		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Chlorobenzene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,1,1,2-Tetrachloroethane	ND	0.0319		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Ethylbenzene	ND	0.0319		mg/Kg-dry	1	6/6/2017 3:35:05 AM
m,p-Xylene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
o-Xylene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Styrene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Isopropylbenzene	ND	0.0852		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Bromoform	ND	0.0213	Q	mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,1,2,2-Tetrachloroethane	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
n-Propylbenzene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Bromobenzene	ND	0.0319		mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,3,5-Trimethylbenzene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
2-Chlorotoluene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM



Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 11:20:00 AM

Project: E320

Lab ID: 1706027-004

Matrix: Soil

Client Sample ID: PR-TR-2-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

4-Chlorotoluene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
tert-Butylbenzene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,2,3-Trichloropropane	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,2,4-Trichlorobenzene	ND	0.0532		mg/Kg-dry	1	6/6/2017 3:35:05 AM
sec-Butylbenzene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
4-Isopropyltoluene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,3-Dichlorobenzene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,4-Dichlorobenzene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
n-Butylbenzene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,2-Dichlorobenzene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,2-Dibromo-3-chloropropane	ND	0.532		mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,2,4-Trimethylbenzene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Hexachlorobutadiene	ND	0.106		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Naphthalene	ND	0.0319		mg/Kg-dry	1	6/6/2017 3:35:05 AM
1,2,3-Trichlorobenzene	ND	0.0213		mg/Kg-dry	1	6/6/2017 3:35:05 AM
Surr: Dibromofluoromethane	86.6	56.5-129		%Rec	1	6/6/2017 3:35:05 AM
Surr: Toluene-d8	72.9	64.5-151		%Rec	1	6/6/2017 3:35:05 AM
Surr: 1-Bromo-4-fluorobenzene	98.5	63.1-141		%Rec	1	6/6/2017 3:35:05 AM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample Moisture (Percent Moisture)

Batch ID: R36583

Analyst: BB

Percent Moisture	7.38	0.500		wt%	1	6/5/2017 8:13:47 AM
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Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 11:46:00 AM

Project: E320

Lab ID: 1706027-005

Matrix: Soil

Client Sample ID: PR-TR-2-12

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Hydrocarbon Identification by NWTPH-HCID

Batch ID: 17248

Analyst: SB

Gasoline	ND	20.0		mg/Kg-dry	1	6/3/2017 4:08:40 AM
Mineral Spirits	ND	30.1		mg/Kg-dry	1	6/3/2017 4:08:40 AM
Kerosene	ND	50.1		mg/Kg-dry	1	6/3/2017 4:08:40 AM
Diesel (Fuel Oil)	ND	50.1		mg/Kg-dry	1	6/3/2017 4:08:40 AM
Heavy Oil	ND	100		mg/Kg-dry	1	6/3/2017 4:08:40 AM
Mineral Oil	ND	100		mg/Kg-dry	1	6/3/2017 4:08:40 AM
Surr: 2-Fluorobiphenyl	91.2	50-150		%Rec	1	6/3/2017 4:08:40 AM
Surr: o-Terphenyl	92.0	50-150		%Rec	1	6/3/2017 4:08:40 AM

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Batch ID: 17250

Analyst: BT

Naphthalene	ND	43.3		µg/Kg-dry	1	6/2/2017 11:12:23 PM
2-Methylnaphthalene	ND	43.3		µg/Kg-dry	1	6/2/2017 11:12:23 PM
1-Methylnaphthalene	ND	43.3		µg/Kg-dry	1	6/2/2017 11:12:23 PM
Acenaphthylene	ND	43.3		µg/Kg-dry	1	6/2/2017 11:12:23 PM
Acenaphthene	ND	43.3		µg/Kg-dry	1	6/2/2017 11:12:23 PM
Fluorene	ND	43.3		µg/Kg-dry	1	6/2/2017 11:12:23 PM
Phenanthrene	ND	43.3		µg/Kg-dry	1	6/2/2017 11:12:23 PM
Anthracene	ND	43.3		µg/Kg-dry	1	6/2/2017 11:12:23 PM
Fluoranthene	ND	43.3		µg/Kg-dry	1	6/2/2017 11:12:23 PM
Pyrene	ND	43.3		µg/Kg-dry	1	6/2/2017 11:12:23 PM
Benz(a)anthracene	ND	43.3		µg/Kg-dry	1	6/2/2017 11:12:23 PM
Chrysene	ND	43.3		µg/Kg-dry	1	6/2/2017 11:12:23 PM
Benzo(b)fluoranthene	ND	43.3		µg/Kg-dry	1	6/2/2017 11:12:23 PM
Benzo(k)fluoranthene	ND	43.3		µg/Kg-dry	1	6/2/2017 11:12:23 PM
Benzo(a)pyrene	ND	43.3		µg/Kg-dry	1	6/2/2017 11:12:23 PM
Indeno(1,2,3-cd)pyrene	ND	43.3		µg/Kg-dry	1	6/2/2017 11:12:23 PM
Dibenz(a,h)anthracene	ND	43.3		µg/Kg-dry	1	6/2/2017 11:12:23 PM
Benzo(g,h,i)perylene	ND	43.3		µg/Kg-dry	1	6/2/2017 11:12:23 PM
Surr: 2-Fluorobiphenyl	55.5	24.5-139		%Rec	1	6/2/2017 11:12:23 PM
Surr: Terphenyl-d14 (surr)	64.5	44.3-176		%Rec	1	6/2/2017 11:12:23 PM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0569	Q	mg/Kg-dry	1	6/6/2017 4:03:30 AM
Chloromethane	ND	0.0569		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Vinyl chloride	ND	0.00190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Bromomethane	ND	0.0854	Q	mg/Kg-dry	1	6/6/2017 4:03:30 AM
Trichlorofluoromethane (CFC-11)	ND	0.0474	Q	mg/Kg-dry	1	6/6/2017 4:03:30 AM



Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 11:46:00 AM

Project: E320

Lab ID: 1706027-005

Matrix: Soil

Client Sample ID: PR-TR-2-12

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

Chloroethane	ND	0.0569	Q	mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,1-Dichloroethene	ND	0.0474	Q	mg/Kg-dry	1	6/6/2017 4:03:30 AM
Methylene chloride	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
trans-1,2-Dichloroethene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Methyl tert-butyl ether (MTBE)	ND	0.0474		mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,1-Dichloroethane	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
2,2-Dichloropropane	ND	0.0474	Q	mg/Kg-dry	1	6/6/2017 4:03:30 AM
cis-1,2-Dichloroethene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Chloroform	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,1,1-Trichloroethane (TCA)	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,1-Dichloropropene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Carbon tetrachloride	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,2-Dichloroethane (EDC)	ND	0.0285		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Benzene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Trichloroethene (TCE)	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,2-Dichloropropane	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Bromodichloromethane	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Dibromomethane	ND	0.0380		mg/Kg-dry	1	6/6/2017 4:03:30 AM
cis-1,3-Dichloropropene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Toluene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
trans-1,3-Dichloropropylene	ND	0.0285		mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,1,2-Trichloroethane	ND	0.0285		mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,3-Dichloropropane	ND	0.0474		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Tetrachloroethene (PCE)	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Dibromochloromethane	ND	0.0285		mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,2-Dibromoethane (EDB)	ND	0.00474		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Chlorobenzene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,1,1,2-Tetrachloroethane	ND	0.0285		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Ethylbenzene	ND	0.0285		mg/Kg-dry	1	6/6/2017 4:03:30 AM
m,p-Xylene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
o-Xylene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Styrene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Isopropylbenzene	ND	0.0759		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Bromoform	ND	0.0190	Q	mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,1,2,2-Tetrachloroethane	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
n-Propylbenzene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Bromobenzene	ND	0.0285		mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,3,5-Trimethylbenzene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
2-Chlorotoluene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM



Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 11:46:00 AM

Project: E320

Lab ID: 1706027-005

Matrix: Soil

Client Sample ID: PR-TR-2-12

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

4-Chlorotoluene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
tert-Butylbenzene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,2,3-Trichloropropane	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,2,4-Trichlorobenzene	ND	0.0474		mg/Kg-dry	1	6/6/2017 4:03:30 AM
sec-Butylbenzene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
4-Isopropyltoluene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,3-Dichlorobenzene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,4-Dichlorobenzene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
n-Butylbenzene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,2-Dichlorobenzene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,2-Dibromo-3-chloropropane	ND	0.474		mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,2,4-Trimethylbenzene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Hexachlorobutadiene	ND	0.0949		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Naphthalene	ND	0.0285		mg/Kg-dry	1	6/6/2017 4:03:30 AM
1,2,3-Trichlorobenzene	ND	0.0190		mg/Kg-dry	1	6/6/2017 4:03:30 AM
Surr: Dibromofluoromethane	81.9	56.5-129		%Rec	1	6/6/2017 4:03:30 AM
Surr: Toluene-d8	93.5	64.5-151		%Rec	1	6/6/2017 4:03:30 AM
Surr: 1-Bromo-4-fluorobenzene	91.0	63.1-141		%Rec	1	6/6/2017 4:03:30 AM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample Moisture (Percent Moisture)

Batch ID: R36583

Analyst: BB

Percent Moisture	12.3	0.500		wt%	1	6/5/2017 8:13:47 AM
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Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 12:39:00 PM

Project: E320

Lab ID: 1706027-006

Matrix: Soil

Client Sample ID: PR-TP-1-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Hydrocarbon Identification by NWTPH-HCID

Batch ID: 17248

Analyst: SB

Gasoline	ND	21.0		mg/Kg-dry	1	6/3/2017 4:40:27 AM
Mineral Spirits	ND	31.5		mg/Kg-dry	1	6/3/2017 4:40:27 AM
Kerosene	ND	52.4		mg/Kg-dry	1	6/3/2017 4:40:27 AM
Diesel (Fuel Oil)	ND	52.4		mg/Kg-dry	1	6/3/2017 4:40:27 AM
Heavy Oil	ND	105		mg/Kg-dry	1	6/3/2017 4:40:27 AM
Mineral Oil	ND	105		mg/Kg-dry	1	6/3/2017 4:40:27 AM
Surr: 2-Fluorobiphenyl	101	50-150		%Rec	1	6/3/2017 4:40:27 AM
Surr: o-Terphenyl	96.2	50-150		%Rec	1	6/3/2017 4:40:27 AM

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 17262

Analyst: SG

Phenol	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Bis(2-chloroethyl) ether	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
2-Chlorophenol	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
1,3-Dichlorobenzene	ND	79.4		µg/Kg-dry	1	6/5/2017 10:31:45 PM
1,4-Dichlorobenzene	ND	79.4		µg/Kg-dry	1	6/5/2017 10:31:45 PM
1,2-Dichlorobenzene	ND	79.4		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Benzyl alcohol	ND	106	Q	µg/Kg-dry	1	6/5/2017 10:31:45 PM
2-Methylphenol (o-cresol)	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Hexachloroethane	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
N-Nitrosodi-n-propylamine	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Nitrobenzene	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Isophorone	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
3&4-Methylphenol (m, p-cresol)	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
2-Nitrophenol	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
2,4-Dimethylphenol	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Bis(2-chloroethoxy)methane	ND	79.4		µg/Kg-dry	1	6/5/2017 10:31:45 PM
2,4-Dichlorophenol	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
1,2,4-Trichlorobenzene	ND	79.4		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Naphthalene	ND	52.9		µg/Kg-dry	1	6/5/2017 10:31:45 PM
4-Chloroaniline	ND	79.4		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Hexachlorobutadiene	ND	79.4		µg/Kg-dry	1	6/5/2017 10:31:45 PM
4-Chloro-3-methylphenol	ND	212		µg/Kg-dry	1	6/5/2017 10:31:45 PM
2-Methylnaphthalene	ND	52.9		µg/Kg-dry	1	6/5/2017 10:31:45 PM
1-Methylnaphthalene	ND	52.9		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Hexachlorocyclopentadiene	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
2,4,6-Trichlorophenol	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
2,4,5-Trichlorophenol	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
2-Chloronaphthalene	ND	79.4		µg/Kg-dry	1	6/5/2017 10:31:45 PM



Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 12:39:00 PM

Project: E320

Lab ID: 1706027-006

Matrix: Soil

Client Sample ID: PR-TP-1-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 17262

Analyst: SG

2-Nitroaniline	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Acenaphthene	ND	52.9		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Dimethylphthalate	270	106	BQ	µg/Kg-dry	1	6/5/2017 10:31:45 PM
2,6-Dinitrotoluene	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Acenaphthylene	ND	52.9		µg/Kg-dry	1	6/5/2017 10:31:45 PM
2,4-Dinitrophenol	ND	212		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Dibenzofuran	ND	79.4		µg/Kg-dry	1	6/5/2017 10:31:45 PM
2,4-Dinitrotoluene	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
4-Nitrophenol	ND	529		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Fluorene	ND	52.9		µg/Kg-dry	1	6/5/2017 10:31:45 PM
4-Chlorophenyl phenyl ether	ND	79.4		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Diethylphthalate	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
4,6-Dinitro-2-methylphenol	ND	212		µg/Kg-dry	1	6/5/2017 10:31:45 PM
4-Bromophenyl phenyl ether	ND	79.4		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Hexachlorobenzene	ND	79.4		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Pentachlorophenol	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Phenanthrene	ND	52.9		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Anthracene	ND	52.9		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Carbazole	ND	79.4		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Di-n-butylphthalate	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Fluoranthene	ND	52.9		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Pyrene	ND	52.9		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Butyl Benzylphthalate	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
bis(2-Ethylhexyl)adipate	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Benz (a) anthracene	ND	52.9		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Chrysene	ND	52.9		µg/Kg-dry	1	6/5/2017 10:31:45 PM
bis (2-Ethylhexyl) phthalate	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Di-n-octyl phthalate	ND	106		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Benzo (b) fluoranthene	ND	52.9	Q	µg/Kg-dry	1	6/5/2017 10:31:45 PM
Benzo (k) fluoranthene	ND	52.9		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Benzo (a) pyrene	ND	52.9		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Indeno (1,2,3-cd) pyrene	ND	52.9		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Dibenz (a,h) anthracene	ND	52.9		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Benzo (g,h,i) perylene	ND	52.9		µg/Kg-dry	1	6/5/2017 10:31:45 PM
Surr: 2,4,6-Tribromophenol	82.1	11.1-127		%Rec	1	6/5/2017 10:31:45 PM
Surr: 2-Fluorobiphenyl	55.2	15-123		%Rec	1	6/5/2017 10:31:45 PM
Surr: Nitrobenzene-d5	49.5	10-133		%Rec	1	6/5/2017 10:31:45 PM
Surr: Phenol-d6	75.9	11.6-133		%Rec	1	6/5/2017 10:31:45 PM
Surr: p-Terphenyl	69.1	26.7-159		%Rec	1	6/5/2017 10:31:45 PM



Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 12:39:00 PM

Project: E320

Lab ID: 1706027-006

Matrix: Soil

Client Sample ID: PR-TP-1-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 17262

Analyst: SG

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0627	Q	mg/Kg-dry	1	6/6/2017 4:32:02 AM
Chloromethane	ND	0.0627		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Vinyl chloride	ND	0.00209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Bromomethane	ND	0.0941	Q	mg/Kg-dry	1	6/6/2017 4:32:02 AM
Trichlorofluoromethane (CFC-11)	ND	0.0523	Q	mg/Kg-dry	1	6/6/2017 4:32:02 AM
Chloroethane	ND	0.0627	Q	mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,1-Dichloroethene	ND	0.0523	Q	mg/Kg-dry	1	6/6/2017 4:32:02 AM
Methylene chloride	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
trans-1,2-Dichloroethene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Methyl tert-butyl ether (MTBE)	ND	0.0523		mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,1-Dichloroethane	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
2,2-Dichloropropane	ND	0.0523	Q	mg/Kg-dry	1	6/6/2017 4:32:02 AM
cis-1,2-Dichloroethene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Chloroform	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,1,1-Trichloroethane (TCA)	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,1-Dichloropropene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Carbon tetrachloride	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,2-Dichloroethane (EDC)	ND	0.0314		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Benzene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Trichloroethene (TCE)	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,2-Dichloropropane	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Bromodichloromethane	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Dibromomethane	ND	0.0418		mg/Kg-dry	1	6/6/2017 4:32:02 AM
cis-1,3-Dichloropropene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Toluene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
trans-1,3-Dichloropropylene	ND	0.0314		mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,1,2-Trichloroethane	ND	0.0314		mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,3-Dichloropropane	ND	0.0523		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Tetrachloroethene (PCE)	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Dibromochloromethane	ND	0.0314		mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,2-Dibromoethane (EDB)	ND	0.00523		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Chlorobenzene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,1,1,2-Tetrachloroethane	ND	0.0314		mg/Kg-dry	1	6/6/2017 4:32:02 AM



Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 12:39:00 PM

Project: E320

Lab ID: 1706027-006

Matrix: Soil

Client Sample ID: PR-TP-1-2

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

Ethylbenzene	ND	0.0314		mg/Kg-dry	1	6/6/2017 4:32:02 AM
m,p-Xylene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
o-Xylene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Styrene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Isopropylbenzene	ND	0.0836		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Bromoform	ND	0.0209	Q	mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,1,2,2-Tetrachloroethane	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
n-Propylbenzene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Bromobenzene	ND	0.0314		mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,3,5-Trimethylbenzene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
2-Chlorotoluene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
4-Chlorotoluene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
tert-Butylbenzene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,2,3-Trichloropropane	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,2,4-Trichlorobenzene	ND	0.0523		mg/Kg-dry	1	6/6/2017 4:32:02 AM
sec-Butylbenzene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
4-Isopropyltoluene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,3-Dichlorobenzene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,4-Dichlorobenzene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
n-Butylbenzene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,2-Dichlorobenzene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,2-Dibromo-3-chloropropane	ND	0.523		mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,2,4-Trimethylbenzene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Hexachlorobutadiene	ND	0.105		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Naphthalene	ND	0.0314		mg/Kg-dry	1	6/6/2017 4:32:02 AM
1,2,3-Trichlorobenzene	ND	0.0209		mg/Kg-dry	1	6/6/2017 4:32:02 AM
Surr: Dibromofluoromethane	83.5	56.5-129		%Rec	1	6/6/2017 4:32:02 AM
Surr: Toluene-d8	79.4	64.5-151		%Rec	1	6/6/2017 4:32:02 AM
Surr: 1-Bromo-4-fluorobenzene	96.3	63.1-141		%Rec	1	6/6/2017 4:32:02 AM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample Moisture (Percent Moisture)

Batch ID: R36583

Analyst: BB

Percent Moisture	7.48	0.500	wt%	1	6/5/2017 8:13:47 AM
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Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 12:57:00 PM

Project: E320

Lab ID: 1706027-007

Matrix: Soil

Client Sample ID: PR-TP-1-10

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Hydrocarbon Identification by NWTPH-HCID

Batch ID: 17248

Analyst: SB

Gasoline	ND	19.2		mg/Kg-dry	1	6/3/2017 5:12:17 AM
Mineral Spirits	ND	28.9		mg/Kg-dry	1	6/3/2017 5:12:17 AM
Kerosene	ND	48.1		mg/Kg-dry	1	6/3/2017 5:12:17 AM
Diesel (Fuel Oil)	ND	48.1		mg/Kg-dry	1	6/3/2017 5:12:17 AM
Heavy Oil	ND	96.2		mg/Kg-dry	1	6/3/2017 5:12:17 AM
Mineral Oil	ND	96.2		mg/Kg-dry	1	6/3/2017 5:12:17 AM
Surr: 2-Fluorobiphenyl	91.4	50-150		%Rec	1	6/3/2017 5:12:17 AM
Surr: o-Terphenyl	92.5	50-150		%Rec	1	6/3/2017 5:12:17 AM

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Batch ID: 17250

Analyst: BT

Naphthalene	ND	42.2		µg/Kg-dry	1	6/2/2017 11:34:23 PM
2-Methylnaphthalene	ND	42.2		µg/Kg-dry	1	6/2/2017 11:34:23 PM
1-Methylnaphthalene	ND	42.2		µg/Kg-dry	1	6/2/2017 11:34:23 PM
Acenaphthylene	ND	42.2		µg/Kg-dry	1	6/2/2017 11:34:23 PM
Acenaphthene	ND	42.2		µg/Kg-dry	1	6/2/2017 11:34:23 PM
Fluorene	ND	42.2		µg/Kg-dry	1	6/2/2017 11:34:23 PM
Phenanthrene	ND	42.2		µg/Kg-dry	1	6/2/2017 11:34:23 PM
Anthracene	ND	42.2		µg/Kg-dry	1	6/2/2017 11:34:23 PM
Fluoranthene	ND	42.2		µg/Kg-dry	1	6/2/2017 11:34:23 PM
Pyrene	ND	42.2		µg/Kg-dry	1	6/2/2017 11:34:23 PM
Benz(a)anthracene	ND	42.2		µg/Kg-dry	1	6/2/2017 11:34:23 PM
Chrysene	ND	42.2		µg/Kg-dry	1	6/2/2017 11:34:23 PM
Benzo(b)fluoranthene	ND	42.2		µg/Kg-dry	1	6/2/2017 11:34:23 PM
Benzo(k)fluoranthene	ND	42.2		µg/Kg-dry	1	6/2/2017 11:34:23 PM
Benzo(a)pyrene	ND	42.2		µg/Kg-dry	1	6/2/2017 11:34:23 PM
Indeno(1,2,3-cd)pyrene	ND	42.2		µg/Kg-dry	1	6/2/2017 11:34:23 PM
Dibenz(a,h)anthracene	ND	42.2		µg/Kg-dry	1	6/2/2017 11:34:23 PM
Benzo(g,h,i)perylene	ND	42.2		µg/Kg-dry	1	6/2/2017 11:34:23 PM
Surr: 2-Fluorobiphenyl	42.3	24.5-139		%Rec	1	6/2/2017 11:34:23 PM
Surr: Terphenyl-d14 (surr)	56.9	44.3-176		%Rec	1	6/2/2017 11:34:23 PM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0673	Q	mg/Kg-dry	1	6/6/2017 5:00:31 AM
Chloromethane	ND	0.0673		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Vinyl chloride	ND	0.00224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Bromomethane	ND	0.101	Q	mg/Kg-dry	1	6/6/2017 5:00:31 AM
Trichlorofluoromethane (CFC-11)	ND	0.0561	Q	mg/Kg-dry	1	6/6/2017 5:00:31 AM



Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 12:57:00 PM

Project: E320

Lab ID: 1706027-007

Matrix: Soil

Client Sample ID: PR-TP-1-10

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

Chloroethane	ND	0.0673	Q	mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,1-Dichloroethene	ND	0.0561	Q	mg/Kg-dry	1	6/6/2017 5:00:31 AM
Methylene chloride	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
trans-1,2-Dichloroethene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Methyl tert-butyl ether (MTBE)	ND	0.0561		mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,1-Dichloroethane	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
2,2-Dichloropropane	ND	0.0561	Q	mg/Kg-dry	1	6/6/2017 5:00:31 AM
cis-1,2-Dichloroethene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Chloroform	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,1,1-Trichloroethane (TCA)	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,1-Dichloropropene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Carbon tetrachloride	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,2-Dichloroethane (EDC)	ND	0.0337		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Benzene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Trichloroethene (TCE)	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,2-Dichloropropane	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Bromodichloromethane	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Dibromomethane	ND	0.0449		mg/Kg-dry	1	6/6/2017 5:00:31 AM
cis-1,3-Dichloropropene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Toluene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
trans-1,3-Dichloropropylene	ND	0.0337		mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,1,2-Trichloroethane	ND	0.0337		mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,3-Dichloropropane	ND	0.0561		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Tetrachloroethene (PCE)	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Dibromochloromethane	ND	0.0337		mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,2-Dibromoethane (EDB)	ND	0.00561		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Chlorobenzene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,1,1,2-Tetrachloroethane	ND	0.0337		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Ethylbenzene	ND	0.0337		mg/Kg-dry	1	6/6/2017 5:00:31 AM
m,p-Xylene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
o-Xylene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Styrene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Isopropylbenzene	ND	0.0897		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Bromoform	ND	0.0224	Q	mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,1,2,2-Tetrachloroethane	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
n-Propylbenzene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Bromobenzene	ND	0.0337		mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,3,5-Trimethylbenzene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
2-Chlorotoluene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM



Analytical Report

Work Order: 1706027
Date Reported: 6/7/2017

Client: O'Neill Service Group

Collection Date: 6/2/2017 12:57:00 PM

Project: E320

Lab ID: 1706027-007

Matrix: Soil

Client Sample ID: PR-TP-1-10

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17265

Analyst: NG

4-Chlorotoluene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
tert-Butylbenzene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,2,3-Trichloropropane	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,2,4-Trichlorobenzene	ND	0.0561		mg/Kg-dry	1	6/6/2017 5:00:31 AM
sec-Butylbenzene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
4-Isopropyltoluene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,3-Dichlorobenzene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,4-Dichlorobenzene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
n-Butylbenzene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,2-Dichlorobenzene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,2-Dibromo-3-chloropropane	ND	0.561		mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,2,4-Trimethylbenzene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Hexachlorobutadiene	ND	0.112		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Naphthalene	ND	0.0337		mg/Kg-dry	1	6/6/2017 5:00:31 AM
1,2,3-Trichlorobenzene	ND	0.0224		mg/Kg-dry	1	6/6/2017 5:00:31 AM
Surr: Dibromofluoromethane	87.8	56.5-129		%Rec	1	6/6/2017 5:00:31 AM
Surr: Toluene-d8	109	64.5-151		%Rec	1	6/6/2017 5:00:31 AM
Surr: 1-Bromo-4-fluorobenzene	92.0	63.1-141		%Rec	1	6/6/2017 5:00:31 AM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample Moisture (Percent Moisture)

Batch ID: R36583

Analyst: BB

Percent Moisture	12.4	0.500		wt%	1	6/5/2017 8:13:47 AM
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Date: 6/7/2017

Work Order: 1706027
CLIENT: O'Neill Service Group
Project: E320

QC SUMMARY REPORT
Total Metals by EPA Method 6020

Sample ID	MB-17261	SampType:	MBLK		Units:	mg/Kg			Prep Date:	6/5/2017		RunNo:	36602	
Client ID:	MBLKS	Batch ID:	17261						Analysis Date:	6/5/2017		SeqNo:	702603	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val			%RPD	RPDLimit	Qual
Arsenic		ND	0.0781											
Barium		ND	0.391											
Cadmium		ND	0.156											
Chromium		ND	0.0781											
Lead		ND	0.156											
Selenium		ND	0.391											
Silver		ND	0.0781											

Sample ID	LCS-17261	SampType:	LCS	Units:	mg/Kg	Prep Date:	6/5/2017			RunNo:	36602	
Client ID:	LCSS	Batch ID:	17261				Analysis Date:	6/5/2017			SeqNo:	702604
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Arsenic	36.9	0.0787	39.37	0	93.8	80	120					
Barium	40.3	0.394	39.37	0	102	80	120					
Cadmium	1.88	0.157	1.969	0	95.7	80	120					
Chromium	38.8	0.0787	39.37	0	98.5	80	120					
Lead	20.5	0.157	19.69	0	104	80	120					
Selenium	3.45	0.394	3.937	0	87.5	80	120					
Silver	9.50	0.0787	9.843	0	96.6	80	120					

Sample ID	1706027-002ADUP	SampType:	DUP			Units:	mg/Kg-dry			Prep Date:	6/5/2017			RunNo:	36602			
Client ID:	PR-TR-3-6-PLUG	Batch ID:	17261			Analysis Date:						6/5/2017			SeqNo:	702606		
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val		%RPD	RPDLimit	Qual					
Arsenic		4.53	0.0938						3.998		12.4	20						
Barium		106	0.469						105.9		0.0713	20						
Cadmium		ND	0.188						0			20						
Chromium		50.1	0.0938						45.03		10.6	20						
Lead		15.8	0.188						18.53		16.1	20						
Selenium		0.935	0.469						1.152		20.8	20						



Date: 6/7/2017

Work Order: 1706027
CLIENT: O'Neill Service Group
Project: E320

QC SUMMARY REPORT
Total Metals by EPA Method 6020

Sample ID	1706027-002ADUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/5/2017	RunNo:	36602		
Client ID:	PR-TR-3-6-PLUG	Batch ID:	17261			Analysis Date:	6/5/2017	SeqNo:	702606		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	ND	0.0938						0		20	

Sample ID	1706027-002AMS	SampType:	MS	Units:		mg/Kg-dry	Prep Date:		6/5/2017	RunNo:		36602
Client ID:	PR-TR-3-6-PLUG	Batch ID:	17261				Analysis Date:		6/5/2017	SeqNo:		702608
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val		%RPD	RPDLimit	Qual
Arsenic	49.3	0.0938	46.90	3.998	96.5	75	125					
Barium	152	0.469	46.90	105.9	99.0	75	125					
Cadmium	2.61	0.188	2.345	0.1035	107	75	125					
Chromium	94.0	0.0938	46.90	45.03	105	75	125					
Lead	40.2	0.188	23.45	18.53	92.3	75	125					
Selenium	5.74	0.469	4.690	1.152	97.9	75	125					
Silver	9.80	0.0938	11.72	0.04915	83.2	75	125					

Sample ID	1706027-002AMSD	SampType:	MSD	Units:			mg/Kg-dry	Prep Date:		6/5/2017	RunNo:		36602
Client ID:	PR-TR-3-6-PLUG	Batch ID:	17261	Analysis Date:					6/5/2017	SeqNo:			702609
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Arsenic	51.0	0.0938	46.90	3.998	100	75	125	49.26	3.53	20			
Barium	148	0.469	46.90	105.9	90.7	75	125	152.3	2.60	20			
Cadmium	2.65	0.188	2.345	0.1035	109	75	125	2.610	1.53	20			
Chromium	101	0.0938	46.90	45.03	119	75	125	94.04	6.86	20			
Lead	40.4	0.188	23.45	18.53	93.1	75	125	40.16	0.488	20			
Selenium	5.97	0.469	4.690	1.152	103	75	125	5.741	3.99	20			
Silver	9.68	0.0938	11.72	0.04915	82.1	75	125	9.802	1.27	20			

Work Order: 1706027
CLIENT: O'Neill Service Group
Project: E320

QC SUMMARY REPORT

Mercury by EPA Method 7471

Sample ID	MB-17256	SampType:	MBLK			Units:	mg/Kg			Prep Date:	6/2/2017		RunNo:	36548	
Client ID:	MBLKS	Batch ID:	17256							Analysis Date:	6/5/2017		SeqNo:	702370	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val		%RPD	RPDLimit	Qual		

Mercury ND 0.250

Sample ID	LCS-17256	SampType: LCS			Units: mg/Kg		Prep Date: 6/2/2017			RunNo: 36548		
Client ID:	LCSS	Batch ID: 17256			Analysis Date: 6/5/2017					SeqNo: 702371		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Mercury 0.422 0.250 0.5000 0 84.4 80 120

Sample ID	1705319-003ADUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/2/2017	RunNo:	36548		
Client ID:	BATCH	Batch ID:	17256			Analysis Date:	6/6/2017	SeqNo:	702373		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury ND 0.292 0 20

Sample ID	1705319-003AMS	SampType:	MS	Units:	mg/Kg-dry	Prep Date:	6/2/2017	RunNo:	36548		
Client ID:	BATCH	Batch ID:	17256			Analysis Date:	6/6/2017	SeqNo:	702374		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.609 0.310 0.6192 0.03925 92.1 70 130

Sample ID	1705319-003AMSD	SampType:	MSD	Units:	mg/Kg-dry	Prep Date:	6/2/2017	RunNo:	36548		
Client ID:	BATCH	Batch ID:	17256			Analysis Date:	6/6/2017	SeqNo:	702375		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.588 0.292 0.5848 0.03925 93.9 70 130 0.6093 3.50 20

Work Order: 1706027

CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID	MB-17248	SampType:	MBLK			Units:	mg/Kg			Prep Date:	6/2/2017		RunNo:	36569	
Client ID:	MBLKS	Batch ID:	17248							Analysis Date:	6/2/2017		SeqNo:	701939	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val		%RPD	RPDLimit	Qual		

Diesel (Fuel Oil)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	19.2		20.00		95.9	50	150				
Surr: o-Terphenyl	17.8		20.00		88.9	50	150				

Sample ID	LCS-17248	SampType:	LCS	Units:	mg/Kg	Prep Date:	6/2/2017	RunNo:	36569		
Client ID:	LCSS	Batch ID:	17248			Analysis Date:	6/2/2017	SeqNo:	701938		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	494	20.0	500.0	0	98.8	65	135				
Surr: 2-Fluorobiphenyl	19.8		20.00		99.2	50	150				
Surr: o-Terphenyl	21.2		20.00		106	50	150				

Sample ID	1706013-006ADUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/2/2017	RunNo:	36569		
Client ID:	BATCH	Batch ID:	17248			Analysis Date:	6/2/2017	SeqNo:	702148		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	ND	21.9						0		30	
Heavy Oil	ND	54.8						0		30	
Surr: 2-Fluorobiphenyl	20.4		21.90		93.1	50	150		0		
Surr: o-Terphenyl	19.5		21.90		88.8	50	150		0		

Sample ID	1706013-006AMS	SampType:	MS	Units:	mg/Kg-dry	Prep Date:	6/2/2017	RunNo:	36569		
Client ID:	BATCH	Batch ID:	17248			Analysis Date:	6/2/2017	SeqNo:	702149		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	528	21.6	540.9	0	97.6	65	135				
Surr: 2-Fluorobiphenyl	23.8		21.64		110	50	150				
Surr: o-Terphenyl	25.0		21.64		116	50	150				

Work Order: 1706027

CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID	1706013-006AMS	SampType:	MS	Units:	mg/Kg-dry	Prep Date:	6/2/2017	RunNo:	36569		
Client ID:	BATCH	Batch ID:	17248			Analysis Date:	6/2/2017	SeqNo:	702149		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID	1706013-006AMSD	SampType:	MSD	Units:	mg/Kg-dry	Prep Date:	6/2/2017	RunNo:	36569		
Client ID:	BATCH	Batch ID:	17248			Analysis Date:	6/2/2017	SeqNo:	702150		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	521	21.7	543.5	0	95.9	65	135	527.9	1.30	30	
Surr: 2-Fluorobiphenyl	21.7		21.74		99.9	50	150		0		
Surr: o-Terphenyl	23.1		21.74		106	50	150		0		

Work Order: 1706027

CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Hydrocarbon Identification by NWTPH-HCID

Sample ID	MB-17248	SampType:	MBLK			Units:	mg/Kg			Prep Date:	6/2/2017		RunNo:	36585	
Client ID:	MBLKS	Batch ID:	17248						Analysis Date:	6/2/2017			SeqNo:	702187	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val		%RPD	RPDLimit	Qual		

Gasoline	ND	20.0									
Mineral Spirits	ND	30.0									
Kerosene	ND	50.0									
Diesel (Fuel Oil)	ND	50.0									
Heavy Oil	ND	100									
Mineral Oil	ND	100									
Surr: 2-Fluorobiphenyl	19.2		20.00		95.9	50	150				
Surr: o-Terphenyl	17.8		20.00		88.9	50	150				

Sample ID	LCS-17248	SampType: LCS			Units: mg/Kg		Prep Date: 6/2/2017			RunNo: 36585		
Client ID:	LCSS	Batch ID: 17248			Analysis Date: 6/2/2017					SeqNo: 702186		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Diesel (Fuel Oil)	494	50.0	500.0	0	98.8	65	135				
Surr: 2-Fluorobiphenyl	19.8		20.00		99.2	50	150				
Surr: o-Terphenyl	21.2		20.00		106	50	150				

Work Order: 1706027

CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID	MB-17250	SampType: MBLK		Units: µg/Kg		Prep Date: 6/2/2017			RunNo: 36606		
Client ID:	MBLKS	Batch ID: 17250		Analysis Date: 6/2/2017					SeqNo: 702661		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	40.0									
2-Methylnaphthalene	ND	40.0									
1-Methylnaphthalene	ND	40.0									
Acenaphthylene	ND	40.0									
Acenaphthene	ND	40.0									
Fluorene	ND	40.0									
Phenanthrene	ND	40.0									
Anthracene	ND	40.0									
Fluoranthene	ND	40.0									
Pyrene	ND	40.0									
Benz(a)anthracene	ND	40.0									
Chrysene	ND	40.0									
Benzo(b)fluoranthene	ND	40.0									
Benzo(k)fluoranthene	ND	40.0									
Benzo(a)pyrene	ND	40.0									
Indeno(1,2,3-cd)pyrene	ND	40.0									
Dibenz(a,h)anthracene	ND	40.0									
Benzo(g,h,i)perylene	ND	40.0									
Surr: 2-Fluorobiphenyl	342		500.0		68.5	24.5	139				
Surr: Terphenyl-d14 (surr)	447		500.0		89.3	44.3	176				

Sample ID	LCS-17250	SampType:	LCS	Units:	µg/Kg	Prep Date:	6/2/2017	RunNo:	36606		
Client ID:	LCSS	Batch ID:	17250			Analysis Date:	6/2/2017	SeqNo:	702662		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	745	40.0	1,000	0	74.5	46.4	125				
2-Methylnaphthalene	772	40.0	1,000	0	77.2	45.1	135				
1-Methylnaphthalene	766	40.0	1,000	0	76.6	46.2	133				
Acenaphthylene	813	40.0	1,000	0	81.3	32.8	136				
Acenaphthene	766	40.0	1,000	0	76.6	38.7	129				

Work Order: 1706027

CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID	LCS-17250	SampType:	LCS	Units:	µg/Kg	Prep Date:	6/2/2017	RunNo:	36606		
Client ID:	LCSS	Batch ID:	17250			Analysis Date:	6/2/2017	SeqNo:	702662		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluorene	786	40.0	1,000	0	78.6	41.4	144				
Phenanthrene	759	40.0	1,000	0	75.9	43.9	133				
Anthracene	824	40.0	1,000	0	82.4	44.2	136				
Fluoranthene	802	40.0	1,000	0	80.2	45.9	137				
Pyrene	799	40.0	1,000	0	79.9	46.2	137				
Benz(a)anthracene	785	40.0	1,000	0	78.5	41.2	141				
Chrysene	759	40.0	1,000	0	75.9	46.9	138				
Benzo(b)fluoranthene	829	40.0	1,000	0	82.9	41	155				
Benzo(k)fluoranthene	785	40.0	1,000	0	78.5	41.8	153				
Benzo(a)pyrene	777	40.0	1,000	0	77.7	30.2	171				
Indeno(1,2,3-cd)pyrene	816	40.0	1,000	0	81.6	31.3	159				
Dibenz(a,h)anthracene	817	40.0	1,000	0	81.7	28	158				
Benzo(g,h,i)perylene	769	40.0	1,000	0	76.9	32.4	144				
Surr: 2-Fluorobiphenyl	417		500.0		83.4	24.5	139				
Surr: Terphenyl-d14 (surr)	445		500.0		89.0	44.3	176				

Sample ID	1705334-001ADUP	SampType:	DUP	Units:			µg/Kg-dry	Prep Date:	6/2/2017	RunNo:	36606
Client ID:	BATCH	Batch ID:	17250					Analysis Date:	6/2/2017	SeqNo:	702664
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	42.7						0		30	
2-Methylnaphthalene	ND	42.7						0		30	
1-Methylnaphthalene	ND	42.7						0		30	
Acenaphthylene	ND	42.7						0		30	
Acenaphthene	ND	42.7						0		30	
Fluorene	ND	42.7						0		30	
Phenanthrene	ND	42.7						0		30	
Anthracene	ND	42.7						0		30	
Fluoranthene	ND	42.7						0		30	
Pyrene	ND	42.7						0		30	

Work Order: 1706027

CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID	1705334-001ADUP	SampType:	DUP	Units:	µg/Kg-dry	Prep Date:	6/2/2017	RunNo:	36606		
Client ID:	BATCH	Batch ID:	17250			Analysis Date:	6/2/2017	SeqNo:	702664		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benz(a)anthracene	ND	42.7						0		30	
Chrysene	ND	42.7						0		30	
Benzo(b)fluoranthene	ND	42.7						0		30	
Benzo(k)fluoranthene	ND	42.7						0		30	
Benzo(a)pyrene	ND	42.7						0		30	
Indeno(1,2,3-cd)pyrene	ND	42.7						0		30	
Dibenz(a,h)anthracene	ND	42.7						0		30	
Benzo(g,h,i)perylene	ND	42.7						0		30	
Surr: 2-Fluorobiphenyl	366		533.4		68.6	24.5	139		0		
Surr: Terphenyl-d14 (surr)	417		533.4		78.1	44.3	176		0		

Sample ID	1705334-001AMS	SampType:	MS	Units:	µg/Kg-dry	Prep Date:	6/2/2017	RunNo:	36606		
Client ID:	BATCH	Batch ID:	17250			Analysis Date:	6/2/2017	SeqNo:	702665		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	732	45.6	1,141	6.113	63.6	42.9	138				
2-Methylnaphthalene	767	45.6	1,141	9.177	66.4	42.8	151				
1-Methylnaphthalene	758	45.6	1,141	8.332	65.7	41.6	148				
Acenaphthylene	807	45.6	1,141	0	70.7	32.6	160				
Acenaphthene	744	45.6	1,141	0	65.2	46.3	142				
Fluorene	766	45.6	1,141	0	67.1	43.4	153				
Phenanthrene	754	45.6	1,141	17.52	64.6	45.5	140				
Anthracene	816	45.6	1,141	2.589	71.3	32.6	160				
Fluoranthene	841	45.6	1,141	17.76	72.1	44.6	161				
Pyrene	827	45.6	1,141	17.92	70.9	48.3	158				
Benz(a)anthracene	794	45.6	1,141	13.46	68.4	34.9	139				
Chrysene	739	45.6	1,141	6.439	64.2	45.2	146				
Benzo(b)fluoranthene	840	45.6	1,141	13.17	72.4	42.2	168				
Benzo(k)fluoranthene	773	45.6	1,141	4.729	67.4	34.8	147				
Benzo(a)pyrene	838	45.6	1,141	13.75	72.2	34.4	179				

Work Order: 1706027

CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID	1705334-001AMS	SampType:	MS	Units:	µg/Kg-dry	Prep Date:	6/2/2017	RunNo:	36606		
Client ID:	BATCH	Batch ID:	17250			Analysis Date:	6/2/2017	SeqNo:	702665		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Indeno(1,2,3-cd)pyrene	800	45.6	1,141	6.500	69.6	5	113				
Dibenz(a,h)anthracene	777	45.6	1,141	0	68.1	17.3	156				
Benzo(g,h,i)perylene	750	45.6	1,141	8.513	64.9	24.9	119				
Surr: 2-Fluorobiphenyl	392		570.6		68.7	24.5	139				
Surr: Terphenyl-d14 (surr)	436		570.6		76.5	44.3	176				

Sample ID	1705334-001AMSD	SampType:	MSD	Units:	µg/Kg-dry	Prep Date:	6/2/2017	RunNo:	36606		
Client ID:	BATCH	Batch ID:	17250			Analysis Date:	6/2/2017	SeqNo:	702666		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	605	41.2	1,029	6.113	58.1	42.9	138	732.2	19.1	30	
2-Methylnaphthalene	635	41.2	1,029	9.177	60.8	42.8	151	766.5	18.7	30	
1-Methylnaphthalene	629	41.2	1,029	8.332	60.3	41.6	148	757.8	18.6	30	
Acenaphthylene	667	41.2	1,029	0	64.8	32.6	160	806.6	18.9	30	
Acenaphthene	609	41.2	1,029	0	59.1	46.3	142	743.6	20.0	30	
Fluorene	630	41.2	1,029	0	61.2	43.4	153	766.2	19.6	30	
Phenanthrene	619	41.2	1,029	17.52	58.5	45.5	140	754.3	19.6	30	
Anthracene	681	41.2	1,029	2.589	65.9	32.6	160	815.7	18.1	30	
Fluoranthene	699	41.2	1,029	17.76	66.2	44.6	161	841.0	18.4	30	
Pyrene	691	41.2	1,029	17.92	65.4	48.3	158	827.0	17.9	30	
Benz(a)anthracene	670	41.2	1,029	13.46	63.8	34.9	139	794.1	17.0	30	
Chrysene	619	41.2	1,029	6.439	59.5	45.2	146	738.6	17.6	30	
Benzo(b)fluoranthene	729	41.2	1,029	13.17	69.5	42.2	168	839.7	14.2	30	
Benzo(k)fluoranthene	625	41.2	1,029	4.729	60.3	34.8	147	773.3	21.2	30	
Benzo(a)pyrene	686	41.2	1,029	13.75	65.3	34.4	179	837.6	19.9	30	
Indeno(1,2,3-cd)pyrene	663	41.2	1,029	6.500	63.8	5	113	800.3	18.8	30	
Dibenz(a,h)anthracene	652	41.2	1,029	0	63.3	17.3	156	777.4	17.5	30	
Benzo(g,h,i)perylene	615	41.2	1,029	8.513	59.0	24.9	119	749.6	19.7	30	
Surr: 2-Fluorobiphenyl	319		514.7		62.0	24.5	139		0		
Surr: Terphenyl-d14 (surr)	361		514.7		70.1	44.3	176		0		

Work Order: 1706027

CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID	1705334-001AMSD	SampType:	MSD	Units:	µg/Kg-dry	Prep Date:	6/2/2017	RunNo:	36606		
Client ID:	BATCH	Batch ID:	17250			Analysis Date:	6/2/2017	SeqNo:	702666		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual



Date: 6/7/2017

Work Order: 1706027

CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	MB-17262	SampType:	MBLK	Units:	µg/Kg	Prep Date:	6/5/2017	RunNo:	36630		
Client ID:	MBLKS	Batch ID:	17262			Analysis Date:	6/5/2017	SeqNo:	703072		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	100									
Bis(2-chloroethyl) ether	ND	100									
2-Chlorophenol	ND	100									
1,3-Dichlorobenzene	ND	75.0									
1,4-Dichlorobenzene	ND	75.0									
1,2-Dichlorobenzene	ND	75.0									
Benzyl alcohol	ND	100									Q
2-Methylphenol (o-cresol)	ND	100									
Hexachloroethane	ND	100									
N-Nitrosodi-n-propylamine	ND	100									
Nitrobenzene	ND	100									
Isophorone	ND	100									
3&4-Methylphenol (m, p-cresol)	ND	100									
2-Nitrophenol	ND	100									
2,4-Dimethylphenol	ND	100									
Bis(2-chloroethoxy)methane	ND	75.0									
2,4-Dichlorophenol	ND	100									
1,2,4-Trichlorobenzene	ND	75.0									
Naphthalene	ND	50.0									
4-Chloroaniline	ND	75.0									
Hexachlorobutadiene	ND	75.0									
4-Chloro-3-methylphenol	ND	200									
2-Methylnaphthalene	ND	50.0									
1-Methylnaphthalene	ND	50.0									
Hexachlorocyclopentadiene	ND	100									
2,4,6-Trichlorophenol	ND	100									
2,4,5-Trichlorophenol	ND	100									
2-Chloronaphthalene	ND	75.0									
2-Nitroaniline	ND	100									
Acenaphthene	ND	50.0									
Dimethylphthalate	631	100									Q



Date: 6/7/2017

Work Order: 1706027

CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	MB-17262	SampType:	MBLK	Units:	µg/Kg	Prep Date:	6/5/2017	RunNo:	36630		
Client ID:	MBLKS	Batch ID:	17262			Analysis Date:	6/5/2017	SeqNo:	703072		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,6-Dinitrotoluene	ND	100									
Acenaphthylene	ND	50.0									
2,4-Dinitrophenol	ND	200									
Dibenzofuran	ND	75.0									
2,4-Dinitrotoluene	ND	100									
4-Nitrophenol	ND	500									
Fluorene	ND	50.0									
4-Chlorophenyl phenyl ether	ND	75.0									
Diethylphthalate	ND	100									
4,6-Dinitro-2-methylphenol	ND	200									
4-Bromophenyl phenyl ether	ND	75.0									
Hexachlorobenzene	ND	75.0									
Pentachlorophenol	ND	100									
Phenanthrene	ND	50.0									
Anthracene	ND	50.0									
Carbazole	ND	75.0									
Di-n-butylphthalate	ND	100									
Fluoranthene	ND	50.0									
Pyrene	ND	50.0									
Butyl Benzylphthalate	ND	100									
bis(2-Ethylhexyl)adipate	ND	100									
Benz (a) anthracene	ND	50.0									
Chrysene	ND	50.0									
bis (2-Ethylhexyl) phthalate	ND	100									
Di-n-octyl phthalate	ND	100									
Benzo (b) fluoranthene	ND	50.0									Q
Benzo (k) fluoranthene	ND	50.0									
Benzo (a) pyrene	ND	50.0									
Indeno (1,2,3-cd) pyrene	ND	50.0									
Dibenz (a,h) anthracene	ND	50.0									
Benzo (g,h,l) perylene	ND	50.0									

Work Order: 1706027

CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	MB-17262	SampType:	MBLK		Units:	µg/Kg		Prep Date:	6/5/2017		RunNo:	36630	
Client ID:	MBLKS	Batch ID:	17262					Analysis Date:	6/5/2017		SeqNo:	703072	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val		%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol		394		1,000		39.4	11.1	127					
Surr: 2-Fluorobiphenyl		259		500.0		51.8	15	123					
Surr: Nitrobenzene-d5		169		500.0		33.8	10	133					
Surr: Phenol-d6		749		1,000		74.9	11.6	133					
Surr: p-Terphenyl		372		500.0		74.4	26.7	159					

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample ID	LCS-17262	SampType:	LCS	Units:	µg/Kg	Prep Date:	6/5/2017	RunNo:	36630		
Client ID:	LCSS	Batch ID:	17262			Analysis Date:	6/5/2017	SeqNo:	703073		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	640	100	1,000	0	64.0	41.8	138				
Bis(2-chloroethyl) ether	574	100	1,000	0	57.4	49.8	141				
2-Chlorophenol	612	100	1,000	0	61.2	49.3	132				
1,3-Dichlorobenzene	379	75.0	1,000	0	37.9	35.9	128				
1,4-Dichlorobenzene	383	75.0	1,000	0	38.3	36.8	131				
1,2-Dichlorobenzene	438	75.0	1,000	0	43.8	41.8	128				
Benzyl alcohol	602	100	1,000	0	60.2	42.4	131				
2-Methylphenol (o-cresol)	661	100	1,000	0	66.1	47.2	134				
Hexachloroethane	419	100	1,000	0	41.9	25.4	144				
N-Nitrosodi-n-propylamine	738	100	1,000	0	73.8	39.8	135				
Nitrobenzene	656	100	1,000	0	65.6	50.3	136				
Isophorone	738	100	1,000	0	73.8	62.7	131				
3&4-Methylphenol (m, p-cresol)	337	100	500.0	0	67.4	57.4	131				
2-Nitrophenol	657	100	1,000	0	65.7	44.2	129				
2,4-Dimethylphenol	683	100	1,000	0	68.3	57.8	121				
Bis(2-chloroethoxy)methane	657	75.0	1,000	0	65.7	55.1	136				
2,4-Dichlorophenol	631	100	1,000	0	63.1	57.1	128				
1,2,4-Trichlorobenzene	594	75.0	1,000	0	59.4	36.2	140				
Naphthalene	609	50.0	1,000	0	60.9	52.9	131				



Date: 6/7/2017

Work Order: 1706027
CLIENT: O'Neill Service Group
Project: E320

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	LCS-17262	SampType: LCS		Units: µg/Kg		Prep Date: 6/5/2017			RunNo: 36630		
Client ID:	LCSS	Batch ID: 17262					Analysis Date: 6/5/2017			SeqNo: 703073	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chloroaniline	668	75.0	1,000	0	66.8	10.4	130				
Hexachlorobutadiene	592	75.0	1,000	0	59.2	55.9	131				
4-Chloro-3-methylphenol	699	200	1,000	0	69.9	49.4	138				
2-Methylnaphthalene	656	50.0	1,000	0	65.6	56.3	132				
1-Methylnaphthalene	644	50.0	1,000	0	64.4	56.4	132				
Hexachlorocyclopentadiene	617	100	1,000	0	61.7	21	130				
2,4,6-Trichlorophenol	521	100	1,000	0	52.1	36.4	132				
2,4,5-Trichlorophenol	617	100	1,000	0	61.7	34.6	133				
2-Chloronaphthalene	643	75.0	1,000	0	64.3	33	120				
2-Nitroaniline	762	100	1,000	0	76.2	43.9	135				
Acenaphthene	676	50.0	1,000	0	67.6	49.2	127				
Dimethylphthalate	1,270	100	1,000	0	127	60.9	140				B
2,6-Dinitrotoluene	672	100	1,000	0	67.2	54.6	127				
Acenaphthylene	646	50.0	1,000	0	64.6	53.7	137				
2,4-Dinitrophenol	657	200	2,000	0	32.8	7.9	119				
Dibenzofuran	662	75.0	1,000	0	66.2	38.2	125				
2,4-Dinitrotoluene	735	100	1,000	0	73.5	21.9	136				
4-Nitrophenol	676	500	1,000	0	67.6	25.4	138				
Fluorene	677	50.0	1,000	0	67.7	64.8	126				
4-Chlorophenyl phenyl ether	665	75.0	1,000	0	66.5	58.2	131				
Diethylphthalate	733	100	1,000	0	73.3	42.9	132				
4,6-Dinitro-2-methylphenol	607	200	1,000	0	60.7	12.9	110				
4-Bromophenyl phenyl ether	683	75.0	1,000	0	68.3	61.8	128				
Hexachlorobenzene	671	75.0	1,000	0	67.1	56.7	131				
Pentachlorophenol	166	100	1,000	0	16.6	10	123				
Phenanthrene	649	50.0	1,000	0	64.9	61.2	130				
Anthracene	648	50.0	1,000	0	64.8	59.2	135				
Carbazole	658	75.0	1,000	0	65.8	37	148				
Di-n-butylphthalate	728	100	1,000	0	72.8	46.6	145				
Fluoranthene	658	50.0	1,000	0	65.8	56.6	135				
Pyrene	648	50.0	1,000	0	64.8	45.4	140				

Work Order: 1706027

CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	LCS-17262	SampType: LCS		Units: µg/Kg		Prep Date: 6/5/2017			RunNo: 36630		
Client ID:	LCSS	Batch ID: 17262					Analysis Date: 6/5/2017			SeqNo: 703073	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Butyl Benzylphthalate	782	100	1,000	0	78.2	31.1	157				
bis(2-Ethylhexyl)adipate	749	100	1,000	0	74.9	28.7	160				
Benz (a) anthracene	638	50.0	1,000	0	63.8	44	150				
Chrysene	648	50.0	1,000	0	64.8	58.9	129				
bis (2-Ethylhexyl) phthalate	799	100	1,000	0	79.9	36.3	149				
Di-n-octyl phthalate	847	100	1,000	0	84.7	31.5	152				
Benzo (b) fluoranthene	646	50.0	1,000	0	64.6	45.6	146				
Benzo (k) fluoranthene	668	50.0	1,000	0	66.8	45.5	138				
Benzo (a) pyrene	691	50.0	1,000	0	69.1	35.6	148				
Indeno (1,2,3-cd) pyrene	661	50.0	1,000	0	66.1	44.2	146				
Dibenz (a,h) anthracene	663	50.0	1,000	0	66.3	37.5	152				
Benzo (g,h,l) perylene	646	50.0	1,000	0	64.6	24.1	156				
Surr: 2,4,6-Tribromophenol	679		1,000		67.9	11.1	127				
Surr: 2-Fluorobiphenyl	355		500.0		71.0	15	123				
Surr: Nitrobenzene-d5	282		500.0		56.4	10	133				
Surr: Phenol-d6	803		1,000		80.3	11.6	133				
Surr: p-Terphenyl	357		500.0		71.4	26.7	159				

Sample ID	1706027-006ADUP	SampType:	DUP	Units:	µg/Kg-dry	Prep Date:	6/5/2017	RunNo:	36630		
Client ID:	PR-TP-1-2	Batch ID:	17262			Analysis Date:	6/5/2017	SeqNo:	703079		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	105						0		50	
Bis(2-chloroethyl) ether	ND	105						0		50	
2-Chlorophenol	ND	105						0		50	
1,3-Dichlorobenzene	ND	78.6						0		50	
1,4-Dichlorobenzene	ND	78.6						0		50	
1,2-Dichlorobenzene	ND	78.6						0		50	
Benzyl alcohol	ND	105						0		50	Q
2-Methylphenol (o-cresol)	ND	105						0		50	



Date: 6/7/2017

Work Order: 1706027
 CLIENT: O'Neill Service Group
 Project: E320

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	1706027-006ADUP	SampType:	DUP	Units:	µg/Kg-dry	Prep Date:	6/5/2017	RunNo:	36630		
Client ID:	PR-TP-1-2	Batch ID:	17262			Analysis Date:	6/5/2017	SeqNo:	703079		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	ND	105						0		50	
N-Nitrosodi-n-propylamine	ND	105						0		50	
Nitrobenzene	ND	105						0		50	
Isophorone	ND	105						0		50	
3&4-Methylphenol (m, p-cresol)	ND	105						0		50	
2-Nitrophenol	ND	105						0		50	
2,4-Dimethylphenol	ND	105						0		50	
Bis(2-chloroethoxy)methane	ND	78.6						0		50	
2,4-Dichlorophenol	ND	105						0		50	
1,2,4-Trichlorobenzene	ND	78.6						0		50	
Naphthalene	ND	52.4						0		50	
4-Chloroaniline	ND	78.6						0		50	
Hexachlorobutadiene	ND	78.6						0		50	
4-Chloro-3-methylphenol	ND	210						0		50	
2-Methylnaphthalene	ND	52.4						0		50	
1-Methylnaphthalene	ND	52.4						0		50	
Hexachlorocyclopentadiene	ND	105						0		50	
2,4,6-Trichlorophenol	ND	105						0		50	
2,4,5-Trichlorophenol	ND	105						0		50	
2-Chloronaphthalene	ND	78.6						0		50	
2-Nitroaniline	ND	105						0		50	
Acenaphthene	ND	52.4						0		50	
Dimethylphthalate	253	105						270.0	6.36	50	BQ
2,6-Dinitrotoluene	ND	105						0		50	
Acenaphthylene	ND	52.4						0		50	
2,4-Dinitrophenol	ND	210						0		50	
Dibenzofuran	ND	78.6						0		50	
2,4-Dinitrotoluene	ND	105						0		50	
4-Nitrophenol	ND	524						0		50	
Fluorene	ND	52.4						0		50	
4-Chlorophenyl phenyl ether	ND	78.6						0		50	

Work Order: 1706027
CLIENT: O'Neill Service Group
Project: E320

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	1706027-006ADUP	SampType:	DUP	Units:	µg/Kg-dry	Prep Date:	6/5/2017	RunNo:	36630		
Client ID:	PR-TP-1-2	Batch ID:	17262			Analysis Date:	6/5/2017	SeqNo:	703079		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diethylphthalate	ND	105						0		50	
4,6-Dinitro-2-methylphenol	ND	210						0		50	
4-Bromophenyl phenyl ether	ND	78.6						0		50	
Hexachlorobenzene	ND	78.6						0		50	
Pentachlorophenol	ND	105						0		50	
Phenanthrene	ND	52.4						0		50	
Anthracene	ND	52.4						0		50	
Carbazole	ND	78.6						0		50	
Di-n-butylphthalate	ND	105						0		50	
Fluoranthene	ND	52.4						0		50	
Pyrene	ND	52.4						0		50	
Butyl Benzylphthalate	ND	105						0		50	
bis(2-Ethylhexyl)adipate	ND	105						0		50	
Benz (a) anthracene	ND	52.4						0		50	
Chrysene	ND	52.4						0		50	
bis (2-Ethylhexyl) phthalate	ND	105						0		50	
Di-n-octyl phthalate	ND	105						0		50	
Benzo (b) fluoranthene	ND	52.4						0		50	Q
Benzo (k) fluoranthene	ND	52.4						0		50	
Benzo (a) pyrene	ND	52.4						0		50	
Indeno (1,2,3-cd) pyrene	ND	52.4						0		50	
Dibenz (a,h) anthracene	ND	52.4						0		50	
Benzo (g,h,i) perylene	ND	52.4						0		50	
Surr: 2,4,6-Tribromophenol	804		1,048		76.7	11.1	127		0		
Surr: 2-Fluorobiphenyl	319		524.2		60.8	15	123		0		
Surr: Nitrobenzene-d5	307		524.2		58.5	10	133		0		
Surr: Phenol-d6	818		1,048		78.0	11.6	133		0		
Surr: p-Terphenyl	368		524.2		70.1	26.7	159		0		

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Date: 6/7/2017

Work Order: 1706027

CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	1706027-006AMS	SampType: MS	Units: µg/Kg-dry			Prep Date: 6/5/2017			RunNo: 36630		
Client ID:	PR-TP-1-2	Batch ID: 17262	Analysis Date: 6/5/2017						SeqNo: 703080		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	658	104	1,042	0	63.2	29.2	146				
Bis(2-chloroethyl) ether	594	104	1,042	0	57.0	34.4	135				
2-Chlorophenol	619	104	1,042	0	59.4	44	134				
1,3-Dichlorobenzene	370	78.2	1,042	0	35.5	21.1	133				
1,4-Dichlorobenzene	386	78.2	1,042	0	37.1	20.9	131				
1,2-Dichlorobenzene	428	78.2	1,042	0	41.1	35	131				
Benzyl alcohol	537	104	1,042	0	51.5	30.8	159				
2-Methylphenol (o-cresol)	677	104	1,042	0	65.0	39.9	125				
Hexachloroethane	390	104	1,042	0	37.4	15.4	139				
N-Nitrosodi-n-propylamine	759	104	1,042	0	72.8	26.4	151				
Nitrobenzene	666	104	1,042	16.80	62.3	61.4	130				
Isophorone	769	104	1,042	0	73.8	61.8	132				
3&4-Methylphenol (m, p-cresol)	345	104	521.2	0	66.2	37.6	125				
2-Nitrophenol	769	104	1,042	0	73.8	33.5	132				
2,4-Dimethylphenol	702	104	1,042	0	67.3	46	158				
Bis(2-chloroethoxy)methane	688	78.2	1,042	0	66.0	46.8	121				
2,4-Dichlorophenol	672	104	1,042	0	64.5	33.9	133				
1,2,4-Trichlorobenzene	579	78.2	1,042	0	55.5	29.2	140				
Naphthalene	616	52.1	1,042	0	59.1	44.4	136				
4-Chloroaniline	604	78.2	1,042	0	58.0	27	126				
Hexachlorobutadiene	601	78.2	1,042	0	57.7	38.2	138				
4-Chloro-3-methylphenol	717	208	1,042	0	68.8	36.8	159				
2-Methylnaphthalene	644	52.1	1,042	0	61.8	51.7	138				
1-Methylnaphthalene	637	52.1	1,042	0	61.1	51.8	131				
Hexachlorocyclopentadiene	514	104	1,042	0	49.3	10	133				
2,4,6-Trichlorophenol	639	104	1,042	0	61.3	34.6	129				
2,4,5-Trichlorophenol	688	104	1,042	0	66.0	54.7	127				
2-Chloronaphthalene	652	78.2	1,042	0	62.5	42.1	124				
2-Nitroaniline	799	104	1,042	0	76.6	39.3	145				
Acenaphthene	675	52.1	1,042	0	64.8	49.6	129				
Dimethylphthalate	954	104	1,042	270.0	65.6	32.9	137				B



Date: 6/7/2017

Work Order: 1706027

CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	1706027-006AMS	SampType:	MS	Units:	µg/Kg-dry	Prep Date:	6/5/2017	RunNo:	36630		
Client ID:	PR-TP-1-2	Batch ID:	17262			Analysis Date:	6/5/2017	SeqNo:	703080		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,6-Dinitrotoluene	695	104	1,042	0	66.7	30.3	136				
Acenaphthylene	659	52.1	1,042	0	63.2	39.9	129				
2,4-Dinitrophenol	1,420	208	2,085	0	68.2	10	149				
Dibenzofuran	656	78.2	1,042	0	62.9	41.2	128				
2,4-Dinitrotoluene	747	104	1,042	0	71.6	30.9	139				
4-Nitrophenol	710	521	1,042	0	68.1	15.6	160				
Fluorene	653	52.1	1,042	0	62.7	37.7	133				
4-Chlorophenyl phenyl ether	660	78.2	1,042	0	63.3	70.9	128				S
Diethylphthalate	719	104	1,042	12.71	67.8	36.7	130				
4,6-Dinitro-2-methylphenol	806	208	1,042	0	77.4	21.9	143				
4-Bromophenyl phenyl ether	672	78.2	1,042	0	64.5	69.6	136				S
Hexachlorobenzene	665	78.2	1,042	0	63.8	34.3	131				
Pentachlorophenol	420	104	1,042	0	40.3	28.2	156				
Phenanthrene	658	52.1	1,042	3.894	62.7	32.2	139				
Anthracene	680	52.1	1,042	0	65.2	43.9	128				
Carbazole	684	78.2	1,042	0	65.6	64.1	152				
Di-n-butylphthalate	792	104	1,042	0	76.0	35.1	142				
Fluoranthene	687	52.1	1,042	0	65.9	33.8	141				
Pyrene	666	52.1	1,042	0	63.9	31.4	151				
Butyl Benzylphthalate	885	104	1,042	0	84.9	30.4	138				
bis(2-Ethylhexyl)adipate	857	104	1,042	0	82.3	32	136				
Benz (a) anthracene	667	52.1	1,042	5.130	63.5	36	138				
Chrysene	648	52.1	1,042	0	62.2	41.6	125				
bis (2-Ethylhexyl) phthalate	901	104	1,042	0	86.4	40.8	170				
Di-n-octyl phthalate	968	104	1,042	0	92.8	34.6	142				
Benzo (b) fluoranthene	665	52.1	1,042	0	63.8	52.1	136				
Benzo (k) fluoranthene	688	52.1	1,042	0	66.0	45	140				
Benzo (a) pyrene	708	52.1	1,042	0	67.9	50.5	137				
Indeno (1,2,3-cd) pyrene	684	52.1	1,042	0	65.6	38.1	155				
Dibenz (a,h) anthracene	674	52.1	1,042	0	64.7	40.7	152				
Benzo (g,h,l) perylene	671	52.1	1,042	0	64.3	34	157				

Work Order: 1706027
CLIENT: O'Neill Service Group
Project: E320

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	1706027-006AMS	SampType:	MS	Units:	µg/Kg-dry	Prep Date:	6/5/2017	RunNo:	36630		
Client ID:	PR-TP-1-2	Batch ID:	17262			Analysis Date:	6/5/2017	SeqNo:	703080		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	906		1,042		86.9	11.1	127				
Surr: 2-Fluorobiphenyl	336		521.2		64.4	15	123				
Surr: Nitrobenzene-d5	312		521.2		59.9	10	133				
Surr: Phenol-d6	792		1,042		75.9	11.6	133				
Surr: p-Terphenyl	348		521.2		66.7	26.7	159				

NOTES:

S - Outlying spike recovery(ies) observed.

Sample ID	1706027-006AMSD	SampType: MSD	Units: µg/Kg-dry			Prep Date: 6/5/2017			RunNo: 36630		
Client ID:	PR-TP-1-2	Batch ID:	17262				Analysis Date: 6/5/2017			SeqNo: 703081	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	653	102	1,024	0	63.8	29.2	146	658.5	0.828	50	
Bis(2-chloroethyl) ether	591	102	1,024	0	57.8	34.4	135	593.7	0.396	50	
2-Chlorophenol	621	102	1,024	0	60.7	44	134	618.6	0.368	50	
1,3-Dichlorobenzene	375	76.8	1,024	0	36.6	21.1	133	369.7	1.40	50	
1,4-Dichlorobenzene	393	76.8	1,024	0	38.4	20.9	131	386.4	1.82	50	
1,2-Dichlorobenzene	433	76.8	1,024	0	42.3	35	131	427.9	1.11	50	
Benzyl alcohol	599	102	1,024	0	58.6	30.8	159	536.5	11.1	50	
2-Methylphenol (o-cresol)	691	102	1,024	0	67.5	39.9	125	677.4	1.93	50	
Hexachloroethane	406	102	1,024	0	39.7	15.4	139	390.2	4.07	50	
N-Nitrosodi-n-propylamine	760	102	1,024	0	74.3	26.4	151	759.0	0.186	50	
Nitrobenzene	681	102	1,024	16.80	64.8	61.4	130	666.2	2.12	50	
Isophorone	776	102	1,024	0	75.8	61.8	132	769.5	0.838	50	
3&4-Methylphenol (m, p-cresol)	341	102	511.8	0	66.6	37.6	125	344.9	1.20	50	
2-Nitrophenol	788	102	1,024	0	77.0	33.5	132	769.1	2.41	50	
2,4-Dimethylphenol	705	102	1,024	0	68.9	46	158	701.6	0.524	50	
Bis(2-chloroethoxy)methane	679	76.8	1,024	0	66.3	46.8	121	687.8	1.28	50	
2,4-Dichlorophenol	678	102	1,024	0	66.3	33.9	133	671.9	0.978	50	
1,2,4-Trichlorobenzene	596	76.8	1,024	0	58.2	29.2	140	578.6	2.94	50	
Naphthalene	633	51.2	1,024	0	61.8	44.4	136	616.1	2.64	50	

Work Order: 1706027

CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	1706027-006AMSD	SampType:	MSD	Units:	µg/Kg-dry	Prep Date:	6/5/2017	RunNo:	36630		
Client ID:	PR-TP-1-2	Batch ID:	17262			Analysis Date:	6/5/2017	SeqNo:	703081		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chloroaniline	652	76.8	1,024	0	63.7	27	126	604.2	7.68	50	
Hexachlorobutadiene	602	76.8	1,024	0	58.8	38.2	138	600.9	0.221	50	
4-Chloro-3-methylphenol	748	205	1,024	0	73.1	36.8	159	717.4	4.22	50	
2-Methylnaphthalene	675	51.2	1,024	0	65.9	51.7	138	644.2	4.62	50	
1-Methylnaphthalene	674	51.2	1,024	0	65.8	51.8	131	636.5	5.65	50	
Hexachlorocyclopentadiene	542	102	1,024	0	53.0	10	133	514.0	5.33	50	
2,4,6-Trichlorophenol	732	102	1,024	0	71.5	34.6	129	639.2	13.5	50	
2,4,5-Trichlorophenol	739	102	1,024	0	72.2	54.7	127	687.6	7.22	50	
2-Chloronaphthalene	702	76.8	1,024	0	68.6	42.1	124	651.6	7.47	50	
2-Nitroaniline	849	102	1,024	0	83.0	39.3	145	798.7	6.11	50	
Acenaphthene	722	51.2	1,024	0	70.6	49.6	129	675.4	6.74	50	
Dimethylphthalate	1,010	102	1,024	270.0	72.0	32.9	137	953.6	5.46	50	B
2,6-Dinitrotoluene	751	102	1,024	0	73.4	30.3	136	695.0	7.80	50	
Acenaphthylene	710	51.2	1,024	0	69.4	39.9	129	658.9	7.51	50	
2,4-Dinitrophenol	1,400	205	2,047	0	68.4	10	149	1,421	1.57	50	
Dibenzofuran	704	76.8	1,024	0	68.8	41.2	128	656.1	7.00	50	
2,4-Dinitrotoluene	768	102	1,024	0	75.0	30.9	139	746.7	2.80	50	
4-Nitrophenol	762	512	1,024	0	74.5	15.6	160	709.8	7.14	50	
Fluorene	711	51.2	1,024	0	69.5	37.7	133	653.3	8.51	50	
4-Chlorophenyl phenyl ether	719	76.8	1,024	0	70.2	70.9	128	660.3	8.51	50	S
Diethylphthalate	768	102	1,024	12.71	73.8	36.7	130	719.2	6.63	50	
4,6-Dinitro-2-methylphenol	798	205	1,024	0	78.0	21.9	143	806.3	1.04	50	
4-Bromophenyl phenyl ether	699	76.8	1,024	0	68.2	69.6	136	671.8	3.90	50	S
Hexachlorobenzene	697	76.8	1,024	0	68.1	34.3	131	665.2	4.64	50	
Pentachlorophenol	473	102	1,024	0	46.2	28.2	156	420.1	11.9	50	
Phenanthrene	687	51.2	1,024	3.894	66.7	32.2	139	657.6	4.35	50	
Anthracene	692	51.2	1,024	0	67.6	43.9	128	679.5	1.75	50	
Carbazole	709	76.8	1,024	0	69.3	64.1	152	683.7	3.63	50	
Di-n-butylphthalate	813	102	1,024	0	79.5	35.1	142	792.0	2.66	50	
Fluoranthene	715	51.2	1,024	0	69.9	33.8	141	687.3	3.95	50	
Pyrene	705	51.2	1,024	0	68.9	31.4	151	665.6	5.81	50	

Work Order: 1706027

CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	1706027-006AMSD	SampType:	MSD	Units:	µg/Kg-dry	Prep Date:	6/5/2017	RunNo:	36630		
Client ID:	PR-TP-1-2	Batch ID:	17262			Analysis Date:	6/5/2017	SeqNo:	703081		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Butyl Benzylphthalate	883	102	1,024	0	86.2	30.4	138	884.6	0.222	50	
bis(2-Ethylhexyl)adipate	878	102	1,024	0	85.8	32	136	857.4	2.34	50	
Benz (a) anthracene	680	51.2	1,024	5.130	66.0	36	138	667.0	1.97	50	
Chrysene	680	51.2	1,024	0	66.5	41.6	125	647.9	4.85	50	
bis (2-Ethylhexyl) phthalate	933	102	1,024	0	91.2	40.8	170	900.7	3.56	50	
Di-n-octyl phthalate	987	102	1,024	0	96.4	34.6	142	967.7	1.99	50	
Benzo (b) fluoranthene	634	51.2	1,024	0	62.0	52.1	136	664.7	4.71	50	
Benzo (k) fluoranthene	726	51.2	1,024	0	70.9	45	140	687.7	5.44	50	
Benzo (a) pyrene	718	51.2	1,024	0	70.2	50.5	137	707.6	1.48	50	
Indeno (1,2,3-cd) pyrene	704	51.2	1,024	0	68.8	38.1	155	683.9	2.90	50	
Dibenz (a,h) anthracene	707	51.2	1,024	0	69.0	40.7	152	673.9	4.74	50	
Benzo (g,h,i) perylene	678	51.2	1,024	0	66.3	34	157	670.6	1.17	50	
Surr: 2,4,6-Tribromophenol	935		1,024		91.3	11.1	127		0		
Surr: 2-Fluorobiphenyl	340		511.8		66.4	15	123		0		
Surr: Nitrobenzene-d5	334		511.8		65.2	10	133		0		
Surr: Phenol-d6	795		1,024		77.7	11.6	133		0		
Surr: p-Terphenyl	369		511.8		72.0	26.7	159		0		

NOTES:

S - Outlying spike recovery(ies) observed.



Date: 6/7/2017

Work Order: 1706027
CLIENT: O'Neill Service Group
Project: E320

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	LCS-17265	SampType:	LCS	Units:	mg/Kg	Prep Date:	6/5/2017	RunNo:	36617		
Client ID:	LCSS	Batch ID:	17265			Analysis Date:	6/5/2017	SeqNo:	702872		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.730	0.0600	1.000	0	73.0	14.3	167				
Chloromethane	0.940	0.0600	1.000	0	94.0	46	144				
Vinyl chloride	0.889	0.00200	1.000	0	88.9	43.4	151				
Bromomethane	0.650	0.0900	1.000	0	65.0	40.9	157				
Trichlorofluoromethane (CFC-11)	0.621	0.0500	1.000	0	62.1	36.9	156				
Chloroethane	0.614	0.0600	1.000	0	61.4	33.4	155				
1,1-Dichloroethene	0.859	0.0500	1.000	0	85.9	49.7	142				
Methylene chloride	0.984	0.0200	1.000	0	98.4	46.3	140				
trans-1,2-Dichloroethene	1.02	0.0200	1.000	0	102	68	130				
Methyl tert-butyl ether (MTBE)	1.06	0.0500	1.000	0	106	66.3	145				
1,1-Dichloroethane	0.882	0.0200	1.000	0	88.2	61.9	137				
2,2-Dichloropropane	1.07	0.0500	1.000	0	107	35.5	186				
cis-1,2-Dichloroethene	0.981	0.0200	1.000	0	98.1	71.3	135				
Chloroform	0.996	0.0200	1.000	0	99.6	69	145				
1,1,1-Trichloroethane (TCA)	0.907	0.0200	1.000	0	90.7	69	132				
1,1-Dichloropropene	0.947	0.0200	1.000	0	94.7	72.7	131				
Carbon tetrachloride	0.853	0.0200	1.000	0	85.3	63.4	137				
1,2-Dichloroethane (EDC)	0.960	0.0300	1.000	0	96.0	50.9	162				
Benzene	0.948	0.0200	1.000	0	94.8	64.3	133				
Trichloroethene (TCE)	0.716	0.0200	1.000	0	71.6	65.5	137				
1,2-Dichloropropane	0.724	0.0200	1.000	0	72.4	63.2	142				
Bromodichloromethane	0.716	0.0200	1.000	0	71.6	53.4	131				
Dibromomethane	0.714	0.0400	1.000	0	71.4	60.1	146				
cis-1,3-Dichloropropene	0.872	0.0200	1.000	0	87.2	59.1	143				
Toluene	0.796	0.0200	1.000	0	79.6	67.3	138				
trans-1,3-Dichloropropylene	0.917	0.0300	1.000	0	91.7	49.2	149				
1,1,2-Trichloroethane	0.781	0.0300	1.000	0	78.1	56.9	147				
1,3-Dichloropropane	0.792	0.0500	1.000	0	79.2	56.1	153				
Tetrachloroethene (PCE)	0.794	0.0200	1.000	0	79.4	52.7	150				
Dibromochloromethane	0.814	0.0300	1.000	0	81.4	70.6	144				
1,2-Dibromoethane (EDB)	0.789	0.00500	1.000	0	78.9	50.5	154				



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Work Order: 1706027
 CLIENT: O'Neill Service Group
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QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	LCS-17265	SampType:	LCS	Units:	mg/Kg	Prep Date:	6/5/2017	RunNo:	36617		
Client ID:	LCSS	Batch ID:	17265			Analysis Date:	6/5/2017	SeqNo:	702872		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	0.970	0.0200	1.000	0	97.0	76.1	123				
1,1,1,2-Tetrachloroethane	0.941	0.0300	1.000	0	94.1	65.9	141				
Ethylbenzene	0.989	0.0300	1.000	0	98.9	74	129				
m,p-Xylene	2.00	0.0200	2.000	0	100	70	124				
o-Xylene	1.01	0.0200	1.000	0	101	68.1	139				
Styrene	0.981	0.0200	1.000	0	98.1	73.3	146				
Isopropylbenzene	0.986	0.0800	1.000	0	98.6	70	130				
Bromoform	0.895	0.0200	1.000	0	89.5	67	154				
1,1,2,2-Tetrachloroethane	0.947	0.0200	1.000	0	94.7	44.8	165				
n-Propylbenzene	0.977	0.0200	1.000	0	97.7	74.8	125				
Bromobenzene	1.00	0.0300	1.000	0	100	49.2	144				
1,3,5-Trimethylbenzene	0.978	0.0200	1.000	0	97.8	74.6	123				
2-Chlorotoluene	0.999	0.0200	1.000	0	99.9	76.7	129				
4-Chlorotoluene	0.991	0.0200	1.000	0	99.1	77.5	125				
tert-Butylbenzene	1.01	0.0200	1.000	0	101	66.2	130				
1,2,3-Trichloropropane	1.03	0.0200	1.000	0	103	67.9	136				
1,2,4-Trichlorobenzene	1.19	0.0500	1.000	0	119	62.6	143				
sec-Butylbenzene	1.03	0.0200	1.000	0	103	75.6	133				
4-Isopropyltoluene	1.04	0.0200	1.000	0	104	76.8	131				
1,3-Dichlorobenzene	1.01	0.0200	1.000	0	101	72.8	128				
1,4-Dichlorobenzene	0.995	0.0200	1.000	0	99.5	72.6	126				
n-Butylbenzene	1.06	0.0200	1.000	0	106	65.3	136				
1,2-Dichlorobenzene	1.04	0.0200	1.000	0	104	72.8	126				
1,2-Dibromo-3-chloropropane	1.01	0.500	1.000	0	101	40.2	155				
1,2,4-Trimethylbenzene	0.991	0.0200	1.000	0	99.1	77.5	129				
Hexachlorobutadiene	1.22	0.100	1.000	0	122	42	151				
Naphthalene	1.19	0.0300	1.000	0	119	58.4	160				
1,2,3-Trichlorobenzene	1.20	0.0200	1.000	0	120	54.8	143				
Surr: Dibromofluoromethane	1.21		1.250		96.9	56.5	129				
Surr: Toluene-d8	1.02		1.250		81.9	64.5	151				
Surr: 1-Bromo-4-fluorobenzene	1.39		1.250		111	63.1	141				



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QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	LCS-17265	SampType: LCS			Units: mg/Kg	Prep Date: 6/5/2017			RunNo: 36617		
Client ID:	LCSS	Batch ID: 17265			Analysis Date: 6/5/2017			SeqNo: 702872			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID	MB-17265	SampType:	MBLK			Units:	mg/Kg			Prep Date:	6/5/2017			RunNo:	36617		
Client ID:	MBLKS	Batch ID:	17265							Analysis Date:	6/5/2017			SeqNo:	702873		
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val		%RPD	RPDLimit	Qual				

Dichlorodifluoromethane (CFC-12)	ND	0.0600
Chloromethane	ND	0.0600
Vinyl chloride	ND	0.00200
Bromomethane	ND	0.0900
Trichlorofluoromethane (CFC-11)	ND	0.0500
Chloroethane	ND	0.0600
1,1-Dichloroethene	ND	0.0500
Methylene chloride	ND	0.0200
trans-1,2-Dichloroethene	ND	0.0200
Methyl tert-butyl ether (MTBE)	ND	0.0500
1,1-Dichloroethane	ND	0.0200
2,2-Dichloropropane	ND	0.0500
cis-1,2-Dichloroethene	ND	0.0200
Chloroform	ND	0.0200
1,1,1-Trichloroethane (TCA)	ND	0.0200
1,1-Dichloropropene	ND	0.0200
Carbon tetrachloride	ND	0.0200
1,2-Dichloroethane (EDC)	ND	0.0300
Benzene	ND	0.0200
Trichloroethene (TCE)	ND	0.0200
1,2-Dichloropropane	ND	0.0200
Bromodichloromethane	ND	0.0200
Dibromomethane	ND	0.0400
cis-1,3-Dichloropropene	ND	0.0200
Toluene	ND	0.0200



Date: 6/7/2017

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CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	MB-17265	SampType:	MBLK		Units:	mg/Kg			Prep Date:	6/5/2017		RunNo:	36617	
Client ID:	MBLKS	Batch ID:	17265						Analysis Date:	6/5/2017		SeqNo:	702873	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual			
trans-1,3-Dichloropropylene	ND	0.0300												
1,1,2-Trichloroethane	ND	0.0300												
1,3-Dichloropropane	ND	0.0500												
Tetrachloroethene (PCE)	ND	0.0200												
Dibromochloromethane	ND	0.0300												
1,2-Dibromoethane (EDB)	ND	0.00500												
Chlorobenzene	ND	0.0200												
1,1,1,2-Tetrachloroethane	ND	0.0300												
Ethylbenzene	ND	0.0300												
m,p-Xylene	ND	0.0200												
o-Xylene	ND	0.0200												
Styrene	ND	0.0200												
Isopropylbenzene	ND	0.0800												
Bromoform	ND	0.0200												
1,1,2,2-Tetrachloroethane	ND	0.0200												
n-Propylbenzene	ND	0.0200												
Bromobenzene	ND	0.0300												
1,3,5-Trimethylbenzene	ND	0.0200												
2-Chlorotoluene	ND	0.0200												
4-Chlorotoluene	ND	0.0200												
tert-Butylbenzene	ND	0.0200												
1,2,3-Trichloropropane	ND	0.0200												
1,2,4-Trichlorobenzene	ND	0.0500												
sec-Butylbenzene	ND	0.0200												
4-Isopropyltoluene	ND	0.0200												
1,3-Dichlorobenzene	ND	0.0200												
1,4-Dichlorobenzene	ND	0.0200												
n-Butylbenzene	ND	0.0200												
1,2-Dichlorobenzene	ND	0.0200												
1,2-Dibromo-3-chloropropane	ND	0.500												
1,2,4-Trimethylbenzene	ND	0.0200												

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CLIENT: O'Neill Service Group

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QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	MB-17265	SampType:	MBLK	Units:	mg/Kg	Prep Date:	6/5/2017	RunNo:	36617		
Client ID:	MBLKS	Batch ID:	17265			Analysis Date:	6/5/2017	SeqNo:	702873		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachlorobutadiene	ND	0.100									
Naphthalene	ND	0.0300									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: Dibromofluoromethane	1.09		1.250		87.0	56.5	129				
Surr: Toluene-d8	1.22		1.250		97.6	64.5	151				
Surr: 1-Bromo-4-fluorobenzene	1.14		1.250		91.5	63.1	141				

Sample ID	1706026-003BDUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/5/2017	RunNo:	36617		
Client ID:	BATCH	Batch ID:	17265			Analysis Date:	6/6/2017	SeqNo:	702852		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0695						0		30	Q
Chloromethane	ND	0.0695						0		30	
Vinyl chloride	ND	0.00232						0		30	
Bromomethane	ND	0.104						0		30	Q
Trichlorofluoromethane (CFC-11)	ND	0.0580						0		30	Q
Chloroethane	ND	0.0695						0		30	Q
1,1-Dichloroethene	ND	0.0580						0		30	Q
Methylene chloride	ND	0.0232						0		30	
trans-1,2-Dichloroethene	ND	0.0232						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0580						0		30	
1,1-Dichloroethane	ND	0.0232						0		30	
2,2-Dichloropropane	ND	0.0580						0		30	Q
cis-1,2-Dichloroethene	ND	0.0232						0		30	
Chloroform	ND	0.0232						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0232						0		30	
1,1-Dichloropropene	ND	0.0232						0		30	
Carbon tetrachloride	ND	0.0232						0		30	
1,2-Dichloroethane (EDC)	ND	0.0348						0		30	
Benzene	ND	0.0232						0		30	



Date: 6/7/2017

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CLIENT: O'Neill Service Group
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QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	1706026-003BDUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/5/2017	RunNo:	36617		
Client ID:	BATCH	Batch ID:	17265			Analysis Date:	6/6/2017	SeqNo:	702852		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	ND	0.0232						0		30	
1,2-Dichloropropane	ND	0.0232						0		30	
Bromodichloromethane	ND	0.0232						0		30	
Dibromomethane	ND	0.0464						0		30	
cis-1,3-Dichloropropene	ND	0.0232						0		30	
Toluene	ND	0.0232						0		30	
trans-1,3-Dichloropropylene	ND	0.0348						0		30	
1,1,2-Trichloroethane	ND	0.0348						0		30	
1,3-Dichloropropane	ND	0.0580						0		30	
Tetrachloroethene (PCE)	ND	0.0232						0		30	
Dibromochloromethane	ND	0.0348						0		30	
1,2-Dibromoethane (EDB)	ND	0.00580						0		30	
Chlorobenzene	ND	0.0232						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0348						0		30	
Ethylbenzene	ND	0.0348						0		30	
m,p-Xylene	ND	0.0232						0		30	
o-Xylene	ND	0.0232						0		30	
Styrene	ND	0.0232						0		30	
Isopropylbenzene	ND	0.0927						0		30	
Bromoform	ND	0.0232						0		30	Q
1,1,2,2-Tetrachloroethane	ND	0.0232						0		30	
n-Propylbenzene	ND	0.0232						0		30	
Bromobenzene	ND	0.0348						0		30	
1,3,5-Trimethylbenzene	ND	0.0232						0		30	
2-Chlorotoluene	ND	0.0232						0		30	
4-Chlorotoluene	ND	0.0232						0		30	
tert-Butylbenzene	ND	0.0232						0		30	
1,2,3-Trichloropropane	ND	0.0232						0		30	
1,2,4-Trichlorobenzene	ND	0.0580						0		30	
sec-Butylbenzene	ND	0.0232						0		30	
4-Isopropyltoluene	ND	0.0232						0		30	

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QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	1706026-003BDUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/5/2017	RunNo:	36617		
Client ID:	BATCH	Batch ID:	17265			Analysis Date:	6/6/2017	SeqNo:	702852		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichlorobenzene	ND	0.0232						0		30	
1,4-Dichlorobenzene	ND	0.0232						0		30	
n-Butylbenzene	ND	0.0232						0		30	
1,2-Dichlorobenzene	ND	0.0232						0		30	
1,2-Dibromo-3-chloropropane	ND	0.580						0		30	
1,2,4-Trimethylbenzene	ND	0.0232						0		30	
Hexachlorobutadiene	ND	0.116						0		30	
Naphthalene	ND	0.0348						0		30	
1,2,3-Trichlorobenzene	ND	0.0232						0		30	
Surr: Dibromofluoromethane	1.31		1.449		90.2	56.5	129		0		
Surr: Toluene-d8	1.41		1.449		97.3	64.5	151		0		
Surr: 1-Bromo-4-fluorobenzene	1.37		1.449		94.5	63.1	141		0		

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample ID	1706026-012BMS	SampType:	MS		Units:	mg/Kg-dry		Prep Date:	6/5/2017		RunNo:	36617	
Client ID:	BATCH	Batch ID:	17265					Analysis Date:	6/6/2017		SeqNo:	702856	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val		%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)		0.905	0.0725	1.209	0	74.9	43.5	121					
Chloromethane		1.08	0.0725	1.209	0	89.3	45	130					
Vinyl chloride		1.02	0.00242	1.209	0	84.4	51.2	146					
Bromomethane		0.705	0.109	1.209	0	58.3	21.3	120					
Trichlorofluoromethane (CFC-11)		0.713	0.0605	1.209	0	59.0	35	131					
Chloroethane		0.689	0.0725	1.209	0	57.0	31.9	123					
1,1-Dichloroethene		0.798	0.0605	1.209	0	66.0	61.9	141					
Methylene chloride		0.995	0.0242	1.209	0	82.3	54.7	142					
trans-1,2-Dichloroethene		0.995	0.0242	1.209	0	82.3	52	136					
Methyl tert-butyl ether (MTBE)		1.09	0.0605	1.209	0	90.4	54.4	132					
1,1-Dichloroethane		1.11	0.0242	1.209	0	91.8	51.8	141					
2,2-Dichloropropane		0.844	0.0605	1.209	0	69.8	36	123					

Work Order: 1706027
CLIENT: O'Neill Service Group
Project: E320

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	1706026-012BMS	SampType: MS	Units: mg/Kg-dry			Prep Date: 6/5/2017			RunNo: 36617		
Client ID:	BATCH	Batch ID:	17265	Analysis Date: 6/6/2017					SeqNo: 702856		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	1.01	0.0242	1.209	0	83.4	58.6	136				
Chloroform	1.07	0.0242	1.209	0	88.6	53.2	129				
1,1,1-Trichloroethane (TCA)	0.975	0.0242	1.209	0	80.7	58.3	145				
1,1-Dichloropropene	1.05	0.0242	1.209	0	87.0	55.1	138				
Carbon tetrachloride	0.956	0.0242	1.209	0	79.1	53.3	144				
1,2-Dichloroethane (EDC)	1.09	0.0363	1.209	0	90.0	51.3	139				
Benzene	1.14	0.0242	1.209	0	94.2	63.5	133				
Trichloroethene (TCE)	1.12	0.0242	1.209	0	92.9	68.6	132				
1,2-Dichloropropane	1.03	0.0242	1.209	0	85.1	59	136				
Bromodichloromethane	0.874	0.0242	1.209	0	72.3	50.7	141				
Dibromomethane	0.949	0.0484	1.209	0	78.5	50.6	137				
cis-1,3-Dichloropropene	1.02	0.0242	1.209	0	84.6	50.4	138				
Toluene	1.04	0.0242	1.209	0	86.4	63.4	132				
trans-1,3-Dichloropropylene	1.03	0.0363	1.209	0	85.3	44.1	147				
1,1,2-Trichloroethane	1.01	0.0363	1.209	0	83.7	51.6	137				
1,3-Dichloropropane	1.02	0.0605	1.209	0	84.0	53.1	134				
Tetrachloroethene (PCE)	1.02	0.0242	1.209	0	84.2	35.6	158				
Dibromochloromethane	0.923	0.0363	1.209	0	76.3	55.3	140				
1,2-Dibromoethane (EDB)	0.985	0.00605	1.209	0	81.4	50.4	136				
Chlorobenzene	1.13	0.0242	1.209	0	93.4	60	133				
1,1,1,2-Tetrachloroethane	1.02	0.0363	1.209	0	84.4	53.1	142				
Ethylbenzene	1.13	0.0363	1.209	0	93.3	54.5	134				
m,p-Xylene	2.25	0.0242	2.418	0	93.0	53.1	132				
o-Xylene	1.13	0.0242	1.209	0	93.3	53.3	139				
Styrene	1.10	0.0242	1.209	0	90.9	51.1	132				
Isopropylbenzene	1.11	0.0967	1.209	0	91.9	58.9	138				
Bromoform	0.808	0.0242	1.209	0	66.8	57.9	130				
1,1,2,2-Tetrachloroethane	0.896	0.0242	1.209	0	74.1	51.9	131				
n-Propylbenzene	1.09	0.0242	1.209	0	90.0	53.6	140				
Bromobenzene	1.09	0.0363	1.209	0	90.3	54.2	140				
1,3,5-Trimethylbenzene	1.10	0.0242	1.209	0	91.2	51.8	136				

Work Order: 1706027
CLIENT: O'Neill Service Group
Project: E320

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	1706026-012BMS	SampType:	MS	Units:	mg/Kg-dry	Prep Date:	6/5/2017	RunNo:	36617		
Client ID:	BATCH	Batch ID:	17265			Analysis Date:	6/6/2017	SeqNo:	702856		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Chlorotoluene	1.13	0.0242	1.209	0	93.2	51.6	136				
4-Chlorotoluene	1.10	0.0242	1.209	0	91.4	50.1	139				
tert-Butylbenzene	1.11	0.0242	1.209	0	92.2	50.5	135				
1,2,3-Trichloropropane	1.02	0.0242	1.209	0	84.3	50.5	131				
1,2,4-Trichlorobenzene	1.10	0.0605	1.209	0	90.6	50.8	130				
sec-Butylbenzene	1.15	0.0242	1.209	0	94.8	52.6	141				
4-Isopropyltoluene	1.16	0.0242	1.209	0	96.3	52.9	134				
1,3-Dichlorobenzene	1.18	0.0242	1.209	0	97.6	52.6	131				
1,4-Dichlorobenzene	1.17	0.0242	1.209	0	96.4	52.9	129				
n-Butylbenzene	1.23	0.0242	1.209	0	102	52.6	130				
1,2-Dichlorobenzene	1.16	0.0242	1.209	0	95.8	55.8	129				
1,2-Dibromo-3-chloropropane	0.842	0.605	1.209	0	69.7	40.5	131				
1,2,4-Trimethylbenzene	1.11	0.0242	1.209	0	91.8	50.6	137				
Hexachlorobutadiene	1.30	0.121	1.209	0	107	40.6	158				
Naphthalene	1.02	0.0363	1.209	0	84.6	52.3	124				
1,2,3-Trichlorobenzene	1.05	0.0242	1.209	0	86.6	54.4	124				
Surr: Dibromofluoromethane	1.39		1.511		92.0	56.5	129				
Surr: Toluene-d8	1.45		1.511		95.9	64.5	151				
Surr: 1-Bromo-4-fluorobenzene	1.57		1.511		104	63.1	141				

Sample ID 1706026-012BMSD		SampType: MSD		Units: mg/Kg-dry		Prep Date: 6/5/2017			RunNo: 36617		
Client ID: BATCH		Batch ID: 17265		Analysis Date: 6/6/2017					SeqNo: 702857		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.22	0.0725	1.209	0	101	43.5	121	0.9054	30.0	30	
Chloromethane	1.28	0.0725	1.209	0	106	45	130	1.079	16.9	30	
Vinyl chloride	1.22	0.00242	1.209	0	101	51.2	146	1.020	17.6	30	
Bromomethane	0.802	0.109	1.209	0	66.3	21.3	120	0.7048	12.9	30	
Trichlorofluoromethane (CFC-11)	0.815	0.0605	1.209	0	67.4	35	131	0.7128	13.3	30	
Chloroethane	0.726	0.0725	1.209	0	60.0	31.9	123	0.6888	5.23	30	

Work Order: 1706027
CLIENT: O'Neill Service Group
Project: E320

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	1706026-012BMSD	SampType:	MSD	Units:	mg/Kg-dry	Prep Date:	6/5/2017	RunNo:	36617		
Client ID:	BATCH	Batch ID:	17265			Analysis Date:	6/6/2017	SeqNo:	702857		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.876	0.0605	1.209	0	72.4	61.9	141	0.7976	9.36	30	
Methylene chloride	1.13	0.0242	1.209	0	93.1	54.7	142	0.9950	12.3	30	
trans-1,2-Dichloroethene	1.12	0.0242	1.209	0	93.0	52	136	0.9948	12.2	30	
Methyl tert-butyl ether (MTBE)	1.12	0.0605	1.209	0	92.3	54.4	132	1.093	2.03	30	
1,1-Dichloroethane	1.10	0.0242	1.209	0	90.6	51.8	141	1.110	1.33	30	
2,2-Dichloropropane	1.06	0.0605	1.209	0	87.9	36	123	0.8444	22.9	30	
cis-1,2-Dichloroethene	1.20	0.0242	1.209	0	99.1	58.6	136	1.009	17.2	30	
Chloroform	1.17	0.0242	1.209	0	96.4	53.2	129	1.071	8.50	30	
1,1,1-Trichloroethane (TCA)	1.17	0.0242	1.209	0	96.5	58.3	145	0.9755	17.8	30	
1,1-Dichloropropene	1.23	0.0242	1.209	0	102	55.1	138	1.052	15.4	30	
Carbon tetrachloride	1.03	0.0242	1.209	0	85.5	53.3	144	0.9559	7.86	30	
1,2-Dichloroethane (EDC)	1.22	0.0363	1.209	0	101	51.3	139	1.088	11.4	30	
Benzene	1.20	0.0242	1.209	0	99.6	63.5	133	1.139	5.54	30	
Trichloroethene (TCE)	1.30	0.0242	1.209	0	107	68.6	132	1.123	14.4	30	
1,2-Dichloropropane	1.15	0.0242	1.209	0	94.7	59	136	1.029	10.7	30	
Bromodichloromethane	0.979	0.0242	1.209	0	81.0	50.7	141	0.8735	11.4	30	
Dibromomethane	1.04	0.0484	1.209	0	85.7	50.6	137	0.9493	8.73	30	
cis-1,3-Dichloropropene	1.15	0.0242	1.209	0	94.9	50.4	138	1.023	11.5	30	
Toluene	1.18	0.0242	1.209	0	97.8	63.4	132	1.045	12.3	30	
trans-1,3-Dichloropropylene	1.14	0.0363	1.209	0	94.1	44.1	147	1.032	9.77	30	
1,1,2-Trichloroethane	1.05	0.0363	1.209	0	86.9	51.6	137	1.012	3.81	30	
1,3-Dichloropropane	1.09	0.0605	1.209	0	90.4	53.1	134	1.015	7.37	30	
Tetrachloroethene (PCE)	1.20	0.0242	1.209	0	98.9	35.6	158	1.018	16.1	30	
Dibromochloromethane	1.01	0.0363	1.209	0	83.9	55.3	140	0.9228	9.47	30	
1,2-Dibromoethane (EDB)	1.05	0.00605	1.209	0	86.9	50.4	136	0.9847	6.43	30	
Chlorobenzene	1.20	0.0242	1.209	0	99.0	60	133	1.129	5.83	30	
1,1,1,2-Tetrachloroethane	1.08	0.0363	1.209	0	89.5	53.1	142	1.020	5.92	30	
Ethylbenzene	1.22	0.0363	1.209	0	101	54.5	134	1.127	8.05	30	
m,p-Xylene	2.44	0.0242	2.418	0	101	53.1	132	2.249	8.14	30	
o-Xylene	1.20	0.0242	1.209	0	99.4	53.3	139	1.128	6.35	30	
Styrene	1.16	0.0242	1.209	0	96.1	51.1	132	1.099	5.55	30	

Work Order: 1706027
CLIENT: O'Neill Service Group
Project: E320

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	1706026-012BMSD	SampType: MSD	Units: mg/Kg-dry			Prep Date: 6/5/2017			RunNo: 36617		
Client ID:	BATCH	Batch ID:	17265	Analysis Date: 6/6/2017					SeqNo: 702857		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Isopropylbenzene	1.22	0.0967	1.209	0	101	58.9	138	1.111	9.35	30	
Bromoform	0.828	0.0242	1.209	0	68.4	57.9	130	0.8076	2.44	30	
1,1,2,2-Tetrachloroethane	0.921	0.0242	1.209	0	76.2	51.9	131	0.8957	2.78	30	
n-Propylbenzene	1.20	0.0242	1.209	0	98.9	53.6	140	1.088	9.44	30	
Bromobenzene	1.14	0.0363	1.209	0	94.2	54.2	140	1.092	4.26	30	
1,3,5-Trimethylbenzene	1.18	0.0242	1.209	0	97.7	51.8	136	1.102	6.87	30	
2-Chlorotoluene	1.19	0.0242	1.209	0	98.0	51.6	136	1.126	5.10	30	
4-Chlorotoluene	1.17	0.0242	1.209	0	96.8	50.1	139	1.105	5.80	30	
tert-Butylbenzene	1.21	0.0242	1.209	0	100	50.5	135	1.114	8.24	30	
1,2,3-Trichloropropane	0.980	0.0242	1.209	0	81.0	50.5	131	1.020	3.98	30	
1,2,4-Trichlorobenzene	1.23	0.0605	1.209	0	102	50.8	130	1.096	11.4	30	
sec-Butylbenzene	1.25	0.0242	1.209	0	103	52.6	141	1.146	8.37	30	
4-Isopropyltoluene	1.25	0.0242	1.209	0	103	52.9	134	1.164	7.13	30	
1,3-Dichlorobenzene	1.25	0.0242	1.209	0	103	52.6	131	1.180	5.39	30	
1,4-Dichlorobenzene	1.23	0.0242	1.209	0	102	52.9	129	1.166	5.38	30	
n-Butylbenzene	1.36	0.0242	1.209	0	113	52.6	130	1.230	10.3	30	
1,2-Dichlorobenzene	1.20	0.0242	1.209	0	99.3	55.8	129	1.158	3.53	30	
1,2-Dibromo-3-chloropropane	0.871	0.605	1.209	0	72.0	40.5	131	0.8424	3.29	30	
1,2,4-Trimethylbenzene	1.17	0.0242	1.209	0	96.5	50.6	137	1.110	5.01	30	
Hexachlorobutadiene	1.41	0.121	1.209	0	117	40.6	158	1.297	8.56	30	
Naphthalene	1.22	0.0363	1.209	0	101	52.3	124	1.023	17.2	30	
1,2,3-Trichlorobenzene	1.19	0.0242	1.209	0	98.1	54.4	124	1.047	12.5	30	
Surr: Dibromofluoromethane	1.46		1.511		96.7	56.5	129		0		
Surr: Toluene-d8	1.52		1.511		101	64.5	151		0		
Surr: 1-Bromo-4-fluorobenzene	1.55		1.511		103	63.1	141		0		



Date: 6/7/2017

Work Order: 1706027
 CLIENT: O'Neill Service Group
 Project: E320

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	1706027-002BDUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/5/2017	RunNo:	36617		
Client ID:	PR-TR-3-6-PLUG	Batch ID:	17265			Analysis Date:	6/6/2017	SeqNo:	703117		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0673						0		30	Q
Chloromethane	ND	0.0673						0		30	
Vinyl chloride	ND	0.00224						0		30	
Bromomethane	ND	0.101						0		30	Q
Trichlorofluoromethane (CFC-11)	ND	0.0561						0		30	Q
Chloroethane	ND	0.0673						0		30	Q
1,1-Dichloroethene	ND	0.0561						0		30	Q
Methylene chloride	ND	0.0224						0		30	
trans-1,2-Dichloroethene	ND	0.0224						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0561						0		30	
1,1-Dichloroethane	ND	0.0224						0		30	
2,2-Dichloropropane	ND	0.0561						0		30	Q
cis-1,2-Dichloroethene	ND	0.0224						0		30	
Chloroform	ND	0.0224						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0224						0		30	
1,1-Dichloropropene	ND	0.0224						0		30	
Carbon tetrachloride	ND	0.0224						0		30	
1,2-Dichloroethane (EDC)	ND	0.0336						0		30	
Benzene	ND	0.0224						0		30	
Trichloroethene (TCE)	ND	0.0224						0		30	
1,2-Dichloropropane	ND	0.0224						0		30	
Bromodichloromethane	ND	0.0224						0		30	
Dibromomethane	ND	0.0449						0		30	
cis-1,3-Dichloropropene	ND	0.0224						0		30	
Toluene	ND	0.0224						0		30	
trans-1,3-Dichloropropylene	ND	0.0336						0		30	
1,1,2-Trichloroethane	ND	0.0336						0		30	
1,3-Dichloropropane	ND	0.0561						0		30	
Tetrachloroethene (PCE)	ND	0.0224						0		30	
Dibromochloromethane	ND	0.0336						0		30	
1,2-Dibromoethane (EDB)	ND	0.00561						0		30	



Date: 6/7/2017

Work Order: 1706027

CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	1706027-002BDUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/5/2017	RunNo:	36617		
Client ID:	PR-TR-3-6-PLUG	Batch ID:	17265			Analysis Date:	6/6/2017	SeqNo:	703117		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	ND	0.0224						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0336						0		30	
Ethylbenzene	ND	0.0336						0		30	
m,p-Xylene	0.0477	0.0224						0.2340	132	30	R
o-Xylene	0.0267	0.0224						0	200	30	
Styrene	ND	0.0224						0		30	
Isopropylbenzene	ND	0.0897						0		30	
Bromoform	ND	0.0224						0		30	Q
1,1,2,2-Tetrachloroethane	ND	0.0224						0		30	
n-Propylbenzene	ND	0.0224						0		30	
Bromobenzene	ND	0.0336						0		30	
1,3,5-Trimethylbenzene	0.0736	0.0224						0	200	30	
2-Chlorotoluene	ND	0.0224						0		30	
4-Chlorotoluene	ND	0.0224						0		30	
tert-Butylbenzene	ND	0.0224						0		30	
1,2,3-Trichloropropane	ND	0.0224						0		30	
1,2,4-Trichlorobenzene	ND	0.0561						0		30	
sec-Butylbenzene	0.0580	0.0224						0	200	30	
4-Isopropyltoluene	0.0863	0.0224						0	200	30	
1,3-Dichlorobenzene	ND	0.0224						0		30	
1,4-Dichlorobenzene	ND	0.0224						0		30	
n-Butylbenzene	ND	0.0224						0		30	
1,2-Dichlorobenzene	ND	0.0224						0		30	
1,2-Dibromo-3-chloropropane	ND	0.561						0		30	
1,2,4-Trimethylbenzene	0.146	0.0224						0	200	30	
Hexachlorobutadiene	ND	0.112						0		30	
Naphthalene	13.9	0.0336						27.49	65.6	30	RE
1,2,3-Trichlorobenzene	ND	0.0224						0		30	
Surr: Dibromofluoromethane	1.25		1.402		89.4	56.5	129		0		
Surr: Toluene-d8	1.49		1.402		106	64.5	151		0		
Surr: 1-Bromo-4-fluorobenzene	1.46		1.402		104	63.1	141		0		



Date: 6/7/2017

Work Order: 1706027

CLIENT: O'Neill Service Group

Project: E320

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	1706027-002BDUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/5/2017	RunNo:	36617		
Client ID:	PR-TR-3-6-PLUG	Batch ID:	17265			Analysis Date:	6/6/2017	SeqNo:	703117		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:

R - High RPD observed. The method is in control as indicated by the LCS.

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

E - Estimated value. The amount exceeds the linear working range of the instrument.



Date: 6/7/2017

Work Order: 1706027
CLIENT: O'Neill Service Group
Project: E320

QC SUMMARY REPORT

Sample Moisture (Percent Moisture)

Sample ID	1706027-001ADUP	SampType:	DUP	Units:	wt%	Prep Date:	6/5/2017	RunNo:	36583		
Client ID:	PR-TR-3-2	Batch ID:	R36583			Analysis Date:	6/5/2017	SeqNo:	702121		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	6.77	0.500						7.136	5.31	20	

Sample ID	1706023-001ADUP	SampType:	DUP	Units:	wt%	Prep Date:	6/5/2017	RunNo:	36583		
Client ID:	BATCH	Batch ID:	R36583	Analysis Date:	6/5/2017	SeqNo:	702145				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	8.21	0.500						8.716	6.03	20	

Client Name: **ONEILL**
 Logged by: **Erica Silva**

Work Order Number: **1706027**
 Date Received: **6/2/2017 2:24:00 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 ☐
 MeOH to 001B - 007B
 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 °C
Cooler	3.3
Sample	2.9

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



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

Chain of Custody Record & Laboratory Services Agreement

Date: 6/2/17 Page: 1 of 2 Laboratory Project No (internal): 1704027

Project Name: E320 Special Remarks:

Project No: KLB PO 005

Collected by: Jackie Marx

Location: Eastside Park and Ride

Report To (PM): Brady Hanson

PM Email: bradyh@oneillsg.com

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Client: * OSC
Address: On File

City, State, Zip:
Telephone: 206-491-3970

Fax:

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*															Comments
				VOCs (EPA 8260 / 624)	GV/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - 5(M))	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)**	EDB (8031)	
1 PR-TR-3-2	6/2/17	10:20	Soil	X			X			X								Results by COB Tuesday
2 PR-TR-3-6-PLUG		10:45		X			X			X								
3 PR-TR-3-8		10:52		X			X			X								
4 PR-TR-2-2		11:20		X			X			X								
5 PR-TR-2-12		11:46		X			X			X								
6 PR-TP-1-2		12:39		X			X			X								
7 PR-TP-1-8		12:57		X			X			X								
8																		
9																		
10																		

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

**Metals (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

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished x [Signature] Date/Time 06/02/17 1424 Received x [Signature] Date/Time 06/2/2017 1424

Relinquished x [Signature] Date/Time [Blank] Received x [Signature] Date/Time [Blank]

Turn-around Time:

- ☐ Standard
- ☐ 3 Day
- ☒ 2 Day
- ☐ Next Day
- Same Day (specify) _____



Fremont
Analytical

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

Chain of Custody Record & Laboratory Services Agreement

Date: 6/2/17

Page: 2 of 2

Laboratory Project No (internal): 1706027

Project Name: E320

Project No: KLB PO 005

Collected by: Jackie Mart

Location: Eastside Park and Ride

Report To (PM): Brady Hanson

PM Email: bradyh@oneillsg.com

Special Remarks:

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Client: OSG

Address: On File

City, State, Zip:

Telephone: 206-491-3970

Fax:

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*																	Comments
				VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DO)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)***	EDB (8011)				
1 PR-TR-3-4	6/2/17	10:29	Soil																	HOLD
2 PR-TR-2-4		11:25																		
3 PR-TR-2-6		11:30																		
4 PR-TR-2-8		11:40																		
5 PR-TP-1-4		12:44																		
6 PR-TP-1-6	✓	12:49	✓																	
7																				
8																				
9																				
10																				

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

**Metals (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

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Relinquished
x Date/Time 06/2/17 14:24

Relinquished
x Date/Time

Received
x Date/Time 6/2/2017 1424

Received
x Date/Time

Turn-around Time:

☐ Standard

☐ 3 Day

☐ 2 Day

☐ Next Day

Same Day _____
(specify)



Fremont

ANALYTICAL

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

Chain of Custody Record & Laboratory Services Agreement

Date: 6/2/17 Page: 1 of 2 Laboratory Project No (Internal): 1706027

Project Name: E320 Special Remarks:

Project No: KLB PO 005

Collected by: Jackie Marx

Location: Eastside Park and Ride

Report To (PM): Brady Hanson

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

PM Email: bradyh@oneillsg.com

Client: * OSG

Address: On File

City, State, Zip:

Telephone: 206-491-3970

Fax:

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	Analytes														Comments
				VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCD)	Diesel/Heavy Oil Range Organics (DO)	SVOCS (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) Dissolved (D)	Anions (IC)***	EDB (8011)		
1 PR-TR-3-2	6/2/17	10:20	Soil	X			X	X										Results by COB
2 PR-TR-3-6-PLUG		10:45		X			X	X	X	JM	X							Tuesday
3 PR-TR-3-8		10:52		X			X			X								Quant HCD per J.M.
4 PR-TR-2-2		11:20		X			X			X								6/7/17 CW
5 PR-TR-2-12		11:46		X			X			X								
6 PR-TP-1-2		12:31		X			X		X	X	JM							
7 PR-TP-1-8		12:57		X			X			X								PR-TP-1-10
8																		
9																		
10																		

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

**Metals (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

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Relinquished x	Date/Time 06/02/17 1424	Received x	Date/Time 6/2/2017 1424
Relinquished x	Date/Time	Received x	Date/Time

Turn-around Time:

☐ Standard

☐ 3 Day

☒ 2 Day

☐ Next Day

Same Day _____ (specify)



3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

O'Neill Service Group

Brady Hanson
17619 NE 67th Court, Suite 100
Redmond, WA 98052

RE: KLB PO 0005

Work Order Number: 1706132

June 14, 2017

Attention Brady Hanson:

Fremont Analytical, Inc. received 20 sample(s) on 6/12/2017 for the analyses presented in the following report.

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.
Hydrocarbon Identification by NWTPH-HCID
Mercury by EPA Method 7471
Sample Moisture (Percent Moisture)
Semi-Volatile Organic Compounds by EPA Method 8270
Total Metals by EPA Method 6020
Volatile Organic Compounds by EPA Method 8260C

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,

Mike Ridgeway
Laboratory Director

CC:
Jackie Mart

CLIENT: O'Neill Service Group
Project: KLB PO 0005
Work Order: 1706132

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1706132-001	PR-TP-4-3	06/12/2017 8:30 AM	06/12/2017 2:44 PM
1706132-002	PR-TP-4-8	06/12/2017 8:45 AM	06/12/2017 2:44 PM
1706132-003	PR-TP-5-3	06/12/2017 9:10 AM	06/12/2017 2:44 PM
1706132-004	PR-TP-5-8	06/12/2017 9:25 AM	06/12/2017 2:44 PM
1706132-005	PR-TP-6-3	06/12/2017 9:50 AM	06/12/2017 2:44 PM
1706132-006	PR-TP-6-8	06/12/2017 9:58 AM	06/12/2017 2:44 PM
1706132-007	PR-TP-7-3	06/12/2017 10:20 AM	06/12/2017 2:44 PM
1706132-008	PR-TP-7-8	06/12/2017 10:30 AM	06/12/2017 2:44 PM
1706132-009	PR-TP-8-3	06/12/2017 10:55 AM	06/12/2017 2:44 PM
1706132-010	PR-TP-8-5	06/12/2017 11:05 AM	06/12/2017 2:44 PM
1706132-011	PR-TP-9-3	06/12/2017 11:30 AM	06/12/2017 2:44 PM
1706132-012	PR-TP-9-6	06/12/2017 11:32 AM	06/12/2017 2:44 PM
1706132-013	PR-TP-10-3	06/12/2017 12:00 PM	06/12/2017 2:44 PM
1706132-014	PR-TP-10-8	06/12/2017 12:08 PM	06/12/2017 2:44 PM
1706132-015	PR-TP-11-3	06/12/2017 12:30 PM	06/12/2017 2:44 PM
1706132-016	PR-TP-11-8	06/12/2017 12:48 PM	06/12/2017 2:44 PM
1706132-017	PR-TP-12-3	06/12/2017 1:00 PM	06/12/2017 2:44 PM
1706132-018	PR-TP-12-8	06/12/2017 1:09 PM	06/12/2017 2:44 PM
1706132-019	PR-TP-13-3	06/12/2017 1:20 PM	06/12/2017 2:44 PM
1706132-020	PR-TP-13-8	06/12/2017 1:25 PM	06/12/2017 2:44 PM

CLIENT: O'Neill Service Group**Project:** KLB PO 0005

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 Reporting Limit
- 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
- R - High relative percent difference observed

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

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 8:45:00 AM

Project: KLB PO 0005

Lab ID: 1706132-002

Matrix: Soil

Client Sample ID: PR-TP-4-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 17332

Analyst: SG

Diesel (Fuel Oil)	ND	23.9		mg/Kg-dry	1	6/12/2017 8:32:52 PM
Heavy Oil	ND	59.8		mg/Kg-dry	1	6/12/2017 8:32:52 PM
Surr: 2-Fluorobiphenyl	116	50-150		%Rec	1	6/12/2017 8:32:52 PM
Surr: o-Terphenyl	120	50-150		%Rec	1	6/12/2017 8:32:52 PM

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 17333

Analyst: BT

Phenol	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Bis(2-chloroethyl) ether	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
2-Chlorophenol	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
1,3-Dichlorobenzene	ND	86.0		µg/Kg-dry	1	6/12/2017 11:17:08 PM
1,4-Dichlorobenzene	ND	86.0		µg/Kg-dry	1	6/12/2017 11:17:08 PM
1,2-Dichlorobenzene	ND	86.0		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Benzyl alcohol	ND	115	Q	µg/Kg-dry	1	6/12/2017 11:17:08 PM
2-Methylphenol (o-cresol)	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Hexachloroethane	ND	115	Q	µg/Kg-dry	1	6/12/2017 11:17:08 PM
N-Nitrosodi-n-propylamine	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Nitrobenzene	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Isophorone	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
3&4-Methylphenol (m, p-cresol)	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
2-Nitrophenol	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
2,4-Dimethylphenol	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Bis(2-chloroethoxy)methane	ND	86.0		µg/Kg-dry	1	6/12/2017 11:17:08 PM
2,4-Dichlorophenol	ND	115	Q	µg/Kg-dry	1	6/12/2017 11:17:08 PM
1,2,4-Trichlorobenzene	ND	86.0		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Naphthalene	ND	57.4		µg/Kg-dry	1	6/12/2017 11:17:08 PM
4-Chloroaniline	ND	86.0		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Hexachlorobutadiene	ND	86.0		µg/Kg-dry	1	6/12/2017 11:17:08 PM
4-Chloro-3-methylphenol	ND	229		µg/Kg-dry	1	6/12/2017 11:17:08 PM
2-Methylnaphthalene	ND	57.4		µg/Kg-dry	1	6/12/2017 11:17:08 PM
1-Methylnaphthalene	ND	57.4		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Hexachlorocyclopentadiene	ND	115	Q	µg/Kg-dry	1	6/12/2017 11:17:08 PM
2,4,6-Trichlorophenol	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
2,4,5-Trichlorophenol	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
2-Chloronaphthalene	ND	86.0		µg/Kg-dry	1	6/12/2017 11:17:08 PM
2-Nitroaniline	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Acenaphthene	ND	57.4		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Dimethylphthalate	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
2,6-Dinitrotoluene	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 8:45:00 AM

Project: KLB PO 0005

Lab ID: 1706132-002

Matrix: Soil

Client Sample ID: PR-TP-4-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 17333

Analyst: BT

Acenaphthylene	ND	57.4		µg/Kg-dry	1	6/12/2017 11:17:08 PM
2,4-Dinitrophenol	ND	229		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Dibenzofuran	ND	86.0		µg/Kg-dry	1	6/12/2017 11:17:08 PM
2,4-Dinitrotoluene	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
4-Nitrophenol	ND	574		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Fluorene	ND	57.4		µg/Kg-dry	1	6/12/2017 11:17:08 PM
4-Chlorophenyl phenyl ether	ND	86.0		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Diethylphthalate	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
4,6-Dinitro-2-methylphenol	ND	229	Q	µg/Kg-dry	1	6/12/2017 11:17:08 PM
4-Bromophenyl phenyl ether	ND	86.0		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Hexachlorobenzene	ND	86.0		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Pentachlorophenol	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Phenanthrene	ND	57.4		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Anthracene	ND	57.4		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Carbazole	ND	86.0		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Di-n-butylphthalate	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Fluoranthene	ND	57.4		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Pyrene	ND	57.4		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Butyl Benzylphthalate	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
bis(2-Ethylhexyl)adipate	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Benz (a) anthracene	ND	57.4		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Chrysene	ND	57.4		µg/Kg-dry	1	6/12/2017 11:17:08 PM
bis (2-Ethylhexyl) phthalate	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Di-n-octyl phthalate	ND	115		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Benzo (b) fluoranthene	ND	57.4		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Benzo (k) fluoranthene	ND	57.4		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Benzo (a) pyrene	ND	57.4		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Indeno (1,2,3-cd) pyrene	ND	57.4		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Dibenz (a,h) anthracene	ND	57.4		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Benzo (g,h,i) perylene	ND	57.4		µg/Kg-dry	1	6/12/2017 11:17:08 PM
Surr: 2,4,6-Tribromophenol	142	14.8-165		%Rec	1	6/12/2017 11:17:08 PM
Surr: 2-Fluorobiphenyl	56.4	15-123		%Rec	1	6/12/2017 11:17:08 PM
Surr: Nitrobenzene-d5	66.3	10-133		%Rec	1	6/12/2017 11:17:08 PM
Surr: Phenol-d6	83.4	11.6-133		%Rec	1	6/12/2017 11:17:08 PM
Surr: p-Terphenyl	89.7	26.7-159		%Rec	1	6/12/2017 11:17:08 PM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 8:45:00 AM

Project: KLB PO 0005

Lab ID: 1706132-002

Matrix: Soil

Client Sample ID: PR-TP-4-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Sample Moisture (Percent Moisture)

Batch ID: R36763 Analyst: BB

Percent Moisture	26.2	0.500		wt%	1	6/13/2017 8:10:01 AM
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Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 9:10:00 AM

Project: KLB PO 0005

Lab ID: 1706132-003

Matrix: Soil

Client Sample ID: PR-TP-5-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Hydrocarbon Identification by NWTPH-HCID

Batch ID: 17332

Analyst: SG

Gasoline	ND	22.4		mg/Kg-dry	1	6/12/2017 9:02:14 PM
Mineral Spirits	ND	33.6		mg/Kg-dry	1	6/12/2017 9:02:14 PM
Kerosene	ND	56.0		mg/Kg-dry	1	6/12/2017 9:02:14 PM
Diesel (Fuel Oil)	ND	56.0		mg/Kg-dry	1	6/12/2017 9:02:14 PM
Heavy Oil	ND	112		mg/Kg-dry	1	6/12/2017 9:02:14 PM
Mineral Oil	ND	112		mg/Kg-dry	1	6/12/2017 9:02:14 PM
Surr: 2-Fluorobiphenyl	132	50-150		%Rec	1	6/12/2017 9:02:14 PM
Surr: o-Terphenyl	135	50-150		%Rec	1	6/12/2017 9:02:14 PM

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 17333

Analyst: BT

Phenol	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Bis(2-chloroethyl) ether	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
2-Chlorophenol	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
1,3-Dichlorobenzene	ND	77.3		µg/Kg-dry	1	6/12/2017 11:39:07 PM
1,4-Dichlorobenzene	ND	77.3		µg/Kg-dry	1	6/12/2017 11:39:07 PM
1,2-Dichlorobenzene	ND	77.3		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Benzyl alcohol	ND	103	Q	µg/Kg-dry	1	6/12/2017 11:39:07 PM
2-Methylphenol (o-cresol)	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Hexachloroethane	ND	103	Q	µg/Kg-dry	1	6/12/2017 11:39:07 PM
N-Nitrosodi-n-propylamine	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Nitrobenzene	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Isophorone	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
3&4-Methylphenol (m, p-cresol)	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
2-Nitrophenol	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
2,4-Dimethylphenol	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Bis(2-chloroethoxy)methane	ND	77.3		µg/Kg-dry	1	6/12/2017 11:39:07 PM
2,4-Dichlorophenol	ND	103	Q	µg/Kg-dry	1	6/12/2017 11:39:07 PM
1,2,4-Trichlorobenzene	ND	77.3		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Naphthalene	ND	51.5		µg/Kg-dry	1	6/12/2017 11:39:07 PM
4-Chloroaniline	ND	77.3		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Hexachlorobutadiene	ND	77.3		µg/Kg-dry	1	6/12/2017 11:39:07 PM
4-Chloro-3-methylphenol	ND	206		µg/Kg-dry	1	6/12/2017 11:39:07 PM
2-Methylnaphthalene	ND	51.5		µg/Kg-dry	1	6/12/2017 11:39:07 PM
1-Methylnaphthalene	ND	51.5		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Hexachlorocyclopentadiene	ND	103	Q	µg/Kg-dry	1	6/12/2017 11:39:07 PM
2,4,6-Trichlorophenol	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
2,4,5-Trichlorophenol	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
2-Chloronaphthalene	ND	77.3		µg/Kg-dry	1	6/12/2017 11:39:07 PM



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 9:10:00 AM

Project: KLB PO 0005

Lab ID: 1706132-003

Matrix: Soil

Client Sample ID: PR-TP-5-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 17333

Analyst: BT

2-Nitroaniline	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Acenaphthene	ND	51.5		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Dimethylphthalate	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
2,6-Dinitrotoluene	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Acenaphthylene	ND	51.5		µg/Kg-dry	1	6/12/2017 11:39:07 PM
2,4-Dinitrophenol	ND	206		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Dibenzofuran	ND	77.3		µg/Kg-dry	1	6/12/2017 11:39:07 PM
2,4-Dinitrotoluene	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
4-Nitrophenol	ND	515		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Fluorene	ND	51.5		µg/Kg-dry	1	6/12/2017 11:39:07 PM
4-Chlorophenyl phenyl ether	ND	77.3		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Diethylphthalate	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
4,6-Dinitro-2-methylphenol	ND	206	Q	µg/Kg-dry	1	6/12/2017 11:39:07 PM
4-Bromophenyl phenyl ether	ND	77.3		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Hexachlorobenzene	ND	77.3		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Pentachlorophenol	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Phenanthrene	ND	51.5		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Anthracene	ND	51.5		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Carbazole	ND	77.3		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Di-n-butylphthalate	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Fluoranthene	ND	51.5		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Pyrene	ND	51.5		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Butyl Benzylphthalate	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
bis(2-Ethylhexyl)adipate	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Benz (a) anthracene	ND	51.5		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Chrysene	ND	51.5		µg/Kg-dry	1	6/12/2017 11:39:07 PM
bis (2-Ethylhexyl) phthalate	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Di-n-octyl phthalate	ND	103		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Benzo (b) fluoranthene	ND	51.5		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Benzo (k) fluoranthene	ND	51.5		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Benzo (a) pyrene	ND	51.5		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Indeno (1,2,3-cd) pyrene	ND	51.5		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Dibenz (a,h) anthracene	ND	51.5		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Benzo (g,h,i) perylene	ND	51.5		µg/Kg-dry	1	6/12/2017 11:39:07 PM
Surr: 2,4,6-Tribromophenol	151	14.8-165		%Rec	1	6/12/2017 11:39:07 PM
Surr: 2-Fluorobiphenyl	58.7	15-123		%Rec	1	6/12/2017 11:39:07 PM
Surr: Nitrobenzene-d5	70.8	10-133		%Rec	1	6/12/2017 11:39:07 PM
Surr: Phenol-d6	91.6	11.6-133		%Rec	1	6/12/2017 11:39:07 PM
Surr: p-Terphenyl	102	26.7-159		%Rec	1	6/12/2017 11:39:07 PM



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 9:10:00 AM

Project: KLB PO 0005

Lab ID: 1706132-003

Matrix: Soil

Client Sample ID: PR-TP-5-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 17333

Analyst: BT

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17345

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0661	Q	mg/Kg-dry	1	6/13/2017 1:25:41 AM
Chloromethane	ND	0.0661		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Vinyl chloride	ND	0.00220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Bromomethane	ND	0.0992		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Trichlorofluoromethane (CFC-11)	ND	0.0551		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Chloroethane	ND	0.0661		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,1-Dichloroethene	ND	0.0551		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Methylene chloride	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
trans-1,2-Dichloroethene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Methyl tert-butyl ether (MTBE)	ND	0.0551		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,1-Dichloroethane	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
2,2-Dichloropropane	ND	0.0551	Q	mg/Kg-dry	1	6/13/2017 1:25:41 AM
cis-1,2-Dichloroethene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Chloroform	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,1,1-Trichloroethane (TCA)	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,1-Dichloropropene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Carbon tetrachloride	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,2-Dichloroethane (EDC)	ND	0.0331		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Benzene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Trichloroethene (TCE)	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,2-Dichloropropane	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Bromodichloromethane	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Dibromomethane	ND	0.0441		mg/Kg-dry	1	6/13/2017 1:25:41 AM
cis-1,3-Dichloropropene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Toluene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
trans-1,3-Dichloropropylene	ND	0.0331		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,1,2-Trichloroethane	ND	0.0331		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,3-Dichloropropane	ND	0.0551		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Tetrachloroethene (PCE)	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Dibromochloromethane	ND	0.0331		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,2-Dibromoethane (EDB)	ND	0.00551		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Chlorobenzene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,1,1,2-Tetrachloroethane	ND	0.0331		mg/Kg-dry	1	6/13/2017 1:25:41 AM



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 9:10:00 AM

Project: KLB PO 0005

Lab ID: 1706132-003

Matrix: Soil

Client Sample ID: PR-TP-5-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17345

Analyst: NG

Ethylbenzene	ND	0.0331		mg/Kg-dry	1	6/13/2017 1:25:41 AM
m,p-Xylene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
o-Xylene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Styrene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Isopropylbenzene	ND	0.0881		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Bromoform	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,1,2,2-Tetrachloroethane	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
n-Propylbenzene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Bromobenzene	ND	0.0331		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,3,5-Trimethylbenzene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
2-Chlorotoluene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
4-Chlorotoluene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
tert-Butylbenzene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,2,3-Trichloropropane	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,2,4-Trichlorobenzene	ND	0.0551		mg/Kg-dry	1	6/13/2017 1:25:41 AM
sec-Butylbenzene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
4-Isopropyltoluene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,3-Dichlorobenzene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,4-Dichlorobenzene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
n-Butylbenzene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,2-Dichlorobenzene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,2-Dibromo-3-chloropropane	ND	0.551		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,2,4-Trimethylbenzene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Hexachlorobutadiene	ND	0.110		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Naphthalene	ND	0.0331		mg/Kg-dry	1	6/13/2017 1:25:41 AM
1,2,3-Trichlorobenzene	ND	0.0220		mg/Kg-dry	1	6/13/2017 1:25:41 AM
Surr: Dibromofluoromethane	90.3	56.5-129		%Rec	1	6/13/2017 1:25:41 AM
Surr: Toluene-d8	97.5	64.5-151		%Rec	1	6/13/2017 1:25:41 AM
Surr: 1-Bromo-4-fluorobenzene	94.7	63.1-141		%Rec	1	6/13/2017 1:25:41 AM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Mercury by EPA Method 7471

Batch ID: 17334

Analyst: WF

Mercury	ND	0.272		mg/Kg-dry	1	6/13/2017 2:01:39 PM
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Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 9:10:00 AM

Project: KLB PO 0005

Lab ID: 1706132-003

Matrix: Soil

Client Sample ID: PR-TP-5-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Total Metals by EPA Method 6020

Batch ID: 17342

Analyst: TN

Arsenic	5.96	0.0885		mg/Kg-dry	1	6/13/2017 4:51:09 PM
Barium	71.3	0.442		mg/Kg-dry	1	6/13/2017 4:51:09 PM
Cadmium	ND	0.177		mg/Kg-dry	1	6/13/2017 4:51:09 PM
Chromium	50.3	0.0885		mg/Kg-dry	1	6/13/2017 4:51:09 PM
Lead	15.1	0.177		mg/Kg-dry	1	6/13/2017 4:51:09 PM
Selenium	1.47	0.442		mg/Kg-dry	1	6/13/2017 4:51:09 PM
Silver	ND	0.0885		mg/Kg-dry	1	6/13/2017 4:51:09 PM

Sample Moisture (Percent Moisture)

Batch ID: R36763

Analyst: BB

Percent Moisture	15.0	0.500		wt%	1	6/13/2017 8:10:01 AM
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Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 9:25:00 AM

Project: KLB PO 0005

Lab ID: 1706132-004

Matrix: Soil

Client Sample ID: PR-TP-5-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Hydrocarbon Identification by NWTPH-HCID

Batch ID: 17332

Analyst: SG

Gasoline	ND	23.2		mg/Kg-dry	1	6/12/2017 9:31:49 PM
Mineral Spirits	ND	34.8		mg/Kg-dry	1	6/12/2017 9:31:49 PM
Kerosene	ND	57.9		mg/Kg-dry	1	6/12/2017 9:31:49 PM
Diesel (Fuel Oil)	ND	57.9		mg/Kg-dry	1	6/12/2017 9:31:49 PM
Heavy Oil	ND	116		mg/Kg-dry	1	6/12/2017 9:31:49 PM
Mineral Oil	ND	116		mg/Kg-dry	1	6/12/2017 9:31:49 PM
Surr: 2-Fluorobiphenyl	117	50-150		%Rec	1	6/12/2017 9:31:49 PM
Surr: o-Terphenyl	120	50-150		%Rec	1	6/12/2017 9:31:49 PM

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 17333

Analyst: BT

Phenol	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Bis(2-chloroethyl) ether	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
2-Chlorophenol	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
1,3-Dichlorobenzene	ND	79.8		µg/Kg-dry	1	6/13/2017 12:01:02 AM
1,4-Dichlorobenzene	ND	79.8		µg/Kg-dry	1	6/13/2017 12:01:02 AM
1,2-Dichlorobenzene	ND	79.8		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Benzyl alcohol	ND	106	Q	µg/Kg-dry	1	6/13/2017 12:01:02 AM
2-Methylphenol (o-cresol)	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Hexachloroethane	ND	106	Q	µg/Kg-dry	1	6/13/2017 12:01:02 AM
N-Nitrosodi-n-propylamine	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Nitrobenzene	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Isophorone	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
3&4-Methylphenol (m, p-cresol)	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
2-Nitrophenol	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
2,4-Dimethylphenol	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Bis(2-chloroethoxy)methane	ND	79.8		µg/Kg-dry	1	6/13/2017 12:01:02 AM
2,4-Dichlorophenol	ND	106	Q	µg/Kg-dry	1	6/13/2017 12:01:02 AM
1,2,4-Trichlorobenzene	ND	79.8		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Naphthalene	ND	53.2		µg/Kg-dry	1	6/13/2017 12:01:02 AM
4-Chloroaniline	ND	79.8		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Hexachlorobutadiene	ND	79.8		µg/Kg-dry	1	6/13/2017 12:01:02 AM
4-Chloro-3-methylphenol	ND	213		µg/Kg-dry	1	6/13/2017 12:01:02 AM
2-Methylnaphthalene	ND	53.2		µg/Kg-dry	1	6/13/2017 12:01:02 AM
1-Methylnaphthalene	ND	53.2		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Hexachlorocyclopentadiene	ND	106	Q	µg/Kg-dry	1	6/13/2017 12:01:02 AM
2,4,6-Trichlorophenol	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
2,4,5-Trichlorophenol	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
2-Chloronaphthalene	ND	79.8		µg/Kg-dry	1	6/13/2017 12:01:02 AM



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 9:25:00 AM

Project: KLB PO 0005

Lab ID: 1706132-004

Matrix: Soil

Client Sample ID: PR-TP-5-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 17333

Analyst: BT

2-Nitroaniline	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Acenaphthene	ND	53.2		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Dimethylphthalate	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
2,6-Dinitrotoluene	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Acenaphthylene	ND	53.2		µg/Kg-dry	1	6/13/2017 12:01:02 AM
2,4-Dinitrophenol	ND	213		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Dibenzofuran	ND	79.8		µg/Kg-dry	1	6/13/2017 12:01:02 AM
2,4-Dinitrotoluene	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
4-Nitrophenol	ND	532		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Fluorene	ND	53.2		µg/Kg-dry	1	6/13/2017 12:01:02 AM
4-Chlorophenyl phenyl ether	ND	79.8		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Diethylphthalate	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
4,6-Dinitro-2-methylphenol	ND	213	Q	µg/Kg-dry	1	6/13/2017 12:01:02 AM
4-Bromophenyl phenyl ether	ND	79.8		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Hexachlorobenzene	ND	79.8		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Pentachlorophenol	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Phenanthrene	ND	53.2		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Anthracene	ND	53.2		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Carbazole	ND	79.8		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Di-n-butylphthalate	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Fluoranthene	ND	53.2		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Pyrene	ND	53.2		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Butyl Benzylphthalate	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
bis(2-Ethylhexyl)adipate	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Benz (a) anthracene	ND	53.2		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Chrysene	ND	53.2		µg/Kg-dry	1	6/13/2017 12:01:02 AM
bis (2-Ethylhexyl) phthalate	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Di-n-octyl phthalate	ND	106		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Benzo (b) fluoranthene	ND	53.2		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Benzo (k) fluoranthene	ND	53.2		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Benzo (a) pyrene	ND	53.2		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Indeno (1,2,3-cd) pyrene	ND	53.2		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Dibenz (a,h) anthracene	ND	53.2		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Benzo (g,h,i) perylene	ND	53.2		µg/Kg-dry	1	6/13/2017 12:01:02 AM
Surr: 2,4,6-Tribromophenol	129	14.8-165		%Rec	1	6/13/2017 12:01:02 AM
Surr: 2-Fluorobiphenyl	59.4	15-123		%Rec	1	6/13/2017 12:01:02 AM
Surr: Nitrobenzene-d5	67.7	10-133		%Rec	1	6/13/2017 12:01:02 AM
Surr: Phenol-d6	76.7	11.6-133		%Rec	1	6/13/2017 12:01:02 AM
Surr: p-Terphenyl	90.7	26.7-159		%Rec	1	6/13/2017 12:01:02 AM



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 9:25:00 AM

Project: KLB PO 0005

Lab ID: 1706132-004

Matrix: Soil

Client Sample ID: PR-TP-5-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 17333

Analyst: BT

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17345

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0686	Q	mg/Kg-dry	1	6/13/2017 1:54:20 AM
Chloromethane	ND	0.0686		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Vinyl chloride	ND	0.00229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Bromomethane	ND	0.103		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Trichlorofluoromethane (CFC-11)	ND	0.0572		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Chloroethane	ND	0.0686		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,1-Dichloroethene	ND	0.0572		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Methylene chloride	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
trans-1,2-Dichloroethene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Methyl tert-butyl ether (MTBE)	ND	0.0572		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,1-Dichloroethane	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
2,2-Dichloropropane	ND	0.0572	Q	mg/Kg-dry	1	6/13/2017 1:54:20 AM
cis-1,2-Dichloroethene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Chloroform	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,1,1-Trichloroethane (TCA)	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,1-Dichloropropene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Carbon tetrachloride	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,2-Dichloroethane (EDC)	ND	0.0343		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Benzene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Trichloroethene (TCE)	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,2-Dichloropropane	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Bromodichloromethane	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Dibromomethane	ND	0.0457		mg/Kg-dry	1	6/13/2017 1:54:20 AM
cis-1,3-Dichloropropene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Toluene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
trans-1,3-Dichloropropylene	ND	0.0343		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,1,2-Trichloroethane	ND	0.0343		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,3-Dichloropropane	ND	0.0572		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Tetrachloroethene (PCE)	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Dibromochloromethane	ND	0.0343		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,2-Dibromoethane (EDB)	ND	0.00572		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Chlorobenzene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,1,1,2-Tetrachloroethane	ND	0.0343		mg/Kg-dry	1	6/13/2017 1:54:20 AM



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 9:25:00 AM

Project: KLB PO 0005

Lab ID: 1706132-004

Matrix: Soil

Client Sample ID: PR-TP-5-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17345

Analyst: NG

Ethylbenzene	ND	0.0343		mg/Kg-dry	1	6/13/2017 1:54:20 AM
m,p-Xylene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
o-Xylene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Styrene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Isopropylbenzene	ND	0.0915		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Bromoform	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,1,2,2-Tetrachloroethane	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
n-Propylbenzene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Bromobenzene	ND	0.0343		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,3,5-Trimethylbenzene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
2-Chlorotoluene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
4-Chlorotoluene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
tert-Butylbenzene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,2,3-Trichloropropane	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,2,4-Trichlorobenzene	ND	0.0572		mg/Kg-dry	1	6/13/2017 1:54:20 AM
sec-Butylbenzene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
4-Isopropyltoluene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,3-Dichlorobenzene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,4-Dichlorobenzene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
n-Butylbenzene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,2-Dichlorobenzene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,2-Dibromo-3-chloropropane	ND	0.572		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,2,4-Trimethylbenzene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Hexachlorobutadiene	ND	0.114		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Naphthalene	ND	0.0343		mg/Kg-dry	1	6/13/2017 1:54:20 AM
1,2,3-Trichlorobenzene	ND	0.0229		mg/Kg-dry	1	6/13/2017 1:54:20 AM
Surr: Dibromofluoromethane	89.9	56.5-129		%Rec	1	6/13/2017 1:54:20 AM
Surr: Toluene-d8	116	64.5-151		%Rec	1	6/13/2017 1:54:20 AM
Surr: 1-Bromo-4-fluorobenzene	95.0	63.1-141		%Rec	1	6/13/2017 1:54:20 AM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Mercury by EPA Method 7471

Batch ID: 17334

Analyst: WF

Mercury	ND	0.302		mg/Kg-dry	1	6/13/2017 2:03:15 PM
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Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 9:25:00 AM

Project: KLB PO 0005

Lab ID: 1706132-004

Matrix: Soil

Client Sample ID: PR-TP-5-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Total Metals by EPA Method 6020

Batch ID: 17342

Analyst: TN

Arsenic	6.03	0.0983		mg/Kg-dry	1	6/13/2017 4:55:10 PM
Barium	73.0	0.491		mg/Kg-dry	1	6/13/2017 4:55:10 PM
Cadmium	ND	0.197		mg/Kg-dry	1	6/13/2017 4:55:10 PM
Chromium	46.4	0.0983		mg/Kg-dry	1	6/13/2017 4:55:10 PM
Lead	16.9	0.197		mg/Kg-dry	1	6/13/2017 4:55:10 PM
Selenium	1.18	0.491		mg/Kg-dry	1	6/13/2017 4:55:10 PM
Silver	ND	0.0983		mg/Kg-dry	1	6/13/2017 4:55:10 PM

Sample Moisture (Percent Moisture)

Batch ID: R36763

Analyst: BB

Percent Moisture	20.5	0.500		wt%	1	6/13/2017 8:10:01 AM
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Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 10:20:00 AM

Project: KLB PO 0005

Lab ID: 1706132-007

Matrix: Soil

Client Sample ID: PR-TP-7-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Hydrocarbon Identification by NWTPH-HCID

Batch ID: 17332

Analyst: SG

Gasoline	ND	19.5		mg/Kg-dry	1	6/12/2017 10:01:10 PM
Mineral Spirits	ND	29.2		mg/Kg-dry	1	6/12/2017 10:01:10 PM
Kerosene	ND	48.7		mg/Kg-dry	1	6/12/2017 10:01:10 PM
Diesel (Fuel Oil)	ND	48.7		mg/Kg-dry	1	6/12/2017 10:01:10 PM
Heavy Oil	ND	97.4		mg/Kg-dry	1	6/12/2017 10:01:10 PM
Mineral Oil	ND	97.4		mg/Kg-dry	1	6/12/2017 10:01:10 PM
Surr: 2-Fluorobiphenyl	121	50-150		%Rec	1	6/12/2017 10:01:10 PM
Surr: o-Terphenyl	124	50-150		%Rec	1	6/12/2017 10:01:10 PM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17345

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0649	Q	mg/Kg-dry	1	6/13/2017 2:51:29 AM
Chloromethane	ND	0.0649		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Vinyl chloride	ND	0.00216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Bromomethane	ND	0.0974		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Trichlorofluoromethane (CFC-11)	ND	0.0541		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Chloroethane	ND	0.0649		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,1-Dichloroethene	ND	0.0541		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Methylene chloride	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
trans-1,2-Dichloroethene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Methyl tert-butyl ether (MTBE)	ND	0.0541		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,1-Dichloroethane	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
2,2-Dichloropropane	ND	0.0541	Q	mg/Kg-dry	1	6/13/2017 2:51:29 AM
cis-1,2-Dichloroethene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Chloroform	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,1,1-Trichloroethane (TCA)	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,1-Dichloropropene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Carbon tetrachloride	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,2-Dichloroethane (EDC)	ND	0.0325		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Benzene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Trichloroethene (TCE)	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,2-Dichloropropane	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Bromodichloromethane	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Dibromomethane	ND	0.0433		mg/Kg-dry	1	6/13/2017 2:51:29 AM
cis-1,3-Dichloropropene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Toluene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
trans-1,3-Dichloropropylene	ND	0.0325		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,1,2-Trichloroethane	ND	0.0325		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,3-Dichloropropane	ND	0.0541		mg/Kg-dry	1	6/13/2017 2:51:29 AM



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 10:20:00 AM

Project: KLB PO 0005

Lab ID: 1706132-007

Matrix: Soil

Client Sample ID: PR-TP-7-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17345

Analyst: NG

Tetrachloroethene (PCE)	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Dibromochloromethane	ND	0.0325		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,2-Dibromoethane (EDB)	ND	0.00541		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Chlorobenzene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,1,1,2-Tetrachloroethane	ND	0.0325		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Ethylbenzene	ND	0.0325		mg/Kg-dry	1	6/13/2017 2:51:29 AM
m,p-Xylene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
o-Xylene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Styrene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Isopropylbenzene	ND	0.0865		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Bromoform	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,1,2,2-Tetrachloroethane	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
n-Propylbenzene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Bromobenzene	ND	0.0325		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,3,5-Trimethylbenzene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
2-Chlorotoluene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
4-Chlorotoluene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
tert-Butylbenzene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,2,3-Trichloropropane	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,2,4-Trichlorobenzene	ND	0.0541		mg/Kg-dry	1	6/13/2017 2:51:29 AM
sec-Butylbenzene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
4-Isopropyltoluene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,3-Dichlorobenzene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,4-Dichlorobenzene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
n-Butylbenzene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,2-Dichlorobenzene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,2-Dibromo-3-chloropropane	ND	0.541		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,2,4-Trimethylbenzene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Hexachlorobutadiene	ND	0.108		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Naphthalene	ND	0.0325		mg/Kg-dry	1	6/13/2017 2:51:29 AM
1,2,3-Trichlorobenzene	ND	0.0216		mg/Kg-dry	1	6/13/2017 2:51:29 AM
Surr: Dibromofluoromethane	89.5	56.5-129		%Rec	1	6/13/2017 2:51:29 AM
Surr: Toluene-d8	97.6	64.5-151		%Rec	1	6/13/2017 2:51:29 AM
Surr: 1-Bromo-4-fluorobenzene	94.8	63.1-141		%Rec	1	6/13/2017 2:51:29 AM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 10:20:00 AM

Project: KLB PO 0005

Lab ID: 1706132-007

Matrix: Soil

Client Sample ID: PR-TP-7-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Mercury by EPA Method 7471

Batch ID: 17334 Analyst: WF

Mercury	ND	0.272		mg/Kg-dry	1	6/13/2017 2:04:51 PM
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Total Metals by EPA Method 6020

Batch ID: 17342 Analyst: TN

Arsenic	2.81	0.0851		mg/Kg-dry	1	6/13/2017 4:59:12 PM
Barium	40.7	0.425		mg/Kg-dry	1	6/13/2017 4:59:12 PM
Cadmium	ND	0.170		mg/Kg-dry	1	6/13/2017 4:59:12 PM
Chromium	29.9	0.0851		mg/Kg-dry	1	6/13/2017 4:59:12 PM
Lead	11.5	0.170		mg/Kg-dry	1	6/13/2017 4:59:12 PM
Selenium	0.935	0.425		mg/Kg-dry	1	6/13/2017 4:59:12 PM
Silver	ND	0.0851		mg/Kg-dry	1	6/13/2017 4:59:12 PM

Sample Moisture (Percent Moisture)

Batch ID: R36763 Analyst: BB

Percent Moisture	11.6	0.500		wt%	1	6/13/2017 8:10:01 AM
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Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 10:30:00 AM

Project: KLB PO 0005

Lab ID: 1706132-008

Matrix: Soil

Client Sample ID: PR-TP-7-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Hydrocarbon Identification by NWTPH-HCID

Batch ID: 17332

Analyst: SG

Gasoline	ND	21.3		mg/Kg-dry	1	6/12/2017 10:30:34 PM
Mineral Spirits	ND	32.0		mg/Kg-dry	1	6/12/2017 10:30:34 PM
Kerosene	ND	53.4		mg/Kg-dry	1	6/12/2017 10:30:34 PM
Diesel (Fuel Oil)	ND	53.4		mg/Kg-dry	1	6/12/2017 10:30:34 PM
Heavy Oil	ND	107		mg/Kg-dry	1	6/12/2017 10:30:34 PM
Mineral Oil	ND	107		mg/Kg-dry	1	6/12/2017 10:30:34 PM
Surr: 2-Fluorobiphenyl	123	50-150		%Rec	1	6/12/2017 10:30:34 PM
Surr: o-Terphenyl	126	50-150		%Rec	1	6/12/2017 10:30:34 PM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17345

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0642	Q	mg/Kg-dry	1	6/13/2017 3:20:05 AM
Chloromethane	ND	0.0642		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Vinyl chloride	ND	0.00214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Bromomethane	ND	0.0963		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Trichlorofluoromethane (CFC-11)	ND	0.0535		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Chloroethane	ND	0.0642		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,1-Dichloroethene	ND	0.0535		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Methylene chloride	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
trans-1,2-Dichloroethene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Methyl tert-butyl ether (MTBE)	ND	0.0535		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,1-Dichloroethane	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
2,2-Dichloropropane	ND	0.0535	Q	mg/Kg-dry	1	6/13/2017 3:20:05 AM
cis-1,2-Dichloroethene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Chloroform	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,1,1-Trichloroethane (TCA)	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,1-Dichloropropene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Carbon tetrachloride	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,2-Dichloroethane (EDC)	ND	0.0321		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Benzene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Trichloroethene (TCE)	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,2-Dichloropropane	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Bromodichloromethane	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Dibromomethane	ND	0.0428		mg/Kg-dry	1	6/13/2017 3:20:05 AM
cis-1,3-Dichloropropene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Toluene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
trans-1,3-Dichloropropylene	ND	0.0321		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,1,2-Trichloroethane	ND	0.0321		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,3-Dichloropropane	ND	0.0535		mg/Kg-dry	1	6/13/2017 3:20:05 AM



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 10:30:00 AM

Project: KLB PO 0005

Lab ID: 1706132-008

Matrix: Soil

Client Sample ID: PR-TP-7-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17345

Analyst: NG

Tetrachloroethene (PCE)	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Dibromochloromethane	ND	0.0321		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,2-Dibromoethane (EDB)	ND	0.00535		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Chlorobenzene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,1,1,2-Tetrachloroethane	ND	0.0321		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Ethylbenzene	ND	0.0321		mg/Kg-dry	1	6/13/2017 3:20:05 AM
m,p-Xylene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
o-Xylene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Styrene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Isopropylbenzene	ND	0.0856		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Bromoform	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,1,2,2-Tetrachloroethane	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
n-Propylbenzene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Bromobenzene	ND	0.0321		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,3,5-Trimethylbenzene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
2-Chlorotoluene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
4-Chlorotoluene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
tert-Butylbenzene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,2,3-Trichloropropane	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,2,4-Trichlorobenzene	ND	0.0535		mg/Kg-dry	1	6/13/2017 3:20:05 AM
sec-Butylbenzene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
4-Isopropyltoluene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,3-Dichlorobenzene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,4-Dichlorobenzene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
n-Butylbenzene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,2-Dichlorobenzene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,2-Dibromo-3-chloropropane	ND	0.535		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,2,4-Trimethylbenzene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Hexachlorobutadiene	ND	0.107		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Naphthalene	ND	0.0321		mg/Kg-dry	1	6/13/2017 3:20:05 AM
1,2,3-Trichlorobenzene	ND	0.0214		mg/Kg-dry	1	6/13/2017 3:20:05 AM
Surr: Dibromofluoromethane	86.6	56.5-129		%Rec	1	6/13/2017 3:20:05 AM
Surr: Toluene-d8	116	64.5-151		%Rec	1	6/13/2017 3:20:05 AM
Surr: 1-Bromo-4-fluorobenzene	93.5	63.1-141		%Rec	1	6/13/2017 3:20:05 AM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 10:30:00 AM

Project: KLB PO 0005

Lab ID: 1706132-008

Matrix: Soil

Client Sample ID: PR-TP-7-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Mercury by EPA Method 7471

Batch ID: 17334 Analyst: WF

Mercury	ND	0.287		mg/Kg-dry	1	6/13/2017 2:06:28 PM
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Total Metals by EPA Method 6020

Batch ID: 17342 Analyst: TN

Arsenic	3.00	0.0923		mg/Kg-dry	1	6/13/2017 5:03:13 PM
Barium	36.2	0.461		mg/Kg-dry	1	6/13/2017 5:03:13 PM
Cadmium	ND	0.185		mg/Kg-dry	1	6/13/2017 5:03:13 PM
Chromium	21.9	0.0923		mg/Kg-dry	1	6/13/2017 5:03:13 PM
Lead	6.03	0.185		mg/Kg-dry	1	6/13/2017 5:03:13 PM
Selenium	0.708	0.461		mg/Kg-dry	1	6/13/2017 5:03:13 PM
Silver	ND	0.0923		mg/Kg-dry	1	6/13/2017 5:03:13 PM

Sample Moisture (Percent Moisture)

Batch ID: R36763 Analyst: BB

Percent Moisture	17.9	0.500		wt%	1	6/13/2017 8:10:01 AM
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Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 11:05:00 AM

Project: KLB PO 0005

Lab ID: 1706132-010

Matrix: Soil

Client Sample ID: PR-TP-8-5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 17332

Analyst: SG

Diesel (Fuel Oil)	ND	21.4		mg/Kg-dry	1	6/13/2017 2:25:04 AM
Heavy Oil	1,020	53.5		mg/Kg-dry	1	6/13/2017 2:25:04 AM
Surr: 2-Fluorobiphenyl	120	50-150		%Rec	1	6/13/2017 2:25:04 AM
Surr: o-Terphenyl	124	50-150		%Rec	1	6/13/2017 2:25:04 AM

Hydrocarbon Identification by NWTPH-HCID

Batch ID: 17332

Analyst: SG

Gasoline	ND	21.4		mg/Kg-dry	1	6/13/2017 2:25:04 AM
Mineral Spirits	ND	32.1		mg/Kg-dry	1	6/13/2017 2:25:04 AM
Kerosene	ND	53.5		mg/Kg-dry	1	6/13/2017 2:25:04 AM
Diesel (Fuel Oil)	ND	53.5		mg/Kg-dry	1	6/13/2017 2:25:04 AM
Heavy Oil	DETECT	107		mg/Kg-dry	1	6/13/2017 2:25:04 AM
Mineral Oil	ND	107		mg/Kg-dry	1	6/13/2017 2:25:04 AM
Surr: 2-Fluorobiphenyl	120	50-150		%Rec	1	6/13/2017 2:25:04 AM
Surr: o-Terphenyl	124	50-150		%Rec	1	6/13/2017 2:25:04 AM

Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 17333

Analyst: BT

Phenol	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Bis(2-chloroethyl) ether	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
2-Chlorophenol	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
1,3-Dichlorobenzene	ND	88.4		µg/Kg-dry	1	6/13/2017 12:22:57 AM
1,4-Dichlorobenzene	ND	88.4		µg/Kg-dry	1	6/13/2017 12:22:57 AM
1,2-Dichlorobenzene	ND	88.4		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Benzyl alcohol	ND	118	Q	µg/Kg-dry	1	6/13/2017 12:22:57 AM
2-Methylphenol (o-cresol)	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Hexachloroethane	ND	118	Q	µg/Kg-dry	1	6/13/2017 12:22:57 AM
N-Nitrosodi-n-propylamine	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Nitrobenzene	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Isophorone	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
3&4-Methylphenol (m, p-cresol)	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
2-Nitrophenol	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
2,4-Dimethylphenol	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Bis(2-chloroethoxy)methane	ND	88.4		µg/Kg-dry	1	6/13/2017 12:22:57 AM
2,4-Dichlorophenol	ND	118	Q	µg/Kg-dry	1	6/13/2017 12:22:57 AM
1,2,4-Trichlorobenzene	ND	88.4		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Naphthalene	ND	59.0		µg/Kg-dry	1	6/13/2017 12:22:57 AM
4-Chloroaniline	ND	88.4		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Hexachlorobutadiene	ND	88.4		µg/Kg-dry	1	6/13/2017 12:22:57 AM



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 11:05:00 AM

Project: KLB PO 0005

Lab ID: 1706132-010

Matrix: Soil

Client Sample ID: PR-TP-8-5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 17333

Analyst: BT

4-Chloro-3-methylphenol	ND	236		µg/Kg-dry	1	6/13/2017 12:22:57 AM
2-Methylnaphthalene	ND	59.0		µg/Kg-dry	1	6/13/2017 12:22:57 AM
1-Methylnaphthalene	ND	59.0		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Hexachlorocyclopentadiene	ND	118	Q	µg/Kg-dry	1	6/13/2017 12:22:57 AM
2,4,6-Trichlorophenol	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
2,4,5-Trichlorophenol	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
2-Chloronaphthalene	ND	88.4		µg/Kg-dry	1	6/13/2017 12:22:57 AM
2-Nitroaniline	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Acenaphthene	ND	59.0		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Dimethylphthalate	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
2,6-Dinitrotoluene	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Acenaphthylene	ND	59.0		µg/Kg-dry	1	6/13/2017 12:22:57 AM
2,4-Dinitrophenol	ND	236		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Dibenzofuran	ND	88.4		µg/Kg-dry	1	6/13/2017 12:22:57 AM
2,4-Dinitrotoluene	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
4-Nitrophenol	ND	590		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Fluorene	ND	59.0		µg/Kg-dry	1	6/13/2017 12:22:57 AM
4-Chlorophenyl phenyl ether	ND	88.4		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Diethylphthalate	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
4,6-Dinitro-2-methylphenol	ND	236	Q	µg/Kg-dry	1	6/13/2017 12:22:57 AM
4-Bromophenyl phenyl ether	ND	88.4		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Hexachlorobenzene	ND	88.4		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Pentachlorophenol	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Phenanthrene	ND	59.0		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Anthracene	ND	59.0		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Carbazole	ND	88.4		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Di-n-butylphthalate	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Fluoranthene	ND	59.0		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Pyrene	ND	59.0		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Butyl Benzylphthalate	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
bis(2-Ethylhexyl)adipate	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Benz (a) anthracene	ND	59.0		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Chrysene	ND	59.0		µg/Kg-dry	1	6/13/2017 12:22:57 AM
bis (2-Ethylhexyl) phthalate	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Di-n-octyl phthalate	ND	118		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Benzo (b) fluoranthene	ND	59.0		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Benzo (k) fluoranthene	ND	59.0		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Benzo (a) pyrene	ND	59.0		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Indeno (1,2,3-cd) pyrene	ND	59.0		µg/Kg-dry	1	6/13/2017 12:22:57 AM



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 11:05:00 AM

Project: KLB PO 0005

Lab ID: 1706132-010

Matrix: Soil

Client Sample ID: PR-TP-8-5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Semi-Volatile Organic Compounds by EPA Method 8270

Batch ID: 17333

Analyst: BT

Dibenz (a,h) anthracene	ND	59.0		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Benzo (g,h,i) perylene	ND	59.0		µg/Kg-dry	1	6/13/2017 12:22:57 AM
Surr: 2,4,6-Tribromophenol	150	14.8-165		%Rec	1	6/13/2017 12:22:57 AM
Surr: 2-Fluorobiphenyl	72.9	15-123		%Rec	1	6/13/2017 12:22:57 AM
Surr: Nitrobenzene-d5	80.3	10-133		%Rec	1	6/13/2017 12:22:57 AM
Surr: Phenol-d6	106	11.6-133		%Rec	1	6/13/2017 12:22:57 AM
Surr: p-Terphenyl	98.5	26.7-159		%Rec	1	6/13/2017 12:22:57 AM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17345

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0727	Q	mg/Kg-dry	1	6/13/2017 3:48:41 AM
Chloromethane	ND	0.0727		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Vinyl chloride	ND	0.00242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Bromomethane	ND	0.109		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Trichlorofluoromethane (CFC-11)	ND	0.0606		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Chloroethane	ND	0.0727		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,1-Dichloroethene	ND	0.0606		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Methylene chloride	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
trans-1,2-Dichloroethene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Methyl tert-butyl ether (MTBE)	ND	0.0606		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,1-Dichloroethane	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
2,2-Dichloropropane	ND	0.0606	Q	mg/Kg-dry	1	6/13/2017 3:48:41 AM
cis-1,2-Dichloroethene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Chloroform	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,1,1-Trichloroethane (TCA)	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,1-Dichloropropene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Carbon tetrachloride	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,2-Dichloroethane (EDC)	ND	0.0363		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Benzene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Trichloroethene (TCE)	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,2-Dichloropropane	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Bromodichloromethane	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Dibromomethane	ND	0.0484		mg/Kg-dry	1	6/13/2017 3:48:41 AM
cis-1,3-Dichloropropene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Toluene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
trans-1,3-Dichloropropylene	ND	0.0363		mg/Kg-dry	1	6/13/2017 3:48:41 AM



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 11:05:00 AM

Project: KLB PO 0005

Lab ID: 1706132-010

Matrix: Soil

Client Sample ID: PR-TP-8-5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17345

Analyst: NG

1,1,2-Trichloroethane	ND	0.0363		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,3-Dichloropropane	ND	0.0606		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Tetrachloroethene (PCE)	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Dibromochloromethane	ND	0.0363		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,2-Dibromoethane (EDB)	ND	0.00606		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Chlorobenzene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,1,1,2-Tetrachloroethane	ND	0.0363		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Ethylbenzene	ND	0.0363		mg/Kg-dry	1	6/13/2017 3:48:41 AM
m,p-Xylene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
o-Xylene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Styrene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Isopropylbenzene	ND	0.0969		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Bromoform	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,1,2,2-Tetrachloroethane	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
n-Propylbenzene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Bromobenzene	ND	0.0363		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,3,5-Trimethylbenzene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
2-Chlorotoluene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
4-Chlorotoluene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
tert-Butylbenzene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,2,3-Trichloropropane	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,2,4-Trichlorobenzene	ND	0.0606		mg/Kg-dry	1	6/13/2017 3:48:41 AM
sec-Butylbenzene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
4-Isopropyltoluene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,3-Dichlorobenzene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,4-Dichlorobenzene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
n-Butylbenzene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,2-Dichlorobenzene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,2-Dibromo-3-chloropropane	ND	0.606		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,2,4-Trimethylbenzene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Hexachlorobutadiene	ND	0.121		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Naphthalene	ND	0.0363		mg/Kg-dry	1	6/13/2017 3:48:41 AM
1,2,3-Trichlorobenzene	ND	0.0242		mg/Kg-dry	1	6/13/2017 3:48:41 AM
Surr: Dibromofluoromethane	89.2	56.5-129		%Rec	1	6/13/2017 3:48:41 AM
Surr: Toluene-d8	98.8	64.5-151		%Rec	1	6/13/2017 3:48:41 AM
Surr: 1-Bromo-4-fluorobenzene	95.1	63.1-141		%Rec	1	6/13/2017 3:48:41 AM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 11:05:00 AM

Project: KLB PO 0005

Lab ID: 1706132-010

Matrix: Soil

Client Sample ID: PR-TP-8-5

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Mercury by EPA Method 7471

Batch ID: 17334 Analyst: WF

Mercury	ND	0.292		mg/Kg-dry	1	6/13/2017 2:08:05 PM
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Total Metals by EPA Method 6020

Batch ID: 17342 Analyst: TN

Arsenic	5.13	0.0984		mg/Kg-dry	1	6/13/2017 5:07:15 PM
Barium	60.2	0.492		mg/Kg-dry	1	6/13/2017 5:07:15 PM
Cadmium	ND	0.197		mg/Kg-dry	1	6/13/2017 5:07:15 PM
Chromium	42.0	0.0984		mg/Kg-dry	1	6/13/2017 5:07:15 PM
Lead	17.6	0.197		mg/Kg-dry	1	6/13/2017 5:07:15 PM
Selenium	1.40	0.492		mg/Kg-dry	1	6/13/2017 5:07:15 PM
Silver	ND	0.0984		mg/Kg-dry	1	6/13/2017 5:07:15 PM

Sample Moisture (Percent Moisture)

Batch ID: R36763 Analyst: BB

Percent Moisture	20.6	0.500		wt%	1	6/13/2017 8:10:01 AM
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Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 12:30:00 PM

Project: KLB PO 0005

Lab ID: 1706132-015

Matrix: Soil

Client Sample ID: PR-TP-11-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Hydrocarbon Identification by NWTPH-HCID

Batch ID: 17332

Analyst: SG

Gasoline	ND	19.6		mg/Kg-dry	1	6/12/2017 10:59:59 PM
Mineral Spirits	ND	29.3		mg/Kg-dry	1	6/12/2017 10:59:59 PM
Kerosene	ND	48.9		mg/Kg-dry	1	6/12/2017 10:59:59 PM
Diesel (Fuel Oil)	ND	48.9		mg/Kg-dry	1	6/12/2017 10:59:59 PM
Heavy Oil	ND	97.8		mg/Kg-dry	1	6/12/2017 10:59:59 PM
Mineral Oil	ND	97.8		mg/Kg-dry	1	6/12/2017 10:59:59 PM
Surr: 2-Fluorobiphenyl	114	50-150		%Rec	1	6/12/2017 10:59:59 PM
Surr: o-Terphenyl	122	50-150		%Rec	1	6/12/2017 10:59:59 PM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17345

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0633	Q	mg/Kg-dry	1	6/13/2017 4:17:18 AM
Chloromethane	ND	0.0633		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Vinyl chloride	ND	0.00211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Bromomethane	ND	0.0949		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Trichlorofluoromethane (CFC-11)	ND	0.0527		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Chloroethane	ND	0.0633		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,1-Dichloroethene	ND	0.0527		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Methylene chloride	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
trans-1,2-Dichloroethene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Methyl tert-butyl ether (MTBE)	ND	0.0527		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,1-Dichloroethane	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
2,2-Dichloropropane	ND	0.0527	Q	mg/Kg-dry	1	6/13/2017 4:17:18 AM
cis-1,2-Dichloroethene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Chloroform	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,1,1-Trichloroethane (TCA)	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,1-Dichloropropene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Carbon tetrachloride	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,2-Dichloroethane (EDC)	ND	0.0316		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Benzene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Trichloroethene (TCE)	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,2-Dichloropropane	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Bromodichloromethane	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Dibromomethane	ND	0.0422		mg/Kg-dry	1	6/13/2017 4:17:18 AM
cis-1,3-Dichloropropene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Toluene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
trans-1,3-Dichloropropylene	ND	0.0316		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,1,2-Trichloroethane	ND	0.0316		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,3-Dichloropropane	ND	0.0527		mg/Kg-dry	1	6/13/2017 4:17:18 AM



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 12:30:00 PM

Project: KLB PO 0005

Lab ID: 1706132-015

Matrix: Soil

Client Sample ID: PR-TP-11-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17345

Analyst: NG

Tetrachloroethene (PCE)	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Dibromochloromethane	ND	0.0316		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,2-Dibromoethane (EDB)	ND	0.00527		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Chlorobenzene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,1,1,2-Tetrachloroethane	ND	0.0316		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Ethylbenzene	ND	0.0316		mg/Kg-dry	1	6/13/2017 4:17:18 AM
m,p-Xylene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
o-Xylene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Styrene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Isopropylbenzene	ND	0.0844		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Bromoform	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,1,2,2-Tetrachloroethane	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
n-Propylbenzene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Bromobenzene	ND	0.0316		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,3,5-Trimethylbenzene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
2-Chlorotoluene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
4-Chlorotoluene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
tert-Butylbenzene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,2,3-Trichloropropane	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,2,4-Trichlorobenzene	ND	0.0527		mg/Kg-dry	1	6/13/2017 4:17:18 AM
sec-Butylbenzene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
4-Isopropyltoluene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,3-Dichlorobenzene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,4-Dichlorobenzene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
n-Butylbenzene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,2-Dichlorobenzene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,2-Dibromo-3-chloropropane	ND	0.527		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,2,4-Trimethylbenzene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Hexachlorobutadiene	ND	0.105		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Naphthalene	ND	0.0316		mg/Kg-dry	1	6/13/2017 4:17:18 AM
1,2,3-Trichlorobenzene	ND	0.0211		mg/Kg-dry	1	6/13/2017 4:17:18 AM
Surr: Dibromofluoromethane	85.8	56.5-129		%Rec	1	6/13/2017 4:17:18 AM
Surr: Toluene-d8	117	64.5-151		%Rec	1	6/13/2017 4:17:18 AM
Surr: 1-Bromo-4-fluorobenzene	92.9	63.1-141		%Rec	1	6/13/2017 4:17:18 AM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 12:30:00 PM

Project: KLB PO 0005

Lab ID: 1706132-015

Matrix: Soil

Client Sample ID: PR-TP-11-3

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Mercury by EPA Method 7471

Batch ID: 17334 Analyst: WF

Mercury	ND	0.260		mg/Kg-dry	1	6/13/2017 2:09:48 PM
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Total Metals by EPA Method 6020

Batch ID: 17342 Analyst: TN

Arsenic	2.68	0.0831		mg/Kg-dry	1	6/13/2017 5:11:17 PM
Barium	37.9	0.415		mg/Kg-dry	1	6/13/2017 5:11:17 PM
Cadmium	ND	0.166		mg/Kg-dry	1	6/13/2017 5:11:17 PM
Chromium	30.8	0.0831		mg/Kg-dry	1	6/13/2017 5:11:17 PM
Lead	28.6	0.166		mg/Kg-dry	1	6/13/2017 5:11:17 PM
Selenium	0.965	0.415		mg/Kg-dry	1	6/13/2017 5:11:17 PM
Silver	ND	0.0831		mg/Kg-dry	1	6/13/2017 5:11:17 PM

Sample Moisture (Percent Moisture)

Batch ID: R36763 Analyst: BB

Percent Moisture	7.39	0.500		wt%	1	6/13/2017 8:10:01 AM
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Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 12:48:00 PM

Project: KLB PO 0005

Lab ID: 1706132-016

Matrix: Soil

Client Sample ID: PR-TP-11-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Hydrocarbon Identification by NWTPH-HCID

Batch ID: 17332

Analyst: SG

Gasoline	ND	24.4		mg/Kg-dry	1	6/12/2017 11:58:32 PM
Mineral Spirits	ND	36.7		mg/Kg-dry	1	6/12/2017 11:58:32 PM
Kerosene	ND	61.1		mg/Kg-dry	1	6/12/2017 11:58:32 PM
Diesel (Fuel Oil)	ND	61.1		mg/Kg-dry	1	6/12/2017 11:58:32 PM
Heavy Oil	ND	122		mg/Kg-dry	1	6/12/2017 11:58:32 PM
Mineral Oil	ND	122		mg/Kg-dry	1	6/12/2017 11:58:32 PM
Surr: 2-Fluorobiphenyl	117	50-150		%Rec	1	6/12/2017 11:58:32 PM
Surr: o-Terphenyl	122	50-150		%Rec	1	6/12/2017 11:58:32 PM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17345

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0694	Q	mg/Kg-dry	1	6/13/2017 4:45:52 AM
Chloromethane	ND	0.0694		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Vinyl chloride	ND	0.00231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Bromomethane	ND	0.104		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Trichlorofluoromethane (CFC-11)	ND	0.0578		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Chloroethane	ND	0.0694		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,1-Dichloroethene	ND	0.0578		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Methylene chloride	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
trans-1,2-Dichloroethene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Methyl tert-butyl ether (MTBE)	ND	0.0578		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,1-Dichloroethane	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
2,2-Dichloropropane	ND	0.0578	Q	mg/Kg-dry	1	6/13/2017 4:45:52 AM
cis-1,2-Dichloroethene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Chloroform	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,1,1-Trichloroethane (TCA)	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,1-Dichloropropene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Carbon tetrachloride	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,2-Dichloroethane (EDC)	ND	0.0347		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Benzene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Trichloroethene (TCE)	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,2-Dichloropropane	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Bromodichloromethane	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Dibromomethane	ND	0.0463		mg/Kg-dry	1	6/13/2017 4:45:52 AM
cis-1,3-Dichloropropene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Toluene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
trans-1,3-Dichloropropylene	ND	0.0347		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,1,2-Trichloroethane	ND	0.0347		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,3-Dichloropropane	ND	0.0578		mg/Kg-dry	1	6/13/2017 4:45:52 AM



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 12:48:00 PM

Project: KLB PO 0005

Lab ID: 1706132-016

Matrix: Soil

Client Sample ID: PR-TP-11-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17345

Analyst: NG

Tetrachloroethene (PCE)	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Dibromochloromethane	ND	0.0347		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,2-Dibromoethane (EDB)	ND	0.00578		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Chlorobenzene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,1,1,2-Tetrachloroethane	ND	0.0347		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Ethylbenzene	ND	0.0347		mg/Kg-dry	1	6/13/2017 4:45:52 AM
m,p-Xylene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
o-Xylene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Styrene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Isopropylbenzene	ND	0.0925		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Bromoform	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,1,2,2-Tetrachloroethane	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
n-Propylbenzene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Bromobenzene	ND	0.0347		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,3,5-Trimethylbenzene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
2-Chlorotoluene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
4-Chlorotoluene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
tert-Butylbenzene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,2,3-Trichloropropane	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,2,4-Trichlorobenzene	ND	0.0578		mg/Kg-dry	1	6/13/2017 4:45:52 AM
sec-Butylbenzene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
4-Isopropyltoluene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,3-Dichlorobenzene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,4-Dichlorobenzene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
n-Butylbenzene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,2-Dichlorobenzene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,2-Dibromo-3-chloropropane	ND	0.578		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,2,4-Trimethylbenzene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Hexachlorobutadiene	ND	0.116		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Naphthalene	ND	0.0347		mg/Kg-dry	1	6/13/2017 4:45:52 AM
1,2,3-Trichlorobenzene	ND	0.0231		mg/Kg-dry	1	6/13/2017 4:45:52 AM
Surr: Dibromofluoromethane	87.6	56.5-129		%Rec	1	6/13/2017 4:45:52 AM
Surr: Toluene-d8	97.8	64.5-151		%Rec	1	6/13/2017 4:45:52 AM
Surr: 1-Bromo-4-fluorobenzene	93.8	63.1-141		%Rec	1	6/13/2017 4:45:52 AM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Analytical Report

Work Order: 1706132
Date Reported: 6/14/2017

Client: O'Neill Service Group

Collection Date: 6/12/2017 12:48:00 PM

Project: KLB PO 0005

Lab ID: 1706132-016

Matrix: Soil

Client Sample ID: PR-TP-11-8

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Mercury by EPA Method 7471

Batch ID: 17334 Analyst: WF

Mercury	ND	0.307		mg/Kg-dry	1	6/13/2017 2:11:27 PM
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Total Metals by EPA Method 6020

Batch ID: 17342 Analyst: TN

Arsenic	4.33	0.0952		mg/Kg-dry	1	6/13/2017 5:15:18 PM
Barium	68.6	0.476		mg/Kg-dry	1	6/13/2017 5:15:18 PM
Cadmium	ND	0.190		mg/Kg-dry	1	6/13/2017 5:15:18 PM
Chromium	50.5	0.0952		mg/Kg-dry	1	6/13/2017 5:15:18 PM
Lead	10.8	0.190		mg/Kg-dry	1	6/13/2017 5:15:18 PM
Selenium	0.987	0.476		mg/Kg-dry	1	6/13/2017 5:15:18 PM
Silver	ND	0.0952		mg/Kg-dry	1	6/13/2017 5:15:18 PM

Sample Moisture (Percent Moisture)

Batch ID: R36763 Analyst: BB

Percent Moisture	18.6	0.500		wt%	1	6/13/2017 8:10:01 AM
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Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID	MB-17332	SampType: MBLK		Units: mg/Kg		Prep Date: 6/12/2017		RunNo: 36756			
Client ID:	MBLKS	Batch ID: 17332				Analysis Date: 6/12/2017		SeqNo: 705449			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	22.5		20.00		113	50	150				
Surr: o-Terphenyl	23.2		20.00		116	50	150				

Sample ID	LCS-17332	SampType:	LCS	Units:	mg/Kg	Prep Date:	6/12/2017	RunNo:	36756		
Client ID:	LCSS	Batch ID:	17332	Analysis Date:	6/12/2017	SeqNo:	705450				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	543	20.0	500.0	0	109	65	135				
Surr: 2-Fluorobiphenyl	22.8		20.00		114	50	150				
Surr: o-Terphenyl	25.0		20.00		125	50	150				

Sample ID	1706124-001ADUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36756		
Client ID:	BATCH	Batch ID:	17332	Analysis Date:	6/12/2017	SeqNo:	705452				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	ND	21.8						0		30	
Heavy Oil	ND	54.5						0		30	
Surr: 2-Fluorobiphenyl	23.7		21.81		109	50	150		0		
Surr: o-Terphenyl	25.1		21.81		115	50	150		0		

Sample ID	1706124-001AMS	SampType:	MS	Units:	mg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36756		
Client ID:	BATCH	Batch ID:	17332			Analysis Date:	6/12/2017	SeqNo:	705462		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	566	21.0	525.9	0	108	65	135				
Surr: 2-Fluorobiphenyl	23.9		21.03		114	50	150				
Surr: o-Terphenyl	26.2		21.03		125	50	150				



Date: 6/14/2017

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Sample ID	1706124-001AMS	SampType:	MS	Units:	mg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36756		
Client ID:	BATCH	Batch ID:	17332	Analysis Date:	6/12/2017	SeqNo:	705462				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID	1706124-001AMSD	SampType:	MSD	Units:	mg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36756		
Client ID:	BATCH	Batch ID:	17332			Analysis Date:	6/12/2017	SeqNo:	705463		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	587	21.0	525.9	0	112	65	135	565.9	3.70	30	
Surr: 2-Fluorobiphenyl	23.4		21.03		111	50	150		0		
Surr: o-Terphenyl	26.2		21.03		124	50	150		0		

Sample ID	1706132-015ADUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36756		
Client ID:	PR-TP-11-3	Batch ID:	17332			Analysis Date:	6/12/2017	SeqNo:	705785		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.8						0		30	
Heavy Oil	ND	52.0						0		30	
Surr: 2-Fluorobiphenyl	24.4		20.79		117	50	150		0		
Surr: o-Terphenyl	25.4		20.79		122	50	150		0		



Date: 6/14/2017

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Hydrocarbon Identification by NWTPH-HCID

Sample ID	MB-17332	SampType:	MBLK		Units:	mg/Kg		Prep Date:	6/12/2017		RunNo:	36779	
Client ID:	MBLKS	Batch ID:	17332					Analysis Date:	6/12/2017		SeqNo:	705870	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val		%RPD	RPDLimit	Qual
Gasoline		ND	20.0										
Mineral Spirits		ND	30.0										
Kerosene		ND	50.0										
Diesel (Fuel Oil)		ND	50.0										
Heavy Oil		ND	100										
Mineral Oil		ND	100										
Surr: 2-Fluorobiphenyl		22.5		20.00		113	50	150					
Surr: o-Terphenyl		23.2		20.00		116	50	150					

Sample ID	LCS-17332	SampType:	LCS	Units:	mg/Kg	Prep Date:	6/12/2017	RunNo:	36779		
Client ID:	LCSS	Batch ID:	17332			Analysis Date:	6/12/2017	SeqNo:	705871		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	543	50.0	500.0	0	109	65	135				
Surr: 2-Fluorobiphenyl	22.8		20.00		114	50	150				
Surr: o-Terphenyl	25.0		20.00		125	50	150				

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Mercury by EPA Method 7471

Sample ID	MB-17334	SampType: MBLK			Units: mg/Kg		Prep Date: 6/12/2017			RunNo: 36750		
Client ID:	MBLKS	Batch ID: 17334			Analysis Date: 6/13/2017					SeqNo: 706039		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Mercury ND 0.250

Sample ID	LCS-17334	SampType: LCS			Units: mg/Kg		Prep Date: 6/12/2017			RunNo: 36750		
Client ID:	LCSS	Batch ID: 17334			Analysis Date: 6/13/2017			SeqNo: 706040				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Mercury 0.469 0.250 0.5000 0 93.8 80 120

Sample ID	1706056-001ADUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36750		
Client ID:	BATCH	Batch ID:	17334	Analysis Date:	6/13/2017	SeqNo:	706018				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury ND 0.255 0 20

Sample ID	1706056-001AMS	SampType:	MS	Units:	mg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36750		
Client ID:	BATCH	Batch ID:	17334			Analysis Date:	6/13/2017	SeqNo:	706019		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.460 0.255 0.5100 0.01924 86.4 70 130

Sample ID	1706056-001AMSD	SampType:	MSD	Units:	mg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36750		
Client ID:	BATCH	Batch ID:	17334	Analysis Date:	6/13/2017	SeqNo:	706020				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 0.445 0.255 0.5100 0.01924 83.4 70 130 0.4600 3.38 20



Date: 6/14/2017

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Sample Moisture (Percent Moisture)

Sample ID	1706132-002ADUP	SampType:	DUP	Units:	wt%	Prep Date:	6/13/2017	RunNo:	36763		
Client ID:	PR-TP-4-8	Batch ID:	R36763			Analysis Date:	6/13/2017	SeqNo:	705586		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	23.1	0.500						26.19	12.6	20	

Sample ID	1706134-013ADUP	SampType:	DUP	Units:	wt%	Prep Date:	6/13/2017	RunNo:	36763		
Client ID:	BATCH	Batch ID:	R36763	Analysis Date:	6/13/2017	SeqNo:	705607				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	21.9	0.500						22.42	2.35	20	



Date: 6/14/2017

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	MB-17333	SampType:	MBLK		Units:	µg/Kg		Prep Date:	6/12/2017		RunNo:	36778	
Client ID:	MBLKS	Batch ID:	17333					Analysis Date:	6/12/2017		SeqNo:	705806	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Phenol	ND	100											
Bis(2-chloroethyl) ether	ND	100											
2-Chlorophenol	ND	100											
1,3-Dichlorobenzene	ND	75.0											
1,4-Dichlorobenzene	ND	75.0											
1,2-Dichlorobenzene	ND	75.0											
Benzyl alcohol	ND	100										Q	
2-Methylphenol (o-cresol)	ND	100											
Hexachloroethane	ND	100										Q	
N-Nitrosodi-n-propylamine	ND	100											
Nitrobenzene	ND	100											
Isophorone	ND	100											
3&4-Methylphenol (m, p-cresol)	ND	100											
2-Nitrophenol	ND	100											
2,4-Dimethylphenol	ND	100											
Bis(2-chloroethoxy)methane	ND	75.0											
2,4-Dichlorophenol	ND	100										Q	
1,2,4-Trichlorobenzene	ND	75.0											
Naphthalene	ND	50.0											
4-Chloroaniline	ND	75.0											
Hexachlorobutadiene	ND	75.0											
4-Chloro-3-methylphenol	ND	200											
2-Methylnaphthalene	ND	50.0											
1-Methylnaphthalene	ND	50.0											
Hexachlorocyclopentadiene	ND	100										Q	
2,4,6-Trichlorophenol	ND	100											
2,4,5-Trichlorophenol	ND	100											
2-Chloronaphthalene	ND	75.0											
2-Nitroaniline	ND	100											
Acenaphthene	ND	50.0											
Dimethylphthalate	ND	100											



Date: 6/14/2017

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT
Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	MB-17333	SampType:	MBLK		Units:	µg/Kg		Prep Date:	6/12/2017		RunNo:	36778	
Client ID:	MBLKS	Batch ID:	17333					Analysis Date:	6/12/2017		SeqNo:	705806	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val		%RPD	RPDLimit	Qual
2,6-Dinitrotoluene		ND	100										
Acenaphthylene		ND	50.0										
2,4-Dinitrophenol		ND	200										
Dibenzofuran		ND	75.0										
2,4-Dinitrotoluene		ND	100										
4-Nitrophenol		ND	500										
Fluorene		ND	50.0										
4-Chlorophenyl phenyl ether		ND	75.0										
Diethylphthalate		ND	100										
4,6-Dinitro-2-methylphenol		ND	200										Q
4-Bromophenyl phenyl ether		ND	75.0										
Hexachlorobenzene		ND	75.0										
Pentachlorophenol		ND	100										
Phenanthrene		ND	50.0										
Anthracene		ND	50.0										
Carbazole		ND	75.0										
Di-n-butylphthalate		ND	100										
Fluoranthene		ND	50.0										
Pyrene		ND	50.0										
Butyl Benzylphthalate		ND	100										
bis(2-Ethylhexyl)adipate		ND	100										
Benz (a) anthracene		ND	50.0										
Chrysene		ND	50.0										
bis (2-Ethylhexyl) phthalate		ND	100										
Di-n-octyl phthalate		ND	100										
Benzo (b) fluoranthene		ND	50.0										
Benzo (k) fluoranthene		ND	50.0										
Benzo (a) pyrene		ND	50.0										
Indeno (1,2,3-cd) pyrene		ND	50.0										
Dibenz (a,h) anthracene		ND	50.0										
Benzo (q,h,l) perylene		ND	50.0										

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	MB-17333	SampType:	MBLK		Units:	µg/Kg			Prep Date:	6/12/2017		RunNo:	36778	
Client ID:	MBLKS	Batch ID:	17333						Analysis Date:	6/12/2017		SeqNo:	705806	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val		%RPD	RPDLimit	Qual	
Surr: 2,4,6-Tribromophenol		932		1,000		93.2	14.8	165						
Surr: 2-Fluorobiphenyl		333		500.0		66.5	15	123						
Surr: Nitrobenzene-d5		199		500.0		39.7	10	133						
Surr: Phenol-d6		985		1,000		98.5	11.6	133						
Surr: p-Terphenyl		568		500.0		114	26.7	159						

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample ID	LCS-17333	SampType:	LCS	Units:	µg/Kg	Prep Date:	6/12/2017	RunNo:	36778		
Client ID:	LCSS	Batch ID:	17333			Analysis Date:	6/12/2017	SeqNo:	705807		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	952	100	1,000	0	95.2	41.8	138				
Bis(2-chloroethyl) ether	998	100	1,000	0	99.8	49.8	141				
2-Chlorophenol	997	100	1,000	0	99.7	49.3	132				
1,3-Dichlorobenzene	910	75.0	1,000	0	91.0	35.9	128				
1,4-Dichlorobenzene	929	75.0	1,000	0	92.9	36.8	131				
1,2-Dichlorobenzene	913	75.0	1,000	0	91.3	41.8	128				
Benzyl alcohol	781	100	1,000	0	78.1	42.4	131				
2-Methylphenol (o-cresol)	936	100	1,000	0	93.6	47.2	134				
Hexachloroethane	956	100	1,000	0	95.6	25.4	144				
N-Nitrosodi-n-propylamine	1,040	100	1,000	0	104	39.8	135				
Nitrobenzene	1,030	100	1,000	0	103	50.3	136				
Isophorone	1,070	100	1,000	0	107	62.7	131				
3&4-Methylphenol (m, p-cresol)	480	100	500.0	0	96.1	57.4	131				
2-Nitrophenol	1,060	100	1,000	0	106	44.2	129				
2,4-Dimethylphenol	1,050	100	1,000	0	105	57.8	121				
Bis(2-chloroethoxy)methane	986	75.0	1,000	0	98.6	55.1	136				
2,4-Dichlorophenol	999	100	1,000	0	99.9	57.1	128				
1,2,4-Trichlorobenzene	953	75.0	1,000	0	95.3	36.2	140				
Naphthalene	966	50.0	1,000	0	96.6	52.9	131				

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	LCS-17333	SampType:	LCS	Units:	µg/Kg	Prep Date:	6/12/2017	RunNo:	36778		
Client ID:	LCSS	Batch ID:	17333			Analysis Date:	6/12/2017	SeqNo:	705807		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chloroaniline	975	75.0	1,000	0	97.5	10.4	130				
Hexachlorobutadiene	1,060	75.0	1,000	0	106	55.9	131				
4-Chloro-3-methylphenol	1,010	200	1,000	0	101	49.4	138				
2-Methylnaphthalene	998	50.0	1,000	0	99.8	56.3	132				
1-Methylnaphthalene	974	50.0	1,000	0	97.4	56.4	132				
Hexachlorocyclopentadiene	923	100	1,000	0	92.3	21	130				
2,4,6-Trichlorophenol	1,060	100	1,000	0	106	36.4	132				
2,4,5-Trichlorophenol	1,060	100	1,000	0	106	34.6	133				
2-Chloronaphthalene	983	75.0	1,000	0	98.3	33	120				
2-Nitroaniline	1,210	100	1,000	0	121	43.9	135				
Acenaphthene	1,020	50.0	1,000	0	102	49.2	127				
Dimethylphthalate	1,050	100	1,000	0	105	60.9	140				
2,6-Dinitrotoluene	1,110	100	1,000	0	111	54.6	127				
Acenaphthylene	1,000	50.0	1,000	0	100	53.7	137				
2,4-Dinitrophenol	1,040	200	2,000	0	52.0	7.9	119				
Dibenzofuran	967	75.0	1,000	0	96.7	38.2	125				
2,4-Dinitrotoluene	1,160	100	1,000	0	116	21.9	136				
4-Nitrophenol	882	500	1,000	0	88.2	25.4	138				
Fluorene	962	50.0	1,000	0	96.2	64.8	126				
4-Chlorophenyl phenyl ether	972	75.0	1,000	0	97.2	58.2	131				
Diethylphthalate	1,080	100	1,000	0	108	42.9	132				
4,6-Dinitro-2-methylphenol	771	200	1,000	0	77.1	12.9	110				
4-Bromophenyl phenyl ether	990	75.0	1,000	0	99.0	61.8	128				
Hexachlorobenzene	1,010	75.0	1,000	0	101	56.7	131				
Pentachlorophenol	687	100	1,000	0	68.7	10	123				
Phenanthrene	945	50.0	1,000	0	94.5	61.2	130				
Anthracene	969	50.0	1,000	0	96.9	59.2	135				
Carbazole	983	75.0	1,000	0	98.3	37	148				
Di-n-butylphthalate	1,130	100	1,000	0	113	46.6	145				
Fluoranthene	1,000	50.0	1,000	0	100	56.6	135				
Pyrene	970	50.0	1,000	0	97.0	45.4	140				

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	LCS-17333	SampType:	LCS	Units:	µg/Kg	Prep Date:	6/12/2017	RunNo:	36778		
Client ID:	LCSS	Batch ID:	17333			Analysis Date:	6/12/2017	SeqNo:	705807		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Butyl Benzylphthalate	1,190	100	1,000	0	119	31.1	157				
bis(2-Ethylhexyl)adipate	1,230	100	1,000	0	123	28.7	160				
Benz (a) anthracene	987	50.0	1,000	0	98.7	44	150				
Chrysene	970	50.0	1,000	0	97.0	58.9	129				
bis (2-Ethylhexyl) phthalate	1,260	100	1,000	0	126	36.3	149				
Di-n-octyl phthalate	1,310	100	1,000	0	131	31.5	152				
Benzo (b) fluoranthene	1,000	50.0	1,000	0	100	45.6	146				
Benzo (k) fluoranthene	1,010	50.0	1,000	0	101	45.5	138				
Benzo (a) pyrene	1,060	50.0	1,000	0	106	35.6	148				
Indeno (1,2,3-cd) pyrene	1,060	50.0	1,000	0	106	44.2	146				
Dibenz (a,h) anthracene	1,070	50.0	1,000	0	107	37.5	152				
Benzo (g,h,i) perylene	1,030	50.0	1,000	0	103	24.1	156				
Surr: 2,4,6-Tribromophenol	1,360		1,000		136	14.8	165				
Surr: 2-Fluorobiphenyl	272		500.0		54.3	15	123				
Surr: Nitrobenzene-d5	197		500.0		39.4	10	133				
Surr: Phenol-d6	1,100		1,000		110	11.6	133				
Surr: p-Terphenyl	559		500.0		112	26.7	159				

Sample ID	1706062-002ADUP	SampType:	DUP	Units:	µg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36778		
Client ID:	BATCH	Batch ID:	17333			Analysis Date:	6/12/2017	SeqNo:	705809		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	ND	139						0		50	
Bis(2-chloroethyl) ether	ND	139						0		50	
2-Chlorophenol	ND	139						0		50	
1,3-Dichlorobenzene	ND	104						0		50	
1,4-Dichlorobenzene	ND	104						0		50	
1,2-Dichlorobenzene	ND	104						0		50	
Benzyl alcohol	ND	139						0		50	Q
2-Methylphenol (o-cresol)	ND	139						0		50	



Date: 6/14/2017

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 CLIENT: O'Neill Service Group
 Project: KLB PO 0005

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Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	1706062-002ADUP	SampType:	DUP	Units:	µg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36778		
Client ID:	BATCH	Batch ID:	17333			Analysis Date:	6/12/2017	SeqNo:	705809		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexachloroethane	ND	139						0		50	Q
N-Nitrosodi-n-propylamine	ND	139						0		50	
Nitrobenzene	ND	139						0		50	
Isophorone	ND	139						0		50	
3&4-Methylphenol (m, p-cresol)	ND	139						0		50	
2-Nitrophenol	ND	139						0		50	
2,4-Dimethylphenol	ND	139						146.4	80.8	50	
Bis(2-chloroethoxy)methane	ND	104						0		50	
2,4-Dichlorophenol	ND	139						0		50	Q
1,2,4-Trichlorobenzene	ND	104						0		50	
Naphthalene	ND	69.3						0		50	
4-Chloroaniline	ND	104						0		50	
Hexachlorobutadiene	ND	104						0		50	
4-Chloro-3-methylphenol	ND	277						0		50	
2-Methylnaphthalene	ND	69.3						0		50	
1-Methylnaphthalene	ND	69.3						0		50	
Hexachlorocyclopentadiene	ND	139						0		50	Q
2,4,6-Trichlorophenol	ND	139						0		50	
2,4,5-Trichlorophenol	ND	139						0		50	
2-Chloronaphthalene	ND	104						0		50	
2-Nitroaniline	ND	139						0		50	
Acenaphthene	ND	69.3						0		50	
Dimethylphthalate	ND	139						0		50	
2,6-Dinitrotoluene	ND	139						0		50	
Acenaphthylene	ND	69.3						0		50	
2,4-Dinitrophenol	ND	277						0		50	
Dibenzofuran	ND	104						0		50	
2,4-Dinitrotoluene	ND	139						0		50	
4-Nitrophenol	ND	693						0		50	
Fluorene	ND	69.3						0		50	
4-Chlorophenyl phenyl ether	ND	104						0		50	

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QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	1706062-002ADUP	SampType:	DUP	Units:	µg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36778		
Client ID:	BATCH	Batch ID:	17333			Analysis Date:	6/12/2017	SeqNo:	705809		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diethylphthalate	402	139						865.6	73.1	50	R
4,6-Dinitro-2-methylphenol	ND	277						0		50	Q
4-Bromophenyl phenyl ether	ND	104						0		50	
Hexachlorobenzene	ND	104						0		50	
Pentachlorophenol	ND	139						0		50	
Phenanthrene	ND	69.3						116.9	56.1	50	
Anthracene	ND	69.3						0		50	
Carbazole	ND	104						0		50	
Di-n-butylphthalate	ND	139						0		50	
Fluoranthene	176	69.3						388.6	75.2	50	R
Pyrene	244	69.3						468.4	63.1	50	R
Butyl Benzylphthalate	ND	139						0		50	
bis(2-Ethylhexyl)adipate	ND	139						0		50	
Benz (a) anthracene	ND	69.3						167.8	92.0	50	R
Chrysene	160	69.3						322.5	67.5	50	R
bis (2-Ethylhexyl) phthalate	ND	139						0		50	
Di-n-octyl phthalate	ND	139						0		50	
Benzo (b) fluoranthene	212	69.3						325.3	42.2	50	R
Benzo (k) fluoranthene	ND	69.3						92.15	82.4	50	
Benzo (a) pyrene	ND	69.3						0		50	
Indeno (1,2,3-cd) pyrene	83.4	69.3						143.6	53.1	50	
Dibenz (a,h) anthracene	ND	69.3						0		50	I
Benzo (g,h,i) perylene	70.6	69.3						119.9	51.8	50	I
Surr: 2,4,6-Tribromophenol	1,870		1,385		135	14.8	165		0		
Surr: 2-Fluorobiphenyl	525		692.5		75.9	15	123		0		
Surr: Nitrobenzene-d5	576		692.5		83.1	10	133		0		
Surr: Phenol-d6	1,220		1,385		88.1	11.6	133		0		
Surr: p-Terphenyl	640		692.5		92.4	26.7	159		0		

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Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	1706062-002ADUP	SampType:	DUP	Units:	µg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36778		
Client ID:	BATCH	Batch ID:	17333			Analysis Date:	6/12/2017	SeqNo:	705809		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:

R - High RPD due to suspected sample inhomogeneity. The method is in control as indicated by the Laboratory Control Sample (LCS).

I - Internal standards were outside of established acceptance criteria. Re-analysis and/or matrix spike samples yielded the same result indicating a possible matrix effect.

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

S - Outlying surrogate recovery(ies) observed.

Sample ID	1706062-002AMS	SampType:	MS	Units:	µg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36778		
Client ID:	BATCH	Batch ID:	17333	Analysis Date:				6/12/2017	SeqNo:	705810	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	1,140	138	1,376	48.68	79.3	29.2	146				
Bis(2-chloroethyl) ether	1,000	138	1,376	0	73.0	34.4	135				
2-Chlorophenol	1,160	138	1,376	0	84.6	44	134				
1,3-Dichlorobenzene	854	103	1,376	0	62.1	21.1	133				
1,4-Dichlorobenzene	843	103	1,376	0	61.3	20.9	131				
1,2-Dichlorobenzene	863	103	1,376	0	62.7	35	131				
Benzyl alcohol	1,070	138	1,376	0	77.8	30.8	159				
2-Methylphenol (o-cresol)	1,190	138	1,376	0	86.8	39.9	125				
Hexachloroethane	387	138	1,376	0	28.1	15.4	139				
N-Nitrosodi-n-propylamine	1,460	138	1,376	0	106	26.4	151				
Nitrobenzene	1,280	138	1,376	0	93.2	61.4	130				
Isophorone	1,350	138	1,376	0	98.4	61.8	132				
3&4-Methylphenol (m, p-cresol)	593	138	687.8	0	86.1	37.6	125				
2-Nitrophenol	1,370	138	1,376	0	99.7	33.5	132				
2,4-Dimethylphenol	1,220	138	1,376	146.4	78.1	46	158				
Bis(2-chloroethoxy)methane	1,100	103	1,376	0	80.1	46.8	121				
2,4-Dichlorophenol	838	138	1,376	0	60.9	33.9	133				
1,2,4-Trichlorobenzene	987	103	1,376	0	71.8	29.2	140				
Naphthalene	950	68.8	1,376	0	69.0	44.4	136				
4-Chloroaniline	935	103	1,376	0	68.0	27	126				
Hexachlorobutadiene	1,190	103	1,376	0	86.3	38.2	138				



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Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	1706062-002AMS	SampType:	MS	Units:	µg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36778		
Client ID:	BATCH	Batch ID:	17333			Analysis Date:	6/12/2017	SeqNo:	705810		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chloro-3-methylphenol	1,300	275	1,376	0	94.6	36.8	159				
2-Methylnaphthalene	1,270	68.8	1,376	0	92.3	51.7	138				
1-Methylnaphthalene	1,520	68.8	1,376	0	110	51.8	131				
Hexachlorocyclopentadiene	ND	138	1,376	0	0	10	133				S
2,4,6-Trichlorophenol	1,080	138	1,376	0	78.7	34.6	129				
2,4,5-Trichlorophenol	1,000	138	1,376	0	72.7	54.7	127				
2-Chloronaphthalene	1,140	103	1,376	0	83.2	42.1	124				
2-Nitroaniline	1,710	138	1,376	0	124	39.3	145				
Acenaphthene	1,150	68.8	1,376	0	83.6	49.6	129				
Dimethylphthalate	1,310	138	1,376	42.23	92.1	32.9	137				
2,6-Dinitrotoluene	1,400	138	1,376	0	102	30.3	136				
Acenaphthylene	1,170	68.8	1,376	0	85.0	39.9	129				
2,4-Dinitrophenol	718	275	2,751	0	26.1	10	149				
Dibenzofuran	1,100	103	1,376	0	80.0	41.2	128				
2,4-Dinitrotoluene	1,350	138	1,376	0	98.3	30.9	139				
4-Nitrophenol	1,180	688	1,376	0	86.1	15.6	160				
Fluorene	1,120	68.8	1,376	0	81.6	37.7	133				
4-Chlorophenyl phenyl ether	1,160	103	1,376	0	84.1	70.9	128				
Diethylphthalate	1,810	138	1,376	865.6	68.5	36.7	130				
4,6-Dinitro-2-methylphenol	481	275	1,376	0	35.0	21.9	143				
4-Bromophenyl phenyl ether	1,120	103	1,376	0	81.2	69.6	136				
Hexachlorobenzene	1,110	103	1,376	0	81.0	34.3	131				
Pentachlorophenol	1,610	138	1,376	0	117	28.2	156				
Phenanthrene	1,150	68.8	1,376	116.9	75.3	32.2	139				
Anthracene	1,130	68.8	1,376	0	82.2	43.9	128				
Carbazole	1,150	103	1,376	0	83.6	64.1	152				
Di-n-butylphthalate	1,510	138	1,376	0	110	35.1	142				
Fluoranthene	1,310	68.8	1,376	388.6	66.6	33.8	141				
Pyrene	1,320	68.8	1,376	468.4	62.0	31.4	151				
Butyl Benzylphthalate	1,780	138	1,376	0	129	30.4	138				
bis(2-Ethylhexyl)adipate	1,930	138	1,376	0	140	32	136				S

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QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	1706062-002AMS	SampType:	MS	Units:	µg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36778		
Client ID:	BATCH	Batch ID:	17333			Analysis Date:	6/12/2017	SeqNo:	705810		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benz (a) anthracene	1,120	68.8	1,376	167.8	69.2	36	138				
Chrysene	1,260	68.8	1,376	322.5	68.0	41.6	125				
bis (2-Ethylhexyl) phthalate	2,260	138	1,376	0	165	40.8	170				
Di-n-octyl phthalate	1,960	138	1,376	0	142	34.6	142				S
Benzo (b) fluoranthene	1,090	68.8	1,376	325.3	55.5	52.1	136				
Benzo (k) fluoranthene	747	68.8	1,376	92.15	47.6	45	140				
Benzo (a) pyrene	767	68.8	1,376	0	55.8	50.5	137				
Indeno (1,2,3-cd) pyrene	764	68.8	1,376	143.6	45.1	38.1	155				
Dibenz (a,h) anthracene	672	68.8	1,376	0	48.8	40.7	152				I
Benzo (g,h,l) perylene	620	68.8	1,376	119.9	36.3	34	157				I
Surr: 2,4,6-Tribromophenol	1,800		1,376		131	14.8	165				
Surr: 2-Fluorobiphenyl	623		687.8		90.6	15	123				
Surr: Nitrobenzene-d5	671		687.8		97.6	10	133				
Surr: Phenol-d6	1,330		1,376		96.7	11.6	133				
Surr: p-Terphenyl	654		687.8		95.0	26.7	159				

NOTES:

S - Outlying spike recovery(ies) observed for Hexachlorocyclopentadiene and bis(2-Ethylhexyl)adipate. A duplicate analysis was performed with similar results indicating a possible matrix effect.

S - Outlying spike recovery observed for Di-n-octyl phthalate. A duplicate analysis was performed and recovered within range.

I - Internal standards were outside of established acceptance criteria. Re-analysis and/or matrix spike samples yielded the same result indicating a possible matrix effect.

Sample ID	1706062-002AMSD	SampType:	MSD	Units:	µg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36778		
Client ID:	BATCH	Batch ID:	17333			Analysis Date:	6/12/2017	SeqNo:	705811		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenol	1,140	127	1,267	48.68	85.9	29.2	146	1,139	0.140	50	
Bis(2-chloroethyl) ether	1,050	127	1,267	0	82.8	34.4	135	1,004	4.29	50	
2-Chlorophenol	1,150	127	1,267	0	90.7	44	134	1,164	1.34	50	
1,3-Dichlorobenzene	940	95.0	1,267	0	74.2	21.1	133	854.0	9.59	50	
1,4-Dichlorobenzene	940	95.0	1,267	0	74.2	20.9	131	843.1	10.9	50	
1,2-Dichlorobenzene	957	95.0	1,267	0	75.5	35	131	862.5	10.4	50	
Benzyl alcohol	990	127	1,267	0	78.2	30.8	159	1,071	7.79	50	



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Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	1706062-002AMSD	SampType: MSD	Units: µg/Kg-dry			Prep Date: 6/12/2017			RunNo: 36778		
Client ID:	BATCH	Batch ID:	17333	Analysis Date: 6/12/2017					SeqNo: 705811		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Methylphenol (o-cresol)	1,160	127	1,267	0	91.3	39.9	125	1,194	3.24	50	
Hexachloroethane	277	127	1,267	0	21.9	15.4	139	386.8	33.0	50	
N-Nitrosodi-n-propylamine	1,470	127	1,267	0	116	26.4	151	1,461	0.550	50	
Nitrobenzene	1,300	127	1,267	0	103	61.4	130	1,283	1.40	50	
Isophorone	1,400	127	1,267	0	110	61.8	132	1,354	3.12	50	
3&4-Methylphenol (m, p-cresol)	549	127	633.4	0	86.7	37.6	125	592.5	7.55	50	
2-Nitrophenol	1,380	127	1,267	0	109	33.5	132	1,371	0.475	50	
2,4-Dimethylphenol	1,240	127	1,267	146.4	86.7	46	158	1,221	1.92	50	
Bis(2-chloroethoxy)methane	1,160	95.0	1,267	0	91.5	46.8	121	1,102	5.03	50	
2,4-Dichlorophenol	785	127	1,267	0	62.0	33.9	133	838.1	6.50	50	
1,2,4-Trichlorobenzene	1,030	95.0	1,267	0	81.2	29.2	140	987.3	4.10	50	
Naphthalene	930	63.3	1,267	0	73.4	44.4	136	949.5	2.07	50	
4-Chloroaniline	853	95.0	1,267	0	67.3	27	126	934.8	9.17	50	
Hexachlorobutadiene	1,070	95.0	1,267	0	84.6	38.2	138	1,187	10.2	50	
4-Chloro-3-methylphenol	1,130	253	1,267	0	89.5	36.8	159	1,301	13.8	50	
2-Methylnaphthalene	1,280	63.3	1,267	0	101	51.7	138	1,270	0.519	50	
1-Methylnaphthalene	1,580	63.3	1,267	0	125	51.8	131	1,518	4.17	50	
Hexachlorocyclopentadiene	ND	127	1,267	0	0	10	133	0		50	S
2,4,6-Trichlorophenol	1,010	127	1,267	0	79.7	34.6	129	1,083	6.99	50	
2,4,5-Trichlorophenol	945	127	1,267	0	74.6	54.7	127	1,000	5.74	50	
2-Chloronaphthalene	1,030	95.0	1,267	0	81.5	42.1	124	1,144	10.3	50	
2-Nitroaniline	1,580	127	1,267	0	125	39.3	145	1,711	7.99	50	
Acenaphthene	1,050	63.3	1,267	0	82.8	49.6	129	1,150	9.16	50	
Dimethylphthalate	1,200	127	1,267	42.23	91.3	32.9	137	1,310	8.80	50	
2,6-Dinitrotoluene	1,220	127	1,267	0	96.0	30.3	136	1,401	14.1	50	
Acenaphthylene	1,060	63.3	1,267	0	83.4	39.9	129	1,170	10.2	50	
2,4-Dinitrophenol	546	253	2,534	0	21.5	10	149	717.9	27.2	50	
Dibenzofuran	1,030	95.0	1,267	0	81.3	41.2	128	1,100	6.64	50	
2,4-Dinitrotoluene	1,230	127	1,267	0	96.8	30.9	139	1,352	9.72	50	
4-Nitrophenol	1,180	633	1,267	0	92.9	15.6	160	1,184	0.566	50	
Fluorene	1,030	63.3	1,267	0	81.1	37.7	133	1,123	8.87	50	

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

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Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	1706062-002AMSD	SampType: MSD	Units: µg/Kg-dry			Prep Date: 6/12/2017			RunNo: 36778		
Client ID:	BATCH	Batch ID:	17333	Analysis Date: 6/12/2017					SeqNo: 705811		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chlorophenyl phenyl ether	1,030	95.0	1,267	0	81.1	70.9	128	1,157	11.9	50	
Diethylphthalate	1,630	127	1,267	865.6	60.0	36.7	130	1,807	10.6	50	
4,6-Dinitro-2-methylphenol	296	253	1,267	0	23.4	21.9	143	480.9	47.5	50	
4-Bromophenyl phenyl ether	1,020	95.0	1,267	0	80.8	69.6	136	1,117	8.74	50	
Hexachlorobenzene	1,080	95.0	1,267	0	85.0	34.3	131	1,114	3.36	50	
Pentachlorophenol	1,390	127	1,267	0	110	28.2	156	1,609	14.7	50	
Phenanthrene	1,090	63.3	1,267	116.9	76.7	32.2	139	1,152	5.74	50	
Anthracene	1,110	63.3	1,267	0	88.0	43.9	128	1,131	1.49	50	
Carbazole	1,100	95.0	1,267	0	86.6	64.1	152	1,150	4.69	50	
Di-n-butylphthalate	1,440	127	1,267	0	113	35.1	142	1,512	5.20	50	
Fluoranthene	1,210	63.3	1,267	388.6	65.1	33.8	141	1,305	7.35	50	
Pyrene	1,250	63.3	1,267	468.4	61.7	31.4	151	1,321	5.50	50	
Butyl Benzylphthalate	1,600	127	1,267	0	126	30.4	138	1,780	10.7	50	
bis(2-Ethylhexyl)adipate	1,770	127	1,267	0	140	32	136	1,930	8.38	50	S
Benz (a) anthracene	996	63.3	1,267	167.8	65.4	36	138	1,120	11.7	50	
Chrysene	1,220	63.3	1,267	322.5	70.8	41.6	125	1,259	3.13	50	
bis (2-Ethylhexyl) phthalate	1,980	127	1,267	0	157	40.8	170	2,264	13.2	50	
Di-n-octyl phthalate	1,790	127	1,267	0	142	34.6	142	1,957	8.65	50	
Benzo (b) fluoranthene	880	63.3	1,267	325.3	43.7	52.1	136	1,089	21.3	50	S
Benzo (k) fluoranthene	742	63.3	1,267	92.15	51.3	45	140	747.3	0.704	50	
Benzo (a) pyrene	651	63.3	1,267	0	51.4	50.5	137	767.4	16.5	50	
Indeno (1,2,3-cd) pyrene	695	63.3	1,267	143.6	43.6	38.1	155	764.3	9.44	50	
Dibenz (a,h) anthracene	610	63.3	1,267	0	48.2	40.7	152	671.5	9.54	50	I
Benzo (g,h,l) perylene	564	63.3	1,267	119.9	35.1	34	157	619.6	9.33	50	I
Surr: 2,4,6-Tribromophenol	1,620		1,267		128	14.8	165		0		
Surr: 2-Fluorobiphenyl	615		633.4		97.0	15	123		0		
Surr: Nitrobenzene-d5	746		633.4		118	10	133		0		
Surr: Phenol-d6	1,270		1,267		100	11.6	133		0		
Surr: p-Terphenyl	645		633.4		102	26.7	159		0		

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Semi-Volatile Organic Compounds by EPA Method 8270

Sample ID	1706062-002AMSD	SampType:	MSD	Units:	µg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36778		
Client ID:	BATCH	Batch ID:	17333			Analysis Date:	6/12/2017	SeqNo:	705811		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:

S - Outlying spike recovery(ies) observed for Hexachlorocyclopentadiene and bis(2-Ethylhexyl)adipate. A duplicate analysis was performed with similar results indicating a possible matrix effect.

S - Outlying spike recovery observed for Benzo(b)fluoranthene. A duplicate analysis was performed and recovered within range.

I - Internal standards were outside of established acceptance criteria. Re-analysis and/or matrix spike samples yielded the same result indicating a possible matrix effect.



Date: 6/14/2017

Work Order: 1706132
 CLIENT: O'Neill Service Group
 Project: KLB PO 0005

QC SUMMARY REPORT

Total Metals by EPA Method 6020

Sample ID	MB-17342	SampType:	MBLK	Units:	mg/Kg	Prep Date:	6/12/2017	RunNo:	36787		
Client ID:	MBLKS	Batch ID:	17342			Analysis Date:	6/13/2017	SeqNo:	706260		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	ND	0.0787
Barium	ND	0.394
Cadmium	ND	0.157
Chromium	ND	0.0787
Lead	ND	0.157
Selenium	ND	0.394
Silver	ND	0.0787

Sample ID	LCS-17342	SampType:	LCS	Units:	mg/Kg	Prep Date:	6/12/2017	RunNo:	36787		
Client ID:	LCSS	Batch ID:	17342			Analysis Date:	6/13/2017	SeqNo:	706261		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	38.2	0.0775	38.76	0	98.6	80	120
Barium	38.8	0.388	38.76	0	100	80	120
Cadmium	1.92	0.155	1.938	0	98.8	80	120
Chromium	36.1	0.0775	38.76	0	93.2	80	120
Lead	20.0	0.155	19.38	0	103	80	120
Selenium	3.71	0.388	3.876	0	95.8	80	120
Silver	8.44	0.0775	9.690	0	87.1	80	120

Sample ID	1706076-003ADUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36787		
Client ID:	BATCH	Batch ID:	17342			Analysis Date:	6/13/2017	SeqNo:	706263		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	4.77	0.0905						4.900	2.66	20
Barium	80.9	0.453						81.40	0.564	20
Cadmium	ND	0.181						0		20
Chromium	44.7	0.0905						40.63	9.58	20
Lead	5.72	0.181						6.900	18.6	20
Selenium	1.31	0.453						1.058	21.4	20



Date: 6/14/2017

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT
Total Metals by EPA Method 6020

Sample ID	1706076-003ADUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36787		
Client ID:	BATCH	Batch ID:	17342	Analysis Date:	6/13/2017	SeqNo:	706263				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	ND	0.0905						0		20	

Sample ID	1706076-003AMS	SampType: MS		Units: mg/Kg-dry		Prep Date: 6/12/2017		RunNo: 36787			
Client ID:	BATCH	Batch ID: 17342				Analysis Date: 6/13/2017		SeqNo: 706267			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	52.8	0.0905	45.26	4.900	106	75	125				
Barium	129	0.453	45.26	81.40	105	75	125				
Cadmium	2.59	0.181	2.263	0.1027	110	75	125				
Chromium	90.0	0.0905	45.26	40.63	109	75	125				
Lead	26.4	0.181	22.63	6.900	86.2	75	125				
Selenium	5.87	0.453	4.526	1.058	106	75	125				
Silver	9.22	0.0905	11.31	0.05848	81.0	75	125				

Sample ID	1706076-003AMSD	SampType:	MSD	Units:			mg/Kg-dry	Prep Date:		6/12/2017	RunNo:		36787
Client ID:	BATCH	Batch ID:	17342	Analysis Date:					6/13/2017	SeqNo:			706268
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Arsenic	48.4	0.0898	44.91	4.900	96.8	75	125	52.85	8.85	20			
Barium	117	0.449	44.91	81.40	78.3	75	125	129.1	10.2	20			
Cadmium	2.37	0.180	2.245	0.1027	101	75	125	2.594	8.94	20			
Chromium	85.2	0.0898	44.91	40.63	99.3	75	125	90.02	5.48	20			
Lead	26.1	0.180	22.45	6.900	85.3	75	125	26.40	1.28	20			
Selenium	5.97	0.449	4.491	1.058	109	75	125	5.870	1.74	20			
Silver	7.95	0.0898	11.23	0.05848	70.3	75	125	9.221	14.8	20	S		

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range.



Date: 6/14/2017

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	MB-17345	SampType:	MBLK		Units:	mg/Kg		Prep Date:	6/12/2017		RunNo:	36782	
Client ID:	MBLKS	Batch ID:	17345					Analysis Date:	6/12/2017		SeqNo:	706013	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Dichlorodifluoromethane (CFC-12)	ND	0.0600											Q
Chloromethane	ND	0.0600											
Vinyl chloride	ND	0.00200											
Bromomethane	ND	0.0900											
Trichlorofluoromethane (CFC-11)	ND	0.0500											
Chloroethane	ND	0.0600											
1,1-Dichloroethene	ND	0.0500											
Methylene chloride	ND	0.0200											
trans-1,2-Dichloroethene	ND	0.0200											
Methyl tert-butyl ether (MTBE)	ND	0.0500											
1,1-Dichloroethane	ND	0.0200											
2,2-Dichloropropane	ND	0.0500											Q
cis-1,2-Dichloroethene	ND	0.0200											
Chloroform	ND	0.0200											
1,1,1-Trichloroethane (TCA)	ND	0.0200											
1,1-Dichloropropene	ND	0.0200											
Carbon tetrachloride	ND	0.0200											
1,2-Dichloroethane (EDC)	ND	0.0300											
Benzene	ND	0.0200											
Trichloroethene (TCE)	ND	0.0200											
1,2-Dichloropropane	ND	0.0200											
Bromodichloromethane	ND	0.0200											
Dibromomethane	ND	0.0400											
cis-1,3-Dichloropropene	ND	0.0200											
Toluene	ND	0.0200											
trans-1,3-Dichloropropylene	ND	0.0300											
1,1,2-Trichloroethane	ND	0.0300											
1,3-Dichloropropane	ND	0.0500											
Tetrachloroethene (PCE)	ND	0.0200											
Dibromochloromethane	ND	0.0300											
1,2-Dibromoethane (EDB)	ND	0.00500											



Date: 6/14/2017

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	MB-17345	SampType: MBLK		Units: mg/Kg		Prep Date: 6/12/2017			RunNo: 36782		
Client ID:	MBLKS	Batch ID: 17345		Analysis Date: 6/12/2017					SeqNo: 706013		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0300									
Ethylbenzene	ND	0.0300									
m,p-Xylene	ND	0.0200									
o-Xylene	ND	0.0200									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0800									
Bromoform	ND	0.0200									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0300									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0200									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0200									
1,2,4-Trichlorobenzene	ND	0.0500									
sec-Butylbenzene	ND	0.0200									
4-Isopropyltoluene	ND	0.0200									
1,3-Dichlorobenzene	ND	0.0200									
1,4-Dichlorobenzene	ND	0.0200									
n-Butylbenzene	ND	0.0200									
1,2-Dichlorobenzene	ND	0.0200									
1,2-Dibromo-3-chloropropane	ND	0.500									
1,2,4-Trimethylbenzene	ND	0.0200									
Hexachlorobutadiene	ND	0.100									
Naphthalene	ND	0.0300									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: Dibromofluoromethane	1.25		1.250		99.9	56.5	129				
Surr: Toluene-d8	1.45		1.250		116	64.5	151				
Surr: 1-Bromo-4-fluorobenzene	1.20		1.250		95.8	63.1	141				



Date: 6/14/2017

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT**Volatile Organic Compounds by EPA Method 8260C**

Sample ID	MB-17345	SampType: MBLK			Units: mg/Kg	Prep Date: 6/12/2017			RunNo: 36782		
Client ID:	MBLKS	Batch ID: 17345				Analysis Date: 6/12/2017			SeqNo: 706013		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample ID	LCS-17345	SampType: LCS		Units: mg/Kg		Prep Date: 6/12/2017			RunNo: 36782		
Client ID:	LCSS	Batch ID: 17345		Analysis Date: 6/12/2017					SeqNo: 706012		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.06	0.0600	1.000	0	106	14.3	167				
Chloromethane	0.977	0.0600	1.000	0	97.7	46	144				
Vinyl chloride	1.04	0.00200	1.000	0	104	43.4	151				
Bromomethane	1.11	0.0900	1.000	0	111	40.9	157				
Trichlorofluoromethane (CFC-11)	1.17	0.0500	1.000	0	117	36.9	156				
Chloroethane	1.14	0.0600	1.000	0	114	33.4	155				
1,1-Dichloroethene	1.16	0.0500	1.000	0	116	49.7	142				
Methylene chloride	1.16	0.0200	1.000	0	116	46.3	140				
trans-1,2-Dichloroethene	1.17	0.0200	1.000	0	117	68	130				
Methyl tert-butyl ether (MTBE)	1.13	0.0500	1.000	0	113	66.3	145				
1,1-Dichloroethane	1.17	0.0200	1.000	0	117	61.9	137				
2,2-Dichloropropane	1.29	0.0500	1.000	0	129	35.5	186				
cis-1,2-Dichloroethene	1.17	0.0200	1.000	0	117	71.3	135				
Chloroform	1.18	0.0200	1.000	0	118	69	145				
1,1,1-Trichloroethane (TCA)	1.16	0.0200	1.000	0	116	69	132				
1,1-Dichloropropene	1.01	0.0200	1.000	0	101	72.7	131				
Carbon tetrachloride	0.966	0.0200	1.000	0	96.6	63.4	137				
1,2-Dichloroethane (EDC)	0.973	0.0300	1.000	0	97.3	50.9	162				
Benzene	1.00	0.0200	1.000	0	100	64.3	133				
Trichloroethene (TCE)	1.00	0.0200	1.000	0	100	65.5	137				
1,2-Dichloropropane	1.06	0.0200	1.000	0	106	63.2	142				
Bromodichloromethane	1.21	0.0200	1.000	0	121	53.4	131				
Dibromomethane	1.07	0.0400	1.000	0	107	60.1	146				
cis-1,3-Dichloropropene	1.22	0.0200	1.000	0	122	59.1	143				

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	LCS-17345	SampType:	LCS	Units:	mg/Kg	Prep Date:	6/12/2017	RunNo:	36782		
Client ID:	LCSS	Batch ID:	17345			Analysis Date:	6/12/2017	SeqNo:	706012		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	1.13	0.0200	1.000	0	113	67.3	138				
trans-1,3-Dichloropropylene	1.22	0.0300	1.000	0	122	49.2	149				
1,1,2-Trichloroethane	1.14	0.0300	1.000	0	114	56.9	147				
1,3-Dichloropropane	1.15	0.0500	1.000	0	115	56.1	153				
Tetrachloroethene (PCE)	1.18	0.0200	1.000	0	118	52.7	150				
Dibromochloromethane	1.23	0.0300	1.000	0	123	70.6	144				
1,2-Dibromoethane (EDB)	1.12	0.00500	1.000	0	112	50.5	154				
Chlorobenzene	0.992	0.0200	1.000	0	99.2	76.1	123				
1,1,1,2-Tetrachloroethane	0.999	0.0300	1.000	0	99.9	65.9	141				
Ethylbenzene	1.00	0.0300	1.000	0	100	74	129				
m,p-Xylene	2.01	0.0200	2.000	0	101	70	124				
o-Xylene	1.01	0.0200	1.000	0	101	68.1	139				
Styrene	0.990	0.0200	1.000	0	99.0	73.3	146				
Isopropylbenzene	0.985	0.0800	1.000	0	98.5	70	130				
Bromoform	1.01	0.0200	1.000	0	101	67	154				
1,1,2,2-Tetrachloroethane	0.995	0.0200	1.000	0	99.5	44.8	165				
n-Propylbenzene	1.02	0.0200	1.000	0	102	74.8	125				
Bromobenzene	1.00	0.0300	1.000	0	100	49.2	144				
1,3,5-Trimethylbenzene	0.989	0.0200	1.000	0	98.9	74.6	123				
2-Chlorotoluene	1.01	0.0200	1.000	0	101	76.7	129				
4-Chlorotoluene	1.00	0.0200	1.000	0	100	77.5	125				
tert-Butylbenzene	0.997	0.0200	1.000	0	99.7	66.2	130				
1,2,3-Trichloropropane	1.01	0.0200	1.000	0	101	67.9	136				
1,2,4-Trichlorobenzene	1.01	0.0500	1.000	0	101	62.6	143				
sec-Butylbenzene	1.07	0.0200	1.000	0	107	75.6	133				
4-Isopropyltoluene	1.06	0.0200	1.000	0	106	76.8	131				
1,3-Dichlorobenzene	1.03	0.0200	1.000	0	103	72.8	128				
1,4-Dichlorobenzene	1.04	0.0200	1.000	0	104	72.6	126				
n-Butylbenzene	1.05	0.0200	1.000	0	105	65.3	136				
1,2-Dichlorobenzene	1.05	0.0200	1.000	0	105	72.8	126				
1,2-Dibromo-3-chloropropane	1.02	0.500	1.000	0	102	40.2	155				



Date: 6/14/2017

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT**Volatile Organic Compounds by EPA Method 8260C**

Sample ID	LCS-17345		SampType: LCS		Units: mg/Kg		Prep Date: 6/12/2017		RunNo: 36782		
Client ID:	LCSS		Batch ID: 17345				Analysis Date: 6/12/2017		SeqNo: 706012		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	0.991	0.0200	1.000	0	99.1	77.5	129				
Hexachlorobutadiene	1.06	0.100	1.000	0	106	42	151				
Naphthalene	1.06	0.0300	1.000	0	106	58.4	160				
1,2,3-Trichlorobenzene	1.00	0.0200	1.000	0	100	54.8	143				
Surr: Dibromofluoromethane	1.36		1.250		109	56.5	129				
Surr: Toluene-d8	1.52		1.250		122	64.5	151				
Surr: 1-Bromo-4-fluorobenzene	1.31		1.250		104	63.1	141				

Sample ID	1706132-004BDUP		SampType: DUP		Units: mg/Kg-dry		Prep Date: 6/12/2017		RunNo: 36782		
Client ID:	PR-TP-5-8		Batch ID: 17345				Analysis Date: 6/13/2017		SeqNo: 706002		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0686						0		30	Q
Chloromethane	ND	0.0686						0		30	
Vinyl chloride	ND	0.00229						0		30	
Bromomethane	ND	0.103						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0572						0		30	
Chloroethane	ND	0.0686						0		30	
1,1-Dichloroethene	ND	0.0572						0		30	
Methylene chloride	ND	0.0229						0		30	
trans-1,2-Dichloroethene	ND	0.0229						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0572						0		30	
1,1-Dichloroethane	ND	0.0229						0		30	
2,2-Dichloropropane	ND	0.0572						0		30	
cis-1,2-Dichloroethene	ND	0.0229						0		30	
Chloroform	ND	0.0229						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0229						0		30	
1,1-Dichloropropene	ND	0.0229						0		30	
Carbon tetrachloride	ND	0.0229						0		30	
1,2-Dichloroethane (EDC)	ND	0.0343						0		30	



Date: 6/14/2017

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	1706132-004BDUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36782		
Client ID:	PR-TP-5-8	Batch ID:	17345			Analysis Date:	6/13/2017	SeqNo:	706002		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0229						0		30	
Trichloroethene (TCE)	ND	0.0229						0		30	
1,2-Dichloropropane	ND	0.0229						0		30	
Bromodichloromethane	ND	0.0229						0		30	
Dibromomethane	ND	0.0457						0		30	
cis-1,3-Dichloropropene	ND	0.0229						0		30	
Toluene	ND	0.0229						0		30	
trans-1,3-Dichloropropylene	ND	0.0343						0		30	
1,1,2-Trichloroethane	ND	0.0343						0		30	
1,3-Dichloropropane	ND	0.0572						0		30	
Tetrachloroethene (PCE)	ND	0.0229						0		30	
Dibromochloromethane	ND	0.0343						0		30	
1,2-Dibromoethane (EDB)	ND	0.00572						0		30	
Chlorobenzene	ND	0.0229						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0343						0		30	
Ethylbenzene	ND	0.0343						0		30	
m,p-Xylene	ND	0.0229						0		30	
o-Xylene	ND	0.0229						0		30	
Styrene	ND	0.0229						0		30	
Isopropylbenzene	ND	0.0915						0		30	
Bromoform	ND	0.0229						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0229						0		30	
n-Propylbenzene	ND	0.0229						0		30	
Bromobenzene	ND	0.0343						0		30	
1,3,5-Trimethylbenzene	ND	0.0229						0		30	
2-Chlorotoluene	ND	0.0229						0		30	
4-Chlorotoluene	ND	0.0229						0		30	
tert-Butylbenzene	ND	0.0229						0		30	
1,2,3-Trichloropropane	ND	0.0229						0		30	
1,2,4-Trichlorobenzene	ND	0.0572						0		30	
sec-Butylbenzene	ND	0.0229						0		30	

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	1706132-004BDUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36782		
Client ID:	PR-TP-5-8	Batch ID:	17345			Analysis Date:	6/13/2017	SeqNo:	706002		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Isopropyltoluene	ND	0.0229						0		30	
1,3-Dichlorobenzene	ND	0.0229						0		30	
1,4-Dichlorobenzene	ND	0.0229						0		30	
n-Butylbenzene	ND	0.0229						0		30	
1,2-Dichlorobenzene	ND	0.0229						0		30	
1,2-Dibromo-3-chloropropane	ND	0.572						0		30	
1,2,4-Trimethylbenzene	ND	0.0229						0		30	
Hexachlorobutadiene	ND	0.114						0		30	
Naphthalene	ND	0.0343						0		30	
1,2,3-Trichlorobenzene	ND	0.0229						0		30	
Surr: Dibromofluoromethane	1.47		1.430		103	56.5	129		0		
Surr: Toluene-d8	1.64		1.430		115	64.5	151		0		
Surr: 1-Bromo-4-fluorobenzene	1.35		1.430		94.8	63.1	141		0		

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample ID	1706132-010BMS	SampType:	MS		Units:	mg/Kg-dry		Prep Date:	6/12/2017		RunNo:	36782	
Client ID:	PR-TP-8-5	Batch ID:	17345					Analysis Date:	6/13/2017		SeqNo:	706006	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Dichlorodifluoromethane (CFC-12)	1.12	0.0727	1.211	0	92.3	43.5	121						
Chloromethane	1.18	0.0727	1.211	0	97.5	45	130						
Vinyl chloride	1.09	0.00242	1.211	0	89.8	51.2	146						
Bromomethane	1.10	0.109	1.211	0	90.9	21.3	120						
Trichlorofluoromethane (CFC-11)	1.54	0.0606	1.211	0	128	35	131						
Chloroethane	1.30	0.0727	1.211	0	107	31.9	123						
1,1-Dichloroethene	1.31	0.0606	1.211	0	108	61.9	141						
Methylene chloride	1.35	0.0242	1.211	0.01811	110	54.7	142						
trans-1,2-Dichloroethene	1.27	0.0242	1.211	0	105	52	136						
Methyl tert-butyl ether (MTBE)	1.41	0.0606	1.211	0	117	54.4	132						
1,1-Dichloroethane	1.10	0.0242	1.211	0	91.1	51.8	141						



Date: 6/14/2017

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	1706132-010BMS	SampType:	MS	Units:	mg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36782		
Client ID:	PR-TP-8-5	Batch ID:	17345			Analysis Date:	6/13/2017	SeqNo:	706006		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,2-Dichloropropane	0.891	0.0606	1.211	0	73.5	36	123				
cis-1,2-Dichloroethene	1.11	0.0242	1.211	0	92.0	58.6	136				
Chloroform	1.11	0.0242	1.211	0	91.5	53.2	129				
1,1,1-Trichloroethane (TCA)	1.07	0.0242	1.211	0	88.0	58.3	145				
1,1-Dichloropropene	1.14	0.0242	1.211	0	94.3	55.1	138				
Carbon tetrachloride	1.03	0.0242	1.211	0	85.2	53.3	144				
1,2-Dichloroethane (EDC)	1.11	0.0363	1.211	0	91.4	51.3	139				
Benzene	1.14	0.0242	1.211	0	94.1	63.5	133				
Trichloroethene (TCE)	1.11	0.0242	1.211	0	91.7	68.6	132				
1,2-Dichloropropane	1.19	0.0242	1.211	0	98.7	59	136				
Bromodichloromethane	1.13	0.0242	1.211	0	93.6	50.7	141				
Dibromomethane	1.18	0.0484	1.211	0	97.6	50.6	137				
cis-1,3-Dichloropropene	1.33	0.0242	1.211	0	110	50.4	138				
Toluene	1.31	0.0242	1.211	0	108	63.4	132				
trans-1,3-Dichloropropylene	1.34	0.0363	1.211	0	111	44.1	147				
1,1,2-Trichloroethane	1.28	0.0363	1.211	0	105	51.6	137				
1,3-Dichloropropane	1.35	0.0606	1.211	0	111	53.1	134				
Tetrachloroethene (PCE)	1.30	0.0242	1.211	0	107	35.6	158				
Dibromochloromethane	1.19	0.0363	1.211	0	98.1	55.3	140				
1,2-Dibromoethane (EDB)	1.31	0.00606	1.211	0	108	50.4	136				
Chlorobenzene	1.12	0.0242	1.211	0	92.1	60	133				
1,1,1,2-Tetrachloroethane	0.992	0.0363	1.211	0	81.9	53.1	142				
Ethylbenzene	1.13	0.0363	1.211	0	93.6	54.5	134				
m,p-Xylene	2.27	0.0242	2.422	0	93.8	53.1	132				
o-Xylene	1.17	0.0242	1.211	0	96.8	53.3	139				
Styrene	1.13	0.0242	1.211	0	93.3	51.1	132				
Isopropylbenzene	1.14	0.0969	1.211	0	93.7	58.9	138				
Bromoform	0.858	0.0242	1.211	0	70.8	57.9	130				
1,1,2,2-Tetrachloroethane	1.08	0.0242	1.211	0	88.8	51.9	131				
n-Propylbenzene	1.16	0.0242	1.211	0	96.1	53.6	140				
Bromobenzene	1.13	0.0363	1.211	0	93.6	54.2	140				



Date: 6/14/2017

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT**Volatile Organic Compounds by EPA Method 8260C**

Sample ID	1706132-010BMS	SampType:	MS	Units:	mg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36782		
Client ID:	PR-TP-8-5	Batch ID:	17345			Analysis Date:	6/13/2017	SeqNo:	706006		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	1.13	0.0242	1.211	0	93.2	51.8	136				
2-Chlorotoluene	1.14	0.0242	1.211	0	93.9	51.6	136				
4-Chlorotoluene	1.14	0.0242	1.211	0	94.1	50.1	139				
tert-Butylbenzene	1.15	0.0242	1.211	0	94.6	50.5	135				
1,2,3-Trichloropropane	1.06	0.0242	1.211	0	87.5	50.5	131				
1,2,4-Trichlorobenzene	1.27	0.0606	1.211	0	105	50.8	130				
sec-Butylbenzene	1.26	0.0242	1.211	0	104	52.6	141				
4-Isopropyltoluene	1.25	0.0242	1.211	0	103	52.9	134				
1,3-Dichlorobenzene	1.17	0.0242	1.211	0	96.7	52.6	131				
1,4-Dichlorobenzene	1.18	0.0242	1.211	0	97.5	52.9	129				
n-Butylbenzene	1.26	0.0242	1.211	0	104	52.6	130				
1,2-Dichlorobenzene	1.18	0.0242	1.211	0	97.2	55.8	129				
1,2-Dibromo-3-chloropropane	0.951	0.606	1.211	0	78.5	40.5	131				
1,2,4-Trimethylbenzene	1.17	0.0242	1.211	0	96.4	50.6	137				
Hexachlorobutadiene	1.36	0.121	1.211	0	113	40.6	158				
Naphthalene	1.41	0.0363	1.211	0	116	52.3	124				
1,2,3-Trichlorobenzene	1.20	0.0242	1.211	0	98.9	54.4	124				
Surr: Dibromofluoromethane	1.51		1.514		99.6	56.5	129				
Surr: Toluene-d8	1.80		1.514		119	64.5	151				
Surr: 1-Bromo-4-fluorobenzene	1.59		1.514		105	63.1	141				

Sample ID	1706132-010BMSD	SampType: MSD	Units: mg/Kg-dry			Prep Date: 6/12/2017			RunNo: 36782		
Client ID:	PR-TP-8-5	Batch ID:	17345				Analysis Date: 6/13/2017			SeqNo: 706007	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	1.19	0.0727	1.211	0	98.1	43.5	121	1.118	6.13	30	
Chloromethane	1.31	0.0727	1.211	0	108	45	130	1.181	10.1	30	
Vinyl chloride	1.20	0.00242	1.211	0	99.1	51.2	146	1.088	9.82	30	
Bromomethane	1.26	0.109	1.211	0	104	21.3	120	1.101	13.3	30	
Trichlorofluoromethane (CFC-11)	1.68	0.0606	1.211	0	138	35	131	1.545	8.13	30	S



Date: 6/14/2017

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	1706132-010BMSD	SampType:	MSD	Units:	mg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36782		
Client ID:	PR-TP-8-5	Batch ID:	17345			Analysis Date:	6/13/2017	SeqNo:	706007		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroethane	1.47	0.0727	1.211	0	121	31.9	123	1.297	12.4	30	
1,1-Dichloroethene	1.45	0.0606	1.211	0	120	61.9	141	1.308	10.3	30	
Methylene chloride	1.43	0.0242	1.211	0.01811	117	54.7	142	1.350	5.82	30	
trans-1,2-Dichloroethene	1.39	0.0242	1.211	0	115	52	136	1.266	9.30	30	
Methyl tert-butyl ether (MTBE)	1.52	0.0606	1.211	0	126	54.4	132	1.412	7.42	30	
1,1-Dichloroethane	1.40	0.0242	1.211	0	116	51.8	141	1.104	23.7	30	
2,2-Dichloropropane	1.21	0.0606	1.211	0	100	36	123	0.8906	30.5	30	R
cis-1,2-Dichloroethene	1.38	0.0242	1.211	0	114	58.6	136	1.114	21.3	30	
Chloroform	1.14	0.0242	1.211	0	94.0	53.2	129	1.108	2.72	30	
1,1,1-Trichloroethane (TCA)	1.11	0.0242	1.211	0	91.9	58.3	145	1.065	4.38	30	
1,1-Dichloropropene	1.20	0.0242	1.211	0	99.5	55.1	138	1.142	5.32	30	
Carbon tetrachloride	1.02	0.0242	1.211	0	84.4	53.3	144	1.031	0.867	30	
1,2-Dichloroethane (EDC)	1.12	0.0363	1.211	0	92.5	51.3	139	1.107	1.11	30	
Benzene	1.18	0.0242	1.211	0	97.8	63.5	133	1.140	3.89	30	
Trichloroethene (TCE)	1.17	0.0242	1.211	0	96.4	68.6	132	1.110	4.98	30	
1,2-Dichloropropane	1.25	0.0242	1.211	0	103	59	136	1.195	4.27	30	
Bromodichloromethane	1.18	0.0242	1.211	0	97.6	50.7	141	1.134	4.19	30	
Dibromomethane	1.20	0.0484	1.211	0	99.3	50.6	137	1.181	1.82	30	
cis-1,3-Dichloropropene	1.38	0.0242	1.211	0	114	50.4	138	1.326	3.78	30	
Toluene	1.34	0.0242	1.211	0	111	63.4	132	1.310	2.45	30	
trans-1,3-Dichloropropylene	1.37	0.0363	1.211	0	114	44.1	147	1.338	2.67	30	
1,1,2-Trichloroethane	1.31	0.0363	1.211	0	108	51.6	137	1.275	2.42	30	
1,3-Dichloropropane	1.35	0.0606	1.211	0	112	53.1	134	1.347	0.251	30	
Tetrachloroethene (PCE)	1.38	0.0242	1.211	0	114	35.6	158	1.300	5.69	30	
Dibromochloromethane	1.22	0.0363	1.211	0	100	55.3	140	1.188	2.38	30	
1,2-Dibromoethane (EDB)	1.30	0.00606	1.211	0	108	50.4	136	1.306	0.112	30	
Chlorobenzene	1.16	0.0242	1.211	0	96.0	60	133	1.115	4.20	30	
1,1,1,2-Tetrachloroethane	1.07	0.0363	1.211	0	88.1	53.1	142	0.9922	7.23	30	
Ethylbenzene	1.19	0.0363	1.211	0	98.1	54.5	134	1.134	4.63	30	
m,p-Xylene	2.37	0.0242	2.422	0	97.9	53.1	132	2.272	4.27	30	
o-Xylene	1.20	0.0242	1.211	0	99.1	53.3	139	1.172	2.37	30	



Date: 6/14/2017

Work Order: 1706132
 CLIENT: O'Neill Service Group
 Project: KLB PO 0005

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	1706132-010BMSD	SampType: MSD	Units: mg/Kg-dry			Prep Date: 6/12/2017			RunNo: 36782		
Client ID:	PR-TP-8-5	Batch ID:	17345				Analysis Date: 6/13/2017			SeqNo: 706007	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	1.18	0.0242	1.211	0	97.2	51.1	132	1.130	4.10	30	
Isopropylbenzene	1.16	0.0969	1.211	0	96.1	58.9	138	1.135	2.53	30	
Bromoform	0.875	0.0242	1.211	0	72.3	57.9	130	0.8579	1.99	30	
1,1,2,2-Tetrachloroethane	1.11	0.0242	1.211	0	91.9	51.9	131	1.075	3.43	30	
n-Propylbenzene	1.20	0.0242	1.211	0	99.1	53.6	140	1.164	3.07	30	
Bromobenzene	1.18	0.0363	1.211	0	97.1	54.2	140	1.133	3.73	30	
1,3,5-Trimethylbenzene	1.15	0.0242	1.211	0	95.3	51.8	136	1.129	2.18	30	
2-Chlorotoluene	1.18	0.0242	1.211	0	97.3	51.6	136	1.138	3.46	30	
4-Chlorotoluene	1.18	0.0242	1.211	0	97.8	50.1	139	1.139	3.88	30	
tert-Butylbenzene	1.19	0.0242	1.211	0	98.5	50.5	135	1.146	3.99	30	
1,2,3-Trichloropropane	1.14	0.0242	1.211	0	94.5	50.5	131	1.059	7.76	30	
1,2,4-Trichlorobenzene	1.31	0.0606	1.211	0	108	50.8	130	1.274	3.00	30	
sec-Butylbenzene	1.27	0.0242	1.211	0	105	52.6	141	1.257	1.42	30	
4-Isopropyltoluene	1.28	0.0242	1.211	0	105	52.9	134	1.251	2.12	30	
1,3-Dichlorobenzene	1.23	0.0242	1.211	0	101	52.6	131	1.171	4.66	30	
1,4-Dichlorobenzene	1.22	0.0242	1.211	0	101	52.9	129	1.180	3.67	30	
n-Butylbenzene	1.30	0.0242	1.211	0	107	52.6	130	1.263	3.00	30	
1,2-Dichlorobenzene	1.24	0.0242	1.211	0	102	55.8	129	1.177	5.16	30	
1,2-Dibromo-3-chloropropane	0.991	0.606	1.211	0	81.8	40.5	131	0.9506	4.16	30	
1,2,4-Trimethylbenzene	1.19	0.0242	1.211	0	98.0	50.6	137	1.167	1.64	30	
Hexachlorobutadiene	1.46	0.121	1.211	0	121	40.6	158	1.365	7.02	30	
Naphthalene	1.33	0.0363	1.211	0	110	52.3	124	1.410	5.90	30	
1,2,3-Trichlorobenzene	1.25	0.0242	1.211	0	103	54.4	124	1.198	4.12	30	
Surr: Dibromofluoromethane	1.49		1.514		98.7	56.5	129		0		
Surr: Toluene-d8	1.80		1.514		119	64.5	151		0		
Surr: 1-Bromo-4-fluorobenzene	1.58		1.514		104	63.1	141		0		

NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range.

R - High RPD observed, spike recoveries are within range.



Date: 6/14/2017

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	1706112-002BDUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36782		
Client ID:	BATCH	Batch ID:	17345			Analysis Date:	6/13/2017	SeqNo:	705998		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0341						0		30	Q
Chloromethane	ND	0.0341						0		30	
Vinyl chloride	ND	0.00114						0		30	
Bromomethane	ND	0.0511						0		30	
Trichlorofluoromethane (CFC-11)	ND	0.0284						0		30	
Chloroethane	ND	0.0341						0		30	
1,1-Dichloroethene	ND	0.0284						0		30	
Methylene chloride	ND	0.0114						0		30	
trans-1,2-Dichloroethene	ND	0.0114						0		30	
Methyl tert-butyl ether (MTBE)	ND	0.0284						0		30	
1,1-Dichloroethane	ND	0.0114						0		30	
2,2-Dichloropropane	ND	0.0284						0		30	Q
cis-1,2-Dichloroethene	ND	0.0114						0		30	
Chloroform	ND	0.0114						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0114						0		30	
1,1-Dichloropropene	ND	0.0114						0		30	
Carbon tetrachloride	ND	0.0114						0		30	
1,2-Dichloroethane (EDC)	ND	0.0170						0		30	
Benzene	ND	0.0114						0		30	
Trichloroethene (TCE)	ND	0.0114						0		30	
1,2-Dichloropropane	ND	0.0114						0		30	
Bromodichloromethane	ND	0.0114						0		30	
Dibromomethane	ND	0.0227						0		30	
cis-1,3-Dichloropropene	ND	0.0114						0		30	
Toluene	ND	0.0114						0		30	
trans-1,3-Dichloropropylene	ND	0.0170						0		30	
1,1,2-Trichloroethane	ND	0.0170						0		30	
1,3-Dichloropropane	ND	0.0284						0		30	
Tetrachloroethene (PCE)	ND	0.0114						0		30	
Dibromochloromethane	ND	0.0170						0		30	
1,2-Dibromoethane (EDB)	ND	0.00284						0		30	



Date: 6/14/2017

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	1706112-002BDUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36782		
Client ID:	BATCH	Batch ID:	17345			Analysis Date:	6/13/2017	SeqNo:	705998		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	ND	0.0114						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0170						0		30	
Ethylbenzene	ND	0.0170						0		30	
m,p-Xylene	ND	0.0114						0		30	
o-Xylene	ND	0.0114						0		30	
Styrene	ND	0.0114						0		30	
Isopropylbenzene	ND	0.0455						0		30	
Bromoform	ND	0.0114						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0114						0		30	
n-Propylbenzene	ND	0.0114						0		30	
Bromobenzene	ND	0.0170						0		30	
1,3,5-Trimethylbenzene	ND	0.0114						0		30	
2-Chlorotoluene	ND	0.0114						0		30	
4-Chlorotoluene	ND	0.0114						0		30	
tert-Butylbenzene	ND	0.0114						0		30	
1,2,3-Trichloropropane	ND	0.0114						0		30	
1,2,4-Trichlorobenzene	ND	0.0284						0		30	
sec-Butylbenzene	ND	0.0114						0		30	
4-Isopropyltoluene	ND	0.0114						0		30	
1,3-Dichlorobenzene	ND	0.0114						0		30	
1,4-Dichlorobenzene	ND	0.0114						0		30	
n-Butylbenzene	ND	0.0114						0		30	
1,2-Dichlorobenzene	ND	0.0114						0		30	
1,2-Dibromo-3-chloropropane	ND	0.284						0		30	
1,2,4-Trimethylbenzene	ND	0.0114						0		30	
Hexachlorobutadiene	ND	0.0568						0		30	
Naphthalene	ND	0.0170						0		30	
1,2,3-Trichlorobenzene	ND	0.0114						0		30	
Surr: Dibromofluoromethane	0.617		0.7102		86.9	56.5	129		0		
Surr: Toluene-d8	0.658		0.7102		92.7	64.5	151		0		
Surr: 1-Bromo-4-fluorobenzene	0.699		0.7102		98.5	63.1	141		0		



Date: 6/14/2017

Work Order: 1706132
CLIENT: O'Neill Service Group
Project: KLB PO 0005

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	1706112-002BDUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	6/12/2017	RunNo:	36782		
Client ID:	BATCH	Batch ID:	17345			Analysis Date:	6/13/2017	SeqNo:	705998		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Client Name: **ONEILL**

 Work Order Number: **1706132**

 Logged by: **Clare Griggs**

 Date Received: **6/12/2017 2:44:00 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 $>0^{\circ}\text{C}$ 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 ☐
MeOH ☐
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 $^{\circ}\text{C}$
Cooler	7.8
Sample	5.5

* Note: DoD/ELAP and TNI require items to be received at $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$



Fremont

Analytical

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

Chain of Custody Record & Laboratory Services Agreement

Date: 6/12/17 Page: 1 of: 2

Laboratory Project No (internal): 1706132

Project Name: KL3 PO 0005

Special Remarks:
cc Results to jackiem@oneillsg.com
For all project results

Client: OSG

Project No: E320

Address:

Collected by: Jackie Mart

City, State, Zip:

Location: Eastside Park and Ride

Telephone:

Report To (PM): Brady Hanson

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax:

PM Email: bradyh@oneillsg.com

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*																	Comments
				VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 8220 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)**	EDB (8011)					
1 PR-TP-4-3	6/12/17	8:30	SOIL																	HOLD
2 PR-TP-4-8		8:45																		
3 PR-TP-5-3		9:10		X			X	X		X										
4 PR-TP-5-8		9:25		X			X	X		X										
5 PR-TP-6-3		9:50																		HOLD
6 PR-TP-6-8		9:58																		HOLD
7 PR-TP-7-3		10:20		X			X			X										
8 PR-TP-7-8		10:30		X			X			X										
9 PR-TP-8-3		10:55																		HOLD
10 PR-TP-8-5	V	11:05	V	X			X	X		X										

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

**Metals (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

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished
x [Signature]
Date/Time 06/12/17 1444

Received
x [Signature]
Date/Time 6/12/2017 1444

Relinquished
x
Date/Time

Received
x
Date/Time

Turn-around Time:

- ☐ Standard
☐ 3 Day
☐ 2 Day
☒ Next Day
Same Day _____
(specify)



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

Chain of Custody Record & Laboratory Services Agreement

Date: 6/12/17 Page: 2 of 2

Laboratory Project No (internal):

Project Name: KLB P6 0005

Special Remarks: CC Results to jackiem@oneillsg.com

Client: OSC

Project No: E320

Address:

Collected by: Jackie Mart

City, State, Zip:

Location: Eastside Park and Ride

Telephone:

Report To (PM): Brady Hanson

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax:

PM Email: bradyh@oneillsg.com

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	Parameters																Comments
				VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	SVOs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) Dissolved (D)	Anions (IC)***	EDB (8011)					
1 PR-TP-9-3	11:30	6/12/17	SOIL																	HOLD
2 PR-TP-9-6	11:32																			HOLD
3 PR-TP-10-3	12:00																			HOLD
4 PR-TP-10-8	12:08																			HOLD
5 PR-TP-11-3	12:30			X			X				X									
6 PR-TP-11-8	12:48			X			X				X									
7 PR-TP-12-3	13:00																			HOLD
8 PR-TP-12-8	13:09																			HOLD
9 PR-TP-13	13:20	6/13/17	SOIL																	PR-TP-13-3 (HOLD)
10 PR-TP-13-8	13:25	6/13/17	SOIL																	HOLD

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

**Metals (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

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Relinquished
x Date/Time 06/12/17 14:44

Received
x Date/Time 6/12/2017 1444

Relinquished
x Date/Time

Received
x Date/Time

Turn-around Time:

- ☐ Standard
☐ 3 Day
☐ 2 Day
☒ Next Day
Same Day (specify)



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

Chain of Custody Record & Laboratory Services Agreement

Date: 6/12/17 Page: 1 of 2

Laboratory Project No (internal): 1706132

Project Name: KLB PO 0005

Special Remarks:
CC Results to
jackiem@oneillsg.com
For all project results

Client: OSC

Project No: E320

Address:

Collected by: Jackie Marx

City, State, Zip:

Location: Eastside Park and Ride

Telephone:

Report To (PM): Brady Hanson

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax:

PM Email: bradyh@oneillsg.com

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)													Gasoline Range Organics (GRO)													Hydrocarbon Identification (HCID)													SVOCs (EPA 8270 / 625)													PAHs (EPA 8270 - SIM)													PCBs (EPA 8082 / 608)													Metals** (EPA 6020 / 200.8)													Total (T) / Dissolved (D)													Anions (IC)***													EDB (8011)													Comments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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1 PR-TP-4-3	6/12/17	8:30	Soil																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

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**Metals (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

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Relinquished

Date/Time

Received

Date/Time

X 6/12/17 1444

X 6/12/2017 1444

Relinquished

Date/Time

Received

Date/Time

X

X

Turn-around Time:

☐ Standard

☐ 3 Day

☐ 2 Day

☒ Next Day

Same Day

(specify)

**Fremont**3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178**Chain of Custody Record & Laboratory Services Agreement**

Date: 6/13/17 Page: 2 of 2

Laboratory Project No (internal):

Project Name: KLB PO 0005

Special Remarks:

cc Results to jackiem@oneillsg.com

Client: OSG

Project No: E320

Address:

Collected by: Jackie Hart

City, State, Zip:

Location: Eastside Park and Ride

Telephone:

Report To (PM): Brady Hanson

Sample Disposal: ☐ Return to client ☒ Disposal by lab (after 30 days)

Fax:

PM Email: bradyh@oneillsg.com

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)													Comments
				GV/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) Dissolved (D)	Anions (IC)***	EDB (8011)			
1 PR-TP-9-3	11:30	6/12/17	SOIL														HOLD
2 PR-TP-9-6	11:32																HOLD
3 PR-TP-10-3	12:00																HOLD
4 PR-TP-10-8	12:08																HOLD
5 PR-TP-11-3	12:30			X		X			X								
6 PR-TP-11-8	12:48			X		X			X								
7 PR-TP-12-3	13:00																HOLD
8 PR-TP-12-8	13:09																HOLD
9 PR-TP-13	13:20	6/13/17	SOIL														PR-TP-13-3 (HOLD)
10 PR-TP-13-8	13:25	6/13/17	SOIL														HOLD

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

**Metals (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

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Relinquished

Date/Time

06/12/17

14:44

Received

Date/Time

6/12/2017

1444

Relinquished

Date/Time

Received

Date/Time

Turn-around Time:

☐ Standard☐ 3 Day☐ 2 Day☒ Next Day

Same Day

(specify)

APPENDIX C

Toxicity Equivalent Concentration Calculations

cPAH Toxic Equivalent Concentration Calculations

Sample ID:		E320 EL111 170629 EX001		E320 EL111 170629 EX002		E320-EL111-171129-S01		E320 -EL11-171205-S03	
Compound	TEF	Detected Concentration	Equivalent Concentration	Detected Concentration	Equivalent Concentration	Detected Concentration	Equivalent Concentration	Detected Concentration	Equivalent Concentration
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzo(a)anthracene	0.1	0.12	0.012	0.052	0.0052	0.20	0.02	0.39	0.039
Chrysene	0.01	0.10	0.001	0.065	0.00065	0.16	0.0016	0.33	0.0033
Benzo(b)fluoranthene	0.1	0.092	0.0092	0.045	0.0045	0.19	0.019	0.29	0.029
Benzo(k)fluoranthene	0.1	0.028	0.0028	0.014	0.0014	0.066	0.0066	0.082	0.0082
Benzo(a)pyrene	1	0.049	0.049	0.021	0.021	0.13	0.13	0.12	0.12
Indeno(1,2,3-cd)pyrene	0.1	0.021	0.0021	0	0	0.060	0.006	0.051	0.0051
Dibenzo(a,h)anthracene	0.1	0	0	0	0	0.024	0.0024	0.017	0.0017
TEC			0.0761		0.03275		0.1856		0.2063
MTCA CUL Total cPAH									
Method A Unrestricted Land Use			0.1		0.1		0.1		0.1
Method A Industrial			2		2		2		2
Method B			0.137		0.137		0.137		0.137

Notes

TEF = Toxicity Equivalency Factor

APPENDIX D
Soil Disposal Tickets

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE

01

TICKET

952752

CELL

WEIGHMASTER

IN - Kim L.

OUT - JAMIE B.

DATE/TIME IN

7/24/17 9:34 am

DATE/TIME OUT

7/24/17 9:53 am

VEHICLE

134 KLB

CONTAINER

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT 83,720 NET TONS 21.98
SCALE OUT TARE WEIGHT 39,760 NET WEIGHT 43,960

INBOUND
INVOICE

QTY.

UNIT

DESCRIPTION

RATE

EXTENSION

TAX

TOTAL

0.00

YD

Tracking QTY

21.98

tn

SW-CONT SOIL

Origin:BELLEVUE/KING 100%

1019



NET AMOUNT

TENDERED

CHANGE

CHECK#

The undersigned Individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SITE	REGIONAL DISPOSAL INTERMODAL -- 3rd and lander Seattle, WA
-------------	---

CUSTOMER	012976 KLB Construction Inc PO Box 158 Mukilteo, WA 98275-0158 Contract:TB-11451 PO:217005
-----------------	--

SITE 01	TICKET # 952760	CELL -
WEIGHMASTER IN - Kim L. OUT - JAMIE B.		
DATE/TIME IN 7/24/17 10:36 am		DATE/TIME OUT 7/24/17 10:52 am
VEHICLE 134 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	91,560	NET TONS	26.03	INBOUND
SCALE OUT TARE WEIGHT	39,500	NET WEIGHT	52,060	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
26.03	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				



NET AMOUNT
TENDERED
CHANGE
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE
01

TICKET #

952766

CELL

WEIGHMASTER

IN - Kim L.

OUT - JAMIE B.

DATE/TIME IN

7/24/17 11:46 am

DATE/TIME OUT

7/24/17 12:04 pm

VEHICLE

134 KLB

CONTAINER

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT 100,680 NET TONS 30.64
SCALE OUT TARE WEIGHT 39,400 NET WEIGHT 61,280

INBOUND

INVOICE

QTY.

UNIT

DESCRIPTION

RATE

EXTENSION

TAX

TOTAL

0.00

YD

Tracking QTY

30.64

tn

SW-CONT SOIL

Origin:BELLEVUE/KING 100%



NET AMOUNT

TENDERED

CHANGE

CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 01	TICKET # 952769	CELL
WEIGHMASTER IN - Kim L. OUT - JAMIE B.		
DATE/TIME IN 7/24/17 12:53 pm	DATE/TIME OUT 7/24/17 1:01 pm	
VEHICLE 134 KLB	CONTAINER	
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	111,540	NET TONS	36.11	INBOUND
SCALE OUT TARE WEIGHT	39,320	NET WEIGHT	72,220	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00 36.11	YD tn	Tracking QTY SW-CONT SOIL Origin:BELLEVUE/KING 100%				



The undersigned Individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE	REGIONAL DISPOSAL INTERMODAL -- 3rd and lander Seattle, WA
------	---

CUSTOMER	012976 KLB Construction Inc PO Box 158 Mukilteo, WA 98275-0158 Contract:TB-11451 PO:217005
----------	--

SITE 01	TICKET # 952773	CELL
WEIGHMASTER IN - Michelle H. OUT - JAMIE B.		
DATE/TIME IN 7/24/17 1:59 pm		DATE/TIME OUT 7/24/17 2:12 pm
VEHICLE 134 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	103,260	NET TONS	31.98	INBOUND
SCALE OUT TARE WEIGHT	39,300	NET WEIGHT	63,960	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
31.98	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

The undersigned Individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE	REGIONAL DISPOSAL INTERMODAL -- 3rd and lander -Seattle, WA
-------------	--

CUSTOMER	012976 KLB Construction Inc PO Box 158 Mukilteo, WA 98275-0158 Contract:TB-11451 PO:217005
-----------------	--

SITE 01	TICKET # 952792	CELL
WEIGHMASTER Kim L.		
DATE/TIME IN 7/25/17 8:04 am		DATE/TIME OUT 7/25/17 8:13 am
VEHICLE 134 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	101,820	NET TONS	31.20	INBOUND
SCALE OUT TARE WEIGHT	39,420	NET WEIGHT	62,400	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
31.20	tn	SW-CONT SOIL				
Origin:BELLEVUE/KING 100% 1019 						

NET AMOUNT
TENDERED
CHANGE
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SITE REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER 012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 01	TICKET # 952795	CELL
WEIGHMASTER IN - Kim L. OUT - JAMIE B.		
DATE/TIME IN 7/25/17 8:17 am		DATE/TIME OUT 7/25/17 8:31 am
VEHICLE 98 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	111,180	NET TONS	35.37	INBOUND
SCALE OUT TARE WEIGHT	40,440	NET WEIGHT	70,740	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
35.37	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				



The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SIGNATURE _____

NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER 012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 01	TICKET # 952799	CELL
WEIGHMASTER IN - Kim L. OUT - JAMIE B.		
DATE/TIME IN 7/25/17 9:23 am		DATE/TIME OUT 7/25/17 9:36 am
VEHICLE 134 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	112,560	NET TONS	36.63	INBOUND
SCALE OUT TARE WEIGHT	39,300	NET WEIGHT	73,260	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
36.63	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				



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NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER 012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 01	TICKET # 952808	CELL
WEIGHMASTER IN - Kim L. OUT - JAMIE B.		
DATE/TIME IN 7/25/17 10:41 am		DATE/TIME OUT 7/25/17 10:51 am
VEHICLE 134 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	109,980	NET TONS	35.20	INBOUND
SCALE OUT TARE WEIGHT	39,580	NET WEIGHT	70,400	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
35.20	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				



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NET AMOUNT
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CHANGE
CHECK#

SITE	REGIONAL DISPOSAL INTERMODAL -- 3rd and lander -Seattle, WA
CUSTOMER	012976 KLB Construction Inc PO Box 158 Mukilteo, WA 98275-0158 Contract:TB-11451 PO:217005

SITE 01	TICKET # 952813	CELL
WEIGHMASTER IN - Patrice G. OUT - JAMIE B.		
DATE/TIME IN 7/25/17 11:45 am	DATE/TIME OUT 7/25/17 11:52 am	
VEHICLE 134 KLB	CONTAINER	
REFERENCE		
BILL OF LADING		

SCALE IN	GROSS WEIGHT	104,340	NET TONS	32.51	INBOUND
SCALE OUT	TARE WEIGHT	39,320	NET WEIGHT	65,020	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
32.51	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				



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NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE	REGIONAL DISPOSAL INTERMODAL -- 3rd and lander -Seattle, WA
CUSTOMER	012976 KLB Construction Inc PO Box 158 Mukilteo, WA 98275-0158 Contract:TB-11451 PO:217005

SITE 01	TICKET # 952820	CELL
WEIGHMASTER IN - Patrice G. OUT - JAMIE B.		
DATE/TIME IN 7/25/17 12:43 pm		DATE/TIME OUT 7/25/17 12:52 pm
VEHICLE 134 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN	GROSS WEIGHT	105,120	NET TONS	32.84	INBOUND
SCALE OUT	TARE WEIGHT	39,440	NET WEIGHT	65,680	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
32.84	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				



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NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE	REGIONAL DISPOSAL INTERMODAL -- 3rd and lander -Seattle, WA
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CUSTOMER	012976 KLB Construction Inc PO Box 158 Mukilteo, WA 98275-0158 Contract:TB-11451 PO:217005
----------	--

SITE	01	TICKET #	952829	CELL	
WEIGHMASTER					
IN - Michelle H. OUT - Patrice G.					
DATE/TIME IN			7/25/17 2:04 pm	DATE/TIME OUT	
VEHICLE			134 KLB	CONTAINER	
REFERENCE					
BILL OF LADING					

SCALE IN GROSS WEIGHT	80,320	NET TONS	20.56	INBOUND
SCALE OUT TARE WEIGHT	39,200	NET WEIGHT	41,120	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
20.56	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				



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NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE REGIONAL DISPOSAL INTERMODAL -- 3rd and lander Seattle, WA
CUSTOMER 012976 KLB Construction Inc PO Box 158 Mukilteo, WA 98275-0158 Contract:TB-11451 PO:217005

SITE 01	TICKET # 952851	CELL
WEIGHMASTER IN - Kim L. OUT - JAMIE B.		
DATE/TIME IN 7/26/17 8:04 am	DATE/TIME OUT 7/26/17 8:20 am	
VEHICLE 134 KLB	CONTAINER	
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	98,360	NET TONS	29.50	INBOUND
SCALE OUT TARE WEIGHT	39,360	NET WEIGHT	59,000	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
29.50	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				
		1019				
						

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NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE
01

TICKET #
952856

CELL

WEIGHMASTER

IN - Kim L. OUT - JAMIE B.

DATE/TIME IN

7/26/17 8:51 am

DATE/TIME OUT

7/26/17 9:05 am

VEHICLE

154 KLB

CONTAINER

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT 103,740 NET TONS 31.97
SCALE OUT TARE WEIGHT 39,800 NET WEIGHT 63,940

INBOUND
INVOICE

QTY.

UNIT

DESCRIPTION

RATE

EXTENSION

TAX

TOTAL

0.00

YD

Tracking QTY

31.97

tn

SW-CONT SOIL

Origin:BELLEVUE/KING 100%



NET AMOUNT

TENDERED

CHANGE

CHECK#

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SITE REGIONAL DISPOSAL INTERMODAL -- 3rd and lander Seattle, WA
--

CUSTOMER 012976 KLB Construction Inc PO Box 158 Mukilteo, WA 98275-0158 Contract:TB-11451 PO:217005

SITE 01	TICKET # 952862	CELL
WEIGHMASTER IN - Patrice G. OUT - Kim L.		
DATE/TIME IN 7/26/17 9:33 am		DATE/TIME OUT 7/26/17 9:57 am
VEHICLE 134 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	100,120	NET TONS	30.30	INBOUND
SCALE OUT TARE WEIGHT	39,520	NET WEIGHT	60,600	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
30.30	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				
						

NET AMOUNT
TENDERED
CHANGE
CHECK#

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SITE REGIONAL DISPOSAL INTERMODAL -- 3rd and lander Seattle, WA
CUSTOMER 012976 KLB Construction Inc PO Box 158 Mukilteo, WA 98275-0158 Contract:TB-11451 PO:217005

SITE 01	TICKET # 952871	CELL
WEIGHMASTER IN - Patrice G. OUT - Kim L.		
DATE/TIME IN 7/26/17 10:27 am	DATE/TIME OUT 7/26/17 10:51 am	
VEHICLE 154 KLB	CONTAINER	
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	99,400	NET TONS	29.95	INBOUND
SCALE OUT TARE WEIGHT	39,500	NET WEIGHT	59,900	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
29.95	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				



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NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE	REGIONAL DISPOSAL INTERMODAL -- 3rd and lander Seattle, WA
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CUSTOMER	012976 KLB Construction Inc PO Box 158 Mukilteo, WA 98275-0158 Contract:TB-11451 PO:217005
----------	--

SITE	TICKET #	CELL
01	952874	
WEIGHMASTER		
IN - Patrice G. OUT - Kim L.		
DATE/TIME IN	DATE/TIME OUT	
7/26/17 10:58 am	7/26/17 11:24 am	
VEHICLE	CONTAINER	
134 KLB		
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	105,580	NET TONS	33.06	INBOUND
SCALE OUT TARE WEIGHT	39,460	NET WEIGHT	66,120	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
33.06	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				
						

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer. RS-F042UPR (07/12) SIGNATURE _____	NET AMOUNT
	TENDERED
	CHANGE
	CHECK#

SITE REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER 012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 01	TICKET # 952883	CELL
WEIGHMASTER IN - JAMIE B. OUT - Kim L.		
DATE/TIME IN 7/26/17 12:28 pm		DATE/TIME OUT 7/26/17 12:37 pm
VEHICLE 134 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	98,960	NET TONS	29.89	INBOUND
SCALE OUT TARE WEIGHT	39,180	NET WEIGHT	59,780	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
29.89	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				
						

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NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER 012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 01	TICKET # 952884	CELL
WEIGHMASTER IN - JAMIE B. OUT - Kim L.		
DATE/TIME IN 7/26/17 12:28 pm		DATE/TIME OUT 7/26/17 12:43 pm
VEHICLE 154 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	99,960	NET TONS	30.16	INBOUND
SCALE OUT TARE WEIGHT	39,640	NET WEIGHT	60,320	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
30.16	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				



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NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE
REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER
012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 01	TICKET # 952895	CELL
WEIGHMASTER IN - Patrice G. OUT - Michelle H.		
DATE/TIME IN 7/26/17 1:55 pm		DATE/TIME OUT 7/26/17 2:16 pm
VEHICLE 134 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	98,500	NET TONS	29.55	INBOUND
SCALE OUT TARE WEIGHT	39,400	NET WEIGHT	59,100	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
29.55	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				
						

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NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE	REGIONAL DISPOSAL INTERMODAL -- 3rd and lander Seattle, WA
CUSTOMER	012976 KLB Construction Inc PO Box 158 Mukilteo, WA 98275-0158 Contract:TB-11451 PO:217005

SITE 01	TICKET # 952898	CELL
WEIGHMASTER IN - Patrice G. OUT - Michelle H.		
DATE/TIME IN 7/26/17 2:05 pm	DATE/TIME OUT 7/26/17 2:32 pm	
VEHICLE 154 KLB	CONTAINER	
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	101,260	NET TONS	30.92	INBOUND
SCALE OUT TARE WEIGHT	39,420	NET WEIGHT	61,840	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
30.92	tn	SW-CONT SOIL				
Origin:BELLEVUE/KING 100% THINK CHOOSE SAFETY LIVE It's the Right Thing!						

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NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE
REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER
012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 01	TICKET # 952940	CELL
WEIGHMASTER IN - Michelle H. OUT - Patrice G.		
DATE/TIME IN 7/27/17 1:49 pm		DATE/TIME OUT 7/27/17 2:19 pm
VEHICLE 154 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT 112,520 NET TONS 36.58
SCALE OUT TARE WEIGHT 39,360 NET WEIGHT 73,160

INBOUND
INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
36.58	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				
1019						

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NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE
REGIONAL DISPOSAL INTERMODAL -- 3rd and lander Seattle, WA
CUSTOMER
012976 KLB Construction Inc PO Box 158 Mukilteo, WA 98275-0158 Contract:TB-11451 PO:217005

SITE	TICKET #	CELL
01	952910	
WEIGHMASTER		
DATE/TIME IN	Kim L.	DATE/TIME OUT
VEHICLE	7/27/17 7:50 am	CONTAINER 7/27/17 8:21 am
REFERENCE 134 KLB		
BILL OF LADING		

SCALE IN GROSS WEIGHT	99,540	NET TONS	29.85	INBOUND
SCALE OUT TARE WEIGHT	39,840	NET WEIGHT	59,700	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
29.85	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				
		1019				



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NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE REGIONAL DISPOSAL INTERMODAL -- 3rd and lander Seattle, WA
CUSTOMER 012976 KLB Construction Inc PO Box 158 Mukilteo, WA 98275-0158 Contract:TB-11451 PO:217005

SITE 01	TICKET # 952913	CELL
WEIGHMASTER IN - Kim L. OUT - JAMIE B.		
DATE/TIME IN 7/27/17 8:26 am		DATE/TIME OUT 7/27/17 8:45 am
VEHICLE 154 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	100,940	NET TONS	30.72	INBOUND
SCALE OUT TARE WEIGHT	39,500	NET WEIGHT	61,440	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
30.72	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				



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NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE	REGIONAL DISPOSAL INTERMODAL -- 3rd and lander Seattle, WA
CUSTOMER	012976 KLB Construction Inc PO Box 158 Mukilteo, WA 98275-0158 Contract:TB-11451 PO:217005

SITE 01	TICKET # 952916	CELL
WEIGHMASTER IN - Patrice G. OUT - JAMIE B.		
DATE/TIME IN 7/27/17 9:27 am		DATE/TIME OUT 7/27/17 9:37 am
VEHICLE 134 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	106,100	NET TONS	32.84
SCALE OUT TARE WEIGHT	40,420	NET WEIGHT	65,680

INBOUND
INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00 32.84	YD tn	Tracking QTY SW-CONT SOIL Origin:BELLEVUE/KING 100%				



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NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE
REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER
012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 01	TICKET # 952918	CELL
WEIGHMASTER IN - Patrice G. OUT - Kim L.		
DATE/TIME IN 7/27/17 10:04 am		DATE/TIME OUT 7/27/17 10:23 am
VEHICLE 154 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	115,480	NET TONS	37.91	INBOUND
SCALE OUT TARE WEIGHT	39,660	NET WEIGHT	75,820	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00 37.91	YD tn	Tracking QTY SW-CONT SOIL Origin:BELLEVUE/KING 100%				



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NET AMOUNT
TENDERED
CHANGE
CHECK#

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

TICKET #	952920
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WEIGHMASTER

IN - Patrice G. OUT - Kim L.

DATE/TIME IN

7/27/17 10:28 am

DATE/TIME OUT

7/27/17 10:37 am

VEHICLE

134 KLB

CONTAINER

REFERENCE

BILL OF LADING

SCALE IN	GROSS WEIGHT	112,500	NET TONS	36.23
SCALE OUT	TARE WEIGHT	40,040	NET WEIGHT	72,460

INBOUND
INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
36.23	tn	SW-CONT SOIL	Origin:BELLEVUE/KING 100%			

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RS-F042UPR (07/12)

SIGNATURE _____

NET AMOUNT

TENDERED

CHANGE

CHECK#

SITE
REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER
012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 01	TICKET # 952927	CELL
WEIGHMASTER IN - JAMIE B. OUT - Kim L.		
DATE/TIME IN 7/27/17 11:29 am		DATE/TIME OUT 7/27/17 11:44 am
VEHICLE 154 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	104,280	NET TONS	32.35	INBOUND
SCALE OUT TARE WEIGHT	39,580	NET WEIGHT	64,700	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00 32.35	YD tn	Tracking QTY SW-CONT SOIL Origin:BELLEVUE/KING 100%				



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NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE
REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER
012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE	TICKET #	CELL
01	952936	
WEIGHMASTER		
IN - JAMIE B. OUT - Patrice G.		
DATE/TIME IN	DATE/TIME OUT	
7/27/17 12:30 pm	7/27/17 1:02 pm	
VEHICLE	CONTAINER	
154 KLB		
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	102,960	NET TONS	31.69	INBOUND
SCALE OUT TARE WEIGHT	39,580	NET WEIGHT	63,380	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
31.69	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				



NET AMOUNT
TENDERED
CHANGE
CHECK#

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SITE 01	TICKET # 953461	CELL
WEIGHMASTER JAMIE B.		
DATE/TIME IN 8/8/17 12:15 pm		DATE/TIME OUT 8/8/17 2:14 pm
VEHICLE 154 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
34.45	tn	SW-CONT SOIL	Origin:BELLEVUE/KING 100%			
		1019				

SIGNATURE

SITE 01	TICKET # 953461	CELL
WEIGHMASTER JAMIE B.		
DATE/TIME IN 8/8/17 12:15 pm		DATE/TIME OUT 8/8/17 2:14 pm
VEHICLE 154 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
34.45	tn	SW-CONT SOIL	Origin:BELLEVEUE/KING 100%			

SIGNATURE

SITE REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER 012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 01	TICKET # 953473	CELL
WEIGHMASTER Kim L.		
DATE/TIME IN 8/9/17 9:03 am	DATE/TIME OUT 8/9/17 10:14 am	
VEHICLE 134 KLB	CONTAINER	
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT 109,940	NET TONS 35.07	INBOUND
SCALE OUT TARE WEIGHT 39,800	NET WEIGHT 70,140	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
35.07	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				
		1019				

NET AMOUNT
TENDERED
CHANGE
CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12)

SIGNATURE _____

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE	TICKET #	CELL
01	958574	
WEIGHMASTER		
IN - Karyn B. OUT - Kim L.		
DATE/TIME IN	DATE/TIME OUT	
12/4/17 12:15 pm	12/4/17 12:32 pm	
VEHICLE	CONTAINER	
98 KLB		
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WRIGHT	95,520	NET TONS	25.72	INBOUND
SCALE OUT TARE WEIGHT	44,080	NET WEIGHT	51,440	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
25.72	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				

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RS-F042UPR (07/12)

SIGNATURE

NET AMOUNT

TENDERED

CHANGE

CHECK#

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE	TICKET #	CELL
01	958574	
WEIGHMASTER		
IN - Karyn B. OUT - Kim L.		
DATE/TIME IN	DATE/TIME OUT	
12/4/17 12:15 pm	12/4/17 12:32 pm	
VEHICLE	CONTAINER	
98 KLB		
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	95,520	NET TONS	25.72	INBOUND
SCALE OUT TARE WEIGHT	44,080	NET WEIGHT	51,440	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
25.72	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				

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RS-F042UPR (07/12)

SIGNATURE

NET AMOUNT

TENDERED

CHANGE

CHECK#

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

9007

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 01	TICKET # 958565	CELL
WEIGHMASTER IN - Kim L.		OUT - JAMIE B.
DATE/TIME IN 12/4/17 9:47 am	DATE/TIME OUT 12/4/17 10:07 am	
VEHICLE 98 KLB	CONTAINER	
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	90,700	NET TONS	24.02	INBOUND
SCALE OUT TARE WEIGHT	42,660	NET WEIGHT	48,040	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
24.02	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				

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RS-F042UPR (07/12)

SIGNATURE

NET AMOUNT

TENDERED

CHANGE

CHECK#

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 01	TICKET # 958565	CELL
WEIGHMASTER IN - Kim L.		OUT - JAMIE B.
DATE/TIME IN 12/4/17 9:47 am	DATE/TIME OUT 12/4/17 10:07 am	
VEHICLE 98 KLB	CONTAINER	
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	90,700	NET TONS	24.02	INBOUND
SCALE OUT TARE WEIGHT	42,660	NET WEIGHT	48,040	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
24.02	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				

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RS-F042UPR (07/12)

SIGNATURE

NET AMOUNT

TENDERED

CHANGE

CHECK#

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

9007

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 01	TICKET # 958564	CELL
WEIGHMASTER IN - Kim L.		OUT - JAMIE B.
DATE/TIME IN 12/4/17 9:43 am	DATE/TIME OUT 12/4/17 10:03 am	
VEHICLE 104 KLB	CONTAINER	
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	91,680	NET TONS	25.48	INBOUND
SCALE OUT TARE WEIGHT	40,720	NET WEIGHT	50,960	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
25.48	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

NET AMOUNT

TENDERED

CHANGE

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RS-F042UPR (07/12)

SIGNATURE

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 01	TICKET # 958564	CELL
WEIGHMASTER IN - Kim L.		OUT - JAMIE B.
DATE/TIME IN 12/4/17 9:43 am	DATE/TIME OUT 12/4/17 10:03 am	
VEHICLE 104 KLB	CONTAINER	
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	91,680	NET TONS	25.48	INBOUND
SCALE OUT TARE WEIGHT	40,720	NET WEIGHT	50,960	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
25.48	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

NET AMOUNT

TENDERED

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RS-F042UPR (07/12)

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SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE

TICKET #

CELL

01

958572

WEIGHMASTER

IN - Karyn B. OUT - Kim L.

DATE/TIME IN

DATE/TIME OUT

12/4/17 12:05 pm

12/4/17 12:18 pm

VEHICLE

CONTAINER

104 KLB

REFERENCE

BILL OF LADING

SCALE IN GROSS WRIGHT	88,480	NET TONS	23.84	INBOUND
SCALE OUT TARE WEIGHT	40,800	NET WEIGHT	47,680	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
23.84	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				

NET AMOUNT

TENDERED

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RS-F042UPR (07/12)

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REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE

TICKET #

CELL

01

958572

WEIGHMASTER

IN - Karyn B. OUT - Kim L.

DATE/TIME IN

DATE/TIME OUT

12/4/17 12:05 pm

12/4/17 12:18 pm

VEHICLE

CONTAINER

104 KLB

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT	88,480	NET TONS	23.84	INBOUND
SCALE OUT TARE WEIGHT	40,800	NET WEIGHT	47,680	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
23.84	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				

NET AMOUNT

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RS-F042UPR (07/12)

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REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE

TICKET #

CELL

01

958581

WEIGHMASTER

IN - JAMIE B.

OUT - Kim L.

DATE/TIME IN

DATE/TIME OUT

12/4/17 1:20 pm

12/4/17 1:35 pm

VEHICLE

CONTAINER

104 KLB

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT	99,520	NET TONS	29.46	INBOUND
SCALE OUT TARE WEIGHT	40,600	NET WEIGHT	58,920	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
29.46	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				

NET AMOUNT

TENDERED

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REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE

TICKET #

CELL

01

958581

WEIGHMASTER

IN - JAMIE B.

OUT - Kim L.

DATE/TIME IN

DATE/TIME OUT

12/4/17 1:20 pm

12/4/17 1:35 pm

VEHICLE

CONTAINER

104 KLB

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT	99,520	NET TONS	29.46	INBOUND
SCALE OUT TARE WEIGHT	40,600	NET WEIGHT	58,920	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
29.46	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				

NET AMOUNT

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SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE	TICKET #	CELL
01	958575	
WEIGHMASTER		
IN - Karyn B. OUT - Kim L.		
DATE/TIME IN	DATE/TIME OUT	
12/4/17 12:30 pm	12/4/17 12:39 pm	
VEHICLE	CONTAINER	
132 KLB		
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	87,560	NET TONS	23.59	INBOUND
SCALE OUT TARE WEIGHT	40,380	NET WEIGHT	47,180	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
23.59	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

NET AMOUNT

TENDERED

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RS-F042UPR (07/12)SIGNATURE

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE	TICKET #	CELL
01	958575	
WEIGHMASTER		
IN - Karyn B. OUT - Kim L.		
DATE/TIME IN	DATE/TIME OUT	
12/4/17 12:30 pm	12/4/17 12:39 pm	
VEHICLE	CONTAINER	
132 KLB		
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	87,560	NET TONS	23.59	INBOUND
SCALE OUT TARE WEIGHT	40,380	NET WEIGHT	47,180	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
23.59	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

NET AMOUNT

TENDERED

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RS-F042UPR (07/12)SIGNATURE

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

9007

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 61	TICKET # 958567	CELL
WEIGHMASTER		IN - Kim L. OUT - JAMIE B.
DATE/TIME IN	12/4/17 10:19 am	DATE/TIME OUT 12/4/17 10:31 am
VEHICLE	132 KLB	CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	87,680	NET TONS	23.54	INBOUND
SCALE OUT TARE WEIGHT	40,600	NET WEIGHT	47,080	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
23.54	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (07/12)

SIGNATURE

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 01	TICKET # 958567	CELL
WEIGHMASTER		IN - Kim L. OUT - JAMIE B.
DATE/TIME IN	12/4/17 10:19 am	DATE/TIME OUT 12/4/17 10:31 am
VEHICLE	132 KLB	CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	87,680	NET TONS	23.54	INBOUND
SCALE OUT TARE WEIGHT	40,600	NET WEIGHT	47,080	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
23.54	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

NET AMOUNT
TENDERED
CHANGE
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RS-F042UPR (07/12)

SIGNATURE

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

9007

9/9

SITE 01	TICKET # 958657	CELL
WEIGHMASTER IN - JAMIE B. OUT - Patrice G.		
DATE/TIME IN 12/5/17 1:16 pm	DATE/TIME OUT 12/5/17 1:36 pm	
VEHICLE 175 OMA	CONTAINER	
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	101,360	NET TONS	27.86	INBOUND
SCALE OUT TARE WEIGHT	45,640	NET WEIGHT	55,720	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
27.86	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

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RS-F042UPR (07/12)

SIGNATURE

NET AMOUNT

TENDERED

CHANGE

CHECK#

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 01	TICKET # 958657	CELL
WEIGHMASTER IN - JAMIE B. OUT - Patrice G.		
DATE/TIME IN 12/5/17 1:16 pm	DATE/TIME OUT 12/5/17 1:36 pm	
VEHICLE 175 OMA	CONTAINER	
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	101,360	NET TONS	27.86	INBOUND
SCALE OUT TARE WEIGHT	45,640	NET WEIGHT	55,720	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
27.86	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

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RS-F042UPR (07/12)

SIGNATURE

NET AMOUNT

TENDERED

CHANGE

CHECK#

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE	TICKET #	CELL
01	958640	
WEIGHMASTER		
IN - JAMIE B.		OUT - Kim L.
DATE/TIME IN	12/5/17 11:51 am	DATE/TIME OUT
VEHICLE	175 OMA	CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT104,700NET TONS29.21INBOUND

SCALE OUT TARE WEIGHT46,280NET WEIGHT58,420INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
29.21	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

NET AMOUNT

TENDERED

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RS-F042UPR (07/12)

SIGNATURE

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE	TICKET #	CELL
01	958640	
WEIGHMASTER		
IN - JAMIE B.		OUT - Kim L.
DATE/TIME IN	12/5/17 11:51 am	DATE/TIME OUT
VEHICLE	175 OMA	CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT104,700NET TONS29.21INBOUND

SCALE OUT TARE WEIGHT46,280NET WEIGHT58,420INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
29.21	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

NET AMOUNT

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RS-F042UPR (07/12)

SIGNATURE

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

9007

SITE

61

TICKET #

958654

CELL

9007

WEIGHMASTER

IN - JAMIE B. OUT - Patrice G.

DATE/TIME IN

12/5/17 1:11 pm

DATE/TIME OUT

12/5/17 1:28 pm

VEHICLE

98 KLB

CONTAINER

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT	109,340	NET TONS	33.15	INBOUND
SCALE OUT TARE WEIGHT	43,040	NET WEIGHT	66,300	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
33.15	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				

NET AMOUNT

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RS-F042UPR (07/12)

SIGNATURE

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE

01

TICKET #

958654

CELL

WEIGHMASTER

IN - JAMIE B. OUT - Patrice G.

DATE/TIME IN

12/5/17 1:11 pm

DATE/TIME OUT

12/5/17 1:28 pm

VEHICLE

98 KLB

CONTAINER

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT	109,340	NET TONS	33.15	INBOUND
SCALE OUT TARE WEIGHT	43,040	NET WEIGHT	66,300	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
33.15	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				

NET AMOUNT

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SIGNATURE

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE	TICKET #	CELL
01	958637	9007
WEIGHMASTER		
IN - JAMIE B. OUT - Kim L.		
DATE/TIME IN	DATE/TIME OUT	
12/5/17 11:35 am	12/5/17 11:58 am	
VEHICLE	CONTAINER	
98 KLB		
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	110,220	NET TONS	33.53	INBOUND
SCALE OUT TARE WEIGHT	43,160	NET WEIGHT	67,060	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
33.53	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

NET AMOUNT

TENDERED

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SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE	TICKET #	CELL
01	958637	
WEIGHMASTER		
IN - JAMIE B. OUT - Kim L.		
DATE/TIME IN	DATE/TIME OUT	
12/5/17 11:35 am	12/5/17 11:58 am	
VEHICLE	CONTAINER	
98 KLB		
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	110,220	NET TONS	33.53	INBOUND
SCALE OUT TARE WEIGHT	43,160	NET WEIGHT	67,060	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
33.53	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

NET AMOUNT

TENDERED

CHANGE

CHECK#

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12) SIGNATURE

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE

TICKET #

CELL

01

958635

9007

WEIGHMASTER

IN - JAMIE B.

OUT - Kim L.

DATE/TIME IN

DATE/TIME OUT

12/5/17 11:26 am

12/5/17 11:41 am

VEHICLE

CONTAINER

166 OMA

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT	108,140	NET TONS	30.18	INBOUND
SCALE OUT TARE WEIGHT	47,780	NET WEIGHT	60,360	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
30.18	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				

NET AMOUNT

TENDERED

CHANGE

CHECK#

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RS-F042UPR (07/12) SIGNATURE

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE

TICKET #

CELL

01

958635

WEIGHMASTER

IN - JAMIE B.

OUT - Kim L.

DATE/TIME IN

DATE/TIME OUT

12/5/17 11:26 am

12/5/17 11:41 am

VEHICLE

CONTAINER

166 OMA

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT	108,140	NET TONS	30.18	INBOUND
SCALE OUT TARE WEIGHT	47,780	NET WEIGHT	60,360	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
30.18	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				

NET AMOUNT

TENDERED

CHANGE

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RS-F042UPR (07/12) SIGNATURE

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE	01	TICKET #	958648	CELL	907
WEIGHMASTER		IN - JAMIE B. OUT - Patrice G.			
DATE/TIME IN		12/5/17 12:38 pm		DATE/TIME OUT 12/5/17 1:01 pm	
VEHICLE		166 OMA		CONTAINER	
REFERENCE					
BILL OF LADING					

SCALE IN GROSS WEIGHT	104,940	NET TONS	28.96	INBOUND
SCALE OUT TARE WEIGHT	47,020	NET WEIGHT	57,920	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
28.96	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

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RS-F042UPR (07/12)

SIGNATURE

Jamie B.

NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE	01	TICKET #	958648	CELL	
WEIGHMASTER		IN - JAMIE B. OUT - Patrice G.			
DATE/TIME IN		12/5/17 12:38 pm		DATE/TIME OUT 12/5/17 1:01 pm	
VEHICLE		166 OMA		CONTAINER	
REFERENCE					
BILL OF LADING					

SCALE IN GROSS WEIGHT	104,940	NET TONS	28.96	INBOUND
SCALE OUT TARE WEIGHT	47,020	NET WEIGHT	57,920	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
28.96	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

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RS-F042UPR (07/12)

SIGNATURE

Jamie B.

NET AMOUNT
TENDERED
CHANGE
CHECK#

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE

01

TICKET #

958670

CELL

WEIGHMASTER

IN - JAMIE B. OUT - Patrice G.

DATE/TIME IN

12/5/17 2:24 pm

DATE/TIME OUT

12/5/17 2:36 pm

VEHICLE

98 KLB

CONTAINER

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT	108,980	NET TONS	32.92	INBOUND
SCALE OUT TARE WEIGHT	43,140	NET WEIGHT	65,840	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
32.92	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				

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RS-F042UPR (07/12)

SIGNATURE

NET AMOUNT

TENDERED

CHANGE

CHECK#

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE

01

TICKET #

958670

CELL

WEIGHMASTER

IN - JAMIE B. OUT - Patrice G.

DATE/TIME IN

12/5/17 2:24 pm

DATE/TIME OUT

12/5/17 2:36 pm

VEHICLE

98 KLB

CONTAINER

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT	108,980	NET TONS	32.92	INBOUND
SCALE OUT TARE WEIGHT	43,140	NET WEIGHT	65,840	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
32.92	tn	SW-CONT SOIL				
		Origin:BELLEVUE/KING 100%				

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RS-F042UPR (07/12)

SIGNATURE

NET AMOUNT

TENDERED

CHANGE

CHECK#

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER

333467
Market Holdings Company LLC
1000 2nd Ave., Suite 1800
Seattle, WA 98104
Contract:LW-17202

For KLB
Emailed Republic 1/4/17 for new copy
-OO

SITE	TICKET #	CELL
01	958626	
WEIGHMASTER		
IN - Patrice G. OUT - Kim L.		
DATE/TIME IN	12/5/17 10:22 am	DATE/TIME OUT
VEHICLE	175 OMA	CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	110,500	NET TONS	31.91	INBOUND
SCALE OUT TARE WEIGHT	46,680	NET WEIGHT	63,820	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
31.91	tn	SW-CONT SOIL W/FUEL Origin:SEATTLE/KING 100%				

NET AMOUNT

TENDERED

CHANGE

CHECK#

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RS-F042UPR (07/12)

SIGNATURE

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER

333467
Market Holdings Company LLC
1000 2nd Ave., Suite 1800
Seattle, WA 98104
Contract:LW-17202

SITE	TICKET #	CELL
01	958626	
WEIGHMASTER		
IN - Patrice G. OUT - Kim L.		
DATE/TIME IN	12/5/17 10:22 am	DATE/TIME OUT
VEHICLE	175 OMA	CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	110,500	NET TONS	31.91	INBOUND
SCALE OUT TARE WEIGHT	46,680	NET WEIGHT	63,820	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
31.91	tn	SW-CONT SOIL W/FUEL Origin:SEATTLE/KING 100%				

NET AMOUNT

TENDERED

CHANGE

CHECK#

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RS-F042UPR (07/12)

SIGNATURE

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER 012976

KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE
01

TICKET #

958676

CELL

WEIGHMASTER

IN - JAMIE B. OUT - Patrice G.

DATE/TIME IN

12/5/17 2:36 pm

DATE/TIME OUT

12/5/17 2:54 pm

VEHICLE

175 OMA

CONTAINER

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT 93,860 NET TONS 24.06
SCALE OUT TARE WEIGHT 45,740 NET WEIGHT 48,120

INBOUND
INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
24.06	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

NET AMOUNT

TENDERED

CHANGE

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SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

REPRINT

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

9007

SITE	TICKET #	CELL
01	958771	
WEIGHMASTER		
JAMIE B.		
DATE/TIME IN	DATE/TIME OUT	
12/6/17 3:01 pm	12/6/17 3:15 pm	
VEHICLE	CONTAINER	
98 KLB		
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	92,660	NET TONS	24.75	INBOUND
SCALE OUT TARE WEIGHT	43,160	NET WEIGHT	49,500	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
24.75	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

NET AMOUNT

TENDERED

CHANGE

CHECK#

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RS-F042UPR (07/12) SIGNATURE

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

REPRINT

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE	TICKET #	CELL
01	958771	
WEIGHMASTER		
JAMIE B.		
DATE/TIME IN	DATE/TIME OUT	
12/6/17 3:01 pm	12/6/17 3:15 pm	
VEHICLE	CONTAINER	
98 KLB		
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	92,660	NET TONS	24.75	INBOUND
SCALE OUT TARE WEIGHT	43,160	NET WEIGHT	49,500	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
24.75	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

NET AMOUNT

TENDERED

CHANGE

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SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

9007

3/3

SITE 01	TICKET # 958815	CELL
WEIGHMASTER IN - Karyn B. OUT - Patrice G.		
DATE/TIME IN 12/7/17 12:33 pm		DATE/TIME OUT 12/7/17 1:20 pm
VEHICLE 106 KLB		CONTAINER
REFERENCE 005		
BILL OF LADING		

SCALE IN GROSS WEIGHT	116,220	NET TONS	37.68	INBOUND
SCALE OUT TARE WEIGHT	40,860	NET WEIGHT	75,360	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
37.68	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (07/12) SIGNATURE _____

SITE

REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER

012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE 01	TICKET # 958815	CELL
WEIGHMASTER IN - Karyn B. OUT - Patrice G.		
DATE/TIME IN 12/7/17 12:33 pm		DATE/TIME OUT 12/7/17 1:20 pm
VEHICLE 106 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	116,220	NET TONS	37.68	INBOUND
SCALE OUT TARE WEIGHT	40,860	NET WEIGHT	75,360	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
37.68	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				

NET AMOUNT
TENDERED
CHANGE
CHECK#

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RS-F042UPR (07/12) SIGNATURE _____

SITE
REGIONAL DISPOSAL INTERMODAL --
3rd and lander Seattle, WA

CUSTOMER
012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE
01

TICKET #
958802

CELL

WEIGHMASTER
Patrice G.

DATE/TIME IN
12/7/17 10:59 am

DATE/TIME OUT
12/7/17 11:27 am

VEHICLE
106 KLB

CONTAINER

REFERENCE
005

BILL OF LADING

SCALE IN GROSS WEIGHT	98,900	NET TONS	28.98	INBOUND
SCALE OUT TARE WEIGHT	40,940	NET WEIGHT	57,960	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
28.98	tn	SW-CONT SOIL				
Origin:BELLEVUE/KING 100%						

RS-F042UPR (07/12)

SIGNATURE

NET AMOUNT

TENDERED

CHANGE

CHECK#

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SITE
REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER
012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

SITE
01

TICKET #
958802

CELL

WEIGHMASTER
Patrice G.

DATE/TIME IN
12/7/17 10:59 am

DATE/TIME OUT
12/7/17 11:27 am

VEHICLE
106 KLB

CONTAINER

REFERENCE

BILL OF LADING

SCALE IN GROSS WEIGHT	98,900	NET TONS	28.98	INBOUND
SCALE OUT TARE WEIGHT	40,940	NET WEIGHT	57,960	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
28.98	tn	SW-CONT SOIL				
Origin:BELLEVUE/KING 100%						

RS-F042UPR (07/12)

SIGNATURE

NET AMOUNT

TENDERED

CHANGE

CHECK#

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SITE REGIONAL DISPOSAL INTERMODAL --
3rd and lander -Seattle, WA

CUSTOMER 012976
KLB Construction Inc
PO Box 158
Mukilteo, WA 98275-0158
Contract:TB-11451 PO:217005

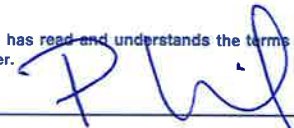
SITE 01	TICKET # 958821	CELL
WEIGHMASTER IN - JAMIE B. OUT - Karyn B.		
DATE/TIME IN 12/7/17 2:15 pm		DATE/TIME OUT 12/7/17 2:27 pm
VEHICLE 106 KLB		CONTAINER
REFERENCE		
BILL OF LADING		

SCALE IN GROSS WEIGHT	93,620	NET TONS	26.30	INBOUND
SCALE OUT TARE WEIGHT	41,020	NET WEIGHT	52,600	INVOICE

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	Tracking QTY				
26.30	tn	SW-CONT SOIL Origin:BELLEVUE/KING 100%				



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SIGNATURE 

NET AMOUNT
TENDERED
CHANGE
CHECK#