TERRA ASSOCIATES, Inc.
Consultants in Geotechnical Engineering, Geology
and
Environmental Earth Sciences

March 3, 2015
Project No. T-6776

Mr. Greg Draper
20 Enatai Drive
Bellevue, Washington 98006

Subject: Discussion and Supplemental Site Sampling
Former UCO Facility
9225 – 151st Avenue NE
Redmond, Washington
King County Tax Parcel 720170-0051
VCP NW 2710

References:
1. Opinion Letter, prepared by Ecology, dated September 15, 2014
2. Remedial Investigation and Cleanup Action Summary, prepared by Terra Associates, Inc., dated May 12, 2014

Dear Mr. Draper:

We previously prepared the referenced report dated May 12, 2014 for this project. Our conclusion was that the site remediation was complete and that no further action was needed. The Washington State Department of Ecology reviewed the report and prepared their letter dated September 15, 2014 that stated further action was required. This letter addresses the concerns raised in the Ecology letter dated September 15, 2014.

Establishment of Cleanup Levels

In our report, we documented the commercial zoning and land use of the site and adjacent properties and proposed the use of industrial soil cleanup levels for the contaminant of concern (COC), carcinogenic polycyclic aromatic hydrocarbons (cPAHs). One sidewall sample from the 2014 remedial excavation had a cPAH level that exceeded the common Method A cleanup level. Ecology responded that a daycare facility was located less than 500 feet from the site margin. The boundary of the property where a daycare is present is approximately 225 feet west of the western edge of the site.

12525 Willows Road NE, Suite 101, Kirkland, Washington 98034
Phone (425) 821-7777 • Fax (425) 821-4334

To address this concern by Ecology, 2,400 pounds of additional soils were removed off-site from the margin of the prior remedial excavation. The excavation was done on February 16, 2014. A new sidewall sample shows that the final sidewall along the south margin of the remedial excavation met MTCA Method A Cleanup values for unrestricted land use. In addition, three shallow Direct Push Technology borings were advanced along the northern margin of the paved parking area immediately south of the remedial excavation. The soil samples all met the MTCA Method A cleanup value for the COC.

The Non Hazardous Waste Manifest is attached to this letter. The soils were disposed of into the waste stream at the Waste Management Landfill in Arlington, Oregon.

The locations of the supplemental samples are shown on Figure 1 attached to this letter. Logs of the supplemental DPTs are shown on Figures 2 through 4 attached to this letter.

Sample Depth of Sample 12-20-1

This sample was taken at a depth of ten inches below site grade. The sample depths are presented in Table 1 attached to this letter.

Groundwater

Due to the nature of the release and the limited penetration into the soil column documented by the existing soils data, it was our opinion that the groundwater was not a media of concern. To address the concern raised in the Ecology letter dated September 15, 2014, a DPT was advanced through the rough centroid of the former impacted area. Due to the density of underground utilities, a vacuum truck was used to create a pilot hole down to a depth of about eight feet. The utilities in the area include electricity, gas, and communications lines. No pea gravel or clean sand bedding was observed around the utility lines exposed in the vacuum excavated pilot hole. No stained soils or unusual odors were noted in the pilot hole excavated for the DPT temporary well. The DPT boring was logged based on the soils exposed in the pilot hole. A groundwater sample was taken using a peristaltic pump and a temporary well screen. The groundwater was analyzed in the lab for diesel and oil range hydrocarbons, cPAHs, and selected metals. None of the analytes were found to be present above MTCA Method A cleanup values. The location of the temporary DPT monitoring well is shown on Figure 1.

Discussion

Based on testing documented in our prior report as well as this letter, it is our opinion that no further remedial work is required to address the historic release of cutting oil and aluminum shavings. The final soil and groundwater samples all meet the MTCA Method A cleanup values for unrestricted land use.

Limitations

The findings, conclusions, and recommendations presented in this letter are based on our documented site observations, review of prior testing by others, interviews, and the referenced analytical testing. Our conclusions in part are based on information provided or prepared by others.

If the existing site uses change, or if further information on the site becomes available, Terra Associates, Inc. should review the information, as it may affect our conclusions.

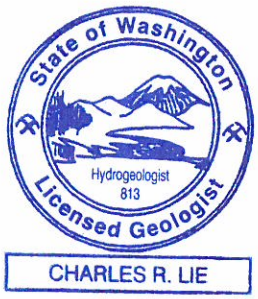
We prepared our conclusions and recommendations in accordance with generally accepted professional engineering practices. We make no other warranty, either expressed, or implied. This report is the copyrighted property of Terra Associates, Inc. and is intended for specific application to the Former UCO Facility in Redmond, Washington.

This report is for the exclusive use of Mr. Greg Draper and his authorized representatives.

We trust the information presented is sufficient for your current needs. If you have any questions or require additional information, please call.

Sincerely yours,
TERRA ASSOCIATES, INC.

Charles R. Lie, L.E.G., L.H.G.
Project Manager



cc: Ms. Diane Escobedo, WDOE NWRO

Attachments: cPAH Summary – Table 1
Groundwater Summary – Table 2
Figure 1 – Sample Location Plan
Figures 2 through 5 – DPT Logs
Analytical Test Reports

Table 1A
cPAH Summary
Supplemental Characterization Samples
Former UCO Facility

Sample ID	Date	Depth (inches)	cPAH	Sample Type	Notes
DPT-1	1-28-15	10	0.0846	Characterization	
DPT-2		10	0.0123	Characterization	
DPT-3		10	0.0166	Characterization	
DPT-W		6	0.066	Characterization	Visible asphalt chunks
MTCA	Method A		0.1		

Table 1B
cPAH Summary
Remedial Action Performance and Confirmation Samples
Former UCO Facility

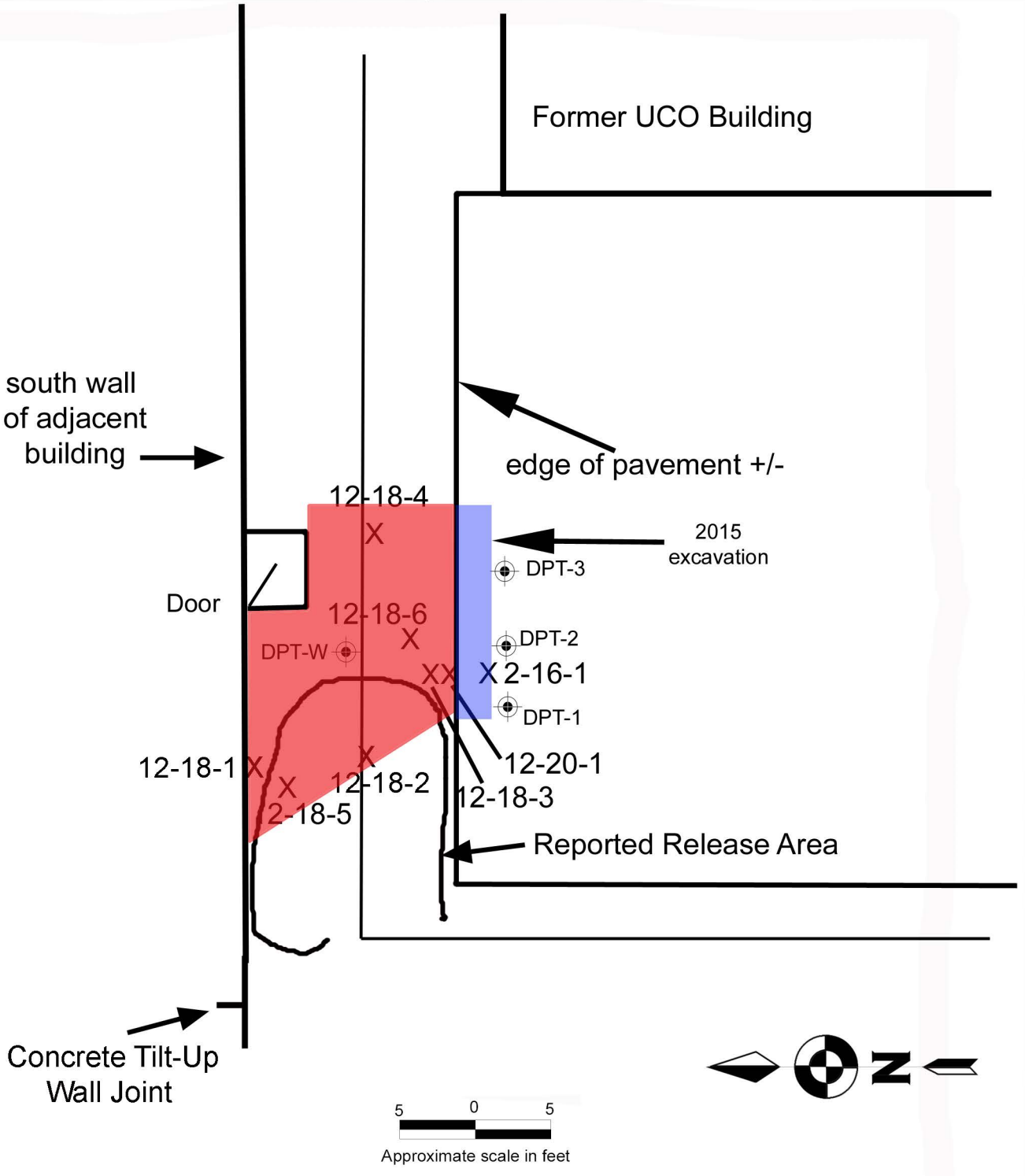
Sample ID	Date	Depth (inches)	cPAH	Sample Type	Notes
12-18-1	12-18-2013	8	0.0064	Final Sidewall	Final
12-18-2	12-18-2013	8	0.0068	Final Sidewall	Final
12-18-3	12-18-2013	8	0.183	Performance	Removed Dec 2013
12-18-4	12-18-2013	8	0.0067	Final Sidewall	Final
12-18-5	12-18-2013	30	0.0057	Final Base	Final
12-18-6	12-18-2013	30	0.0069	Final Base	Final
12-20-1	12-20-2013	310	0.46	Performance	Removed Feb 2015
2-16-1	2-16-2015	10	0.014	Final Sidewall	Final
MTCA	Method A		0.1		

Notes: All units are mg/kg.
Samples below the PQL were given values of one half of the PQL.
Results are corrected for the TEF on table 708-2 of the MTCA.
Shaded cells show samples that exceed the Method A cleanup value. Samples that exceed the MTCA Method A value were removed from the site for off-site disposal.

Table 2
Analytical Test Summary-Groundwater
Former UCO Facility

Sample ID	Date	cPAHs	TPHD	TPH Oil	Aluminum	Cadmium	Chromium	Lead
DPT-W	1-28-2015	0.014	260U	410U	68	4.0U	10U	1.0U
MTCA	Method A	0.1	500	500	16,000	5.0	50	15.0

Notes: All units are µg/l.
Cleanup value shown for aluminum is Method B.
cPAH results are corrected for the TEF on Table 708-2 of the MTCA.
u modifier indicates that the analyte was not present at the numerical practical quantitation limit (PQL).



Shaded area represents approximate limits remedial excavation conducted on December 18, 2013

Reference: Base image taken from Figure 5 of Remedial Investigation by Terra Associates dated March 29, 2013

TERRA ASSOCIATES
Geotechnical Consultants

Remedial Excavation Sampling Plan
UCO
Redmond, Washington

Proj. No T-6776	Date MAR 2015	Figure 1

LOG OF DPT NO. DPT-1

Figure No. 2

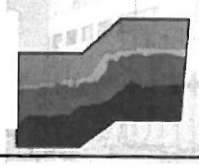
Project: UCO **Project No:** T-6776 **Date Drilled:** 1/28/15

Client: Greg Draper **Driller:** Cascade Drilling **Logged By:** NRH

Location: Redmond, Washington **Approx. Elev:** N/A

Depth (ft)	Sample Interval	Soil Description	Odor/Sheen	Recovery % (20 40 60 80 120)	PID (PPM)	Observ. Well
0		(5 inches ASPHALT)				
		Brown sandy SILT, moist, stiff. (ML)				
1					0.0	
2		Gray-brown gravelly SAND, moist. (SP-SM)	No/No		0.0	
3		Terminated at 3 feet.				
4						
5						

Note: This borehole log has been prepared for geotechnical purposes. This information pertains only to this boring location and should not be interpeted as being indicative of other areas of the site.



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LOG OF DPT NO. DPT-2

Figure No. 3

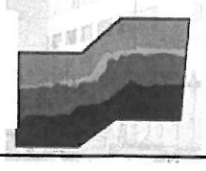
Project: UCO **Project No:** T-6776 **Date Drilled:** 1/28/15

Client: Greg Draper **Driller:** Cascade Drilling **Logged By:** NRH

Location: Redmond, Washington **Approx. Elev:** N/A

Depth (ft)	Sample Interval	Soil Description	Odor/Sheen	Recovery % (20 40 60 80 120)	PID (PPM)	Observ. Well
1		(5 inches ASPHALT) Brown sandy SILT, moist, stiff.	No/No		0.0	
2					0.0	
		Brown gravelly SAND. (SP-SM)				
3		Terminated at 3 feet.				
4						
5						

Note: This borehole log has been prepared for geotechnical purposes. This information pertains only to this boring location and should not be interpeted as being indicative of other areas of the site.



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LOG OF DPT NO. DPT-3

Figure No. 4

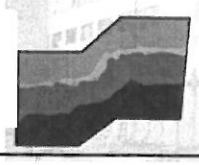
Project: UCO **Project No:** T-6776 **Date Drilled:** 1/28/15

Client: Greg Draper **Driller:** Cascade Drilling **Logged By:** NRH

Location: Redmond, Washington **Approx. Elev:** N/A

Depth (ft)	Sample Interval	Soil Description	Odor/Sheen	Recovery % (20 40 60 80 120)	PID (PPM)	Observ. Well
		(5 inches ASPHALT)				
		Brown sandy SILT, moist, stiff. (ML)			0.0	
1			No/No			
2		Brown gravelly SAND, moist, dense. (SP-SM)	No/No		0.0	
3		Terminated at 3 feet.				
4						
5						

Note: This borehole log has been prepared for geotechnical purposes. This information pertains only to this boring location and should not be interpeted as being indicative of other areas of the site.



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LOG OF DPT NO. DPT-W

Figure No. 5

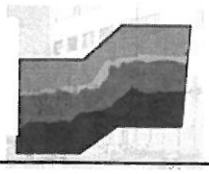
Project: UCO **Project No:** T-6776 **Date Drilled:** 1/28/15

Client: Greg Draper **Driller:** Cascade Drilling **Logged By:** NRH

Location: Redmond, Washington **Approx. Elev:** N/A

Depth (ft)	Sample Interval	Soil Description	Odor/Sheen	Recovery % (20 40 60 80 120)	PID (PPM)	Observ. Well
1		FILL: sandy gravel, moist.	No/No		0.0	
2–10		Brown gravelly SAND with minor silt, dense. (SP-SM)	No/No		0.0	
8 ▼						
10		Terminated at 10 feet. Temporary well set from 8 to 10 feet to obtain groundwater sample. Groundwater observed at 8 feet.				
11–15						

Note: This borehole log has been prepared for geotechnical purposes. This information pertains only to this boring location and should not be interpeted as being indicative of other areas of the site.



Terra Associates, Inc.

Consultants in Geotechnical Engineering, Geology and Environmental Earth Sciences

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

February 5, 2015

Chuck Lie
Terra Associates, Inc.
12525 Willows Road, Suite 101
Kirkland, WA 98034

Re: Analytical Data for Project 6776
Laboratory Reference No. 1501-195

Dear Chuck:

Enclosed are the analytical results and associated quality control data for samples submitted on January 28, 2015.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

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

Date of Report: February 5, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-195
Project: 6776

Case Narrative

Samples were collected on January 28, 2015 and received by the laboratory on January 28, 2015. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

PAHs EPA 8270D/SIM Analysis

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

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

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Date of Report: February 5, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-195
Project: 6776

PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**DPT-1-10"**					
Laboratory ID:	01-195-01					
Naphthalene	**ND**	0.010	EPA 8270D/SIM	1-30-15	2-4-15	
2-Methylnaphthalene	**ND**	0.010	EPA 8270D/SIM	1-30-15	2-4-15	
1-Methylnaphthalene	**ND**	0.010	EPA 8270D/SIM	1-30-15	2-4-15	
Acenaphthylene	**ND**	0.010	EPA 8270D/SIM	1-30-15	2-4-15	
Acenaphthene	**0.017**	0.010	EPA 8270D/SIM	1-30-15	2-4-15	
Fluorene	**0.017**	0.010	EPA 8270D/SIM	1-30-15	2-4-15	
Phenanthrene	**0.16**	0.010	EPA 8270D/SIM	1-30-15	2-4-15	
Anthracene	**0.032**	0.010	EPA 8270D/SIM	1-30-15	2-4-15	
Fluoranthene	**0.20**	0.010	EPA 8270D/SIM	1-30-15	2-4-15	
Pyrene	**0.15**	0.010	EPA 8270D/SIM	1-30-15	2-4-15	
Benzo[a]anthracene	**0.083**	0.010	EPA 8270D/SIM	1-30-15	2-4-15	
Chrysene	**0.080**	0.010	EPA 8270D/SIM	1-30-15	2-4-15	
Benzo[b]fluoranthene	**0.058**	0.010	EPA 8270D/SIM	1-30-15	2-4-15	
Benzo(j,k)fluoranthene	**0.055**	0.010	EPA 8270D/SIM	1-30-15	2-4-15	
Benzo[a]pyrene	**0.059**	0.010	EPA 8270D/SIM	1-30-15	2-4-15	
Indeno(1,2,3-c,d)pyrene	**0.034**	0.010	EPA 8270D/SIM	1-30-15	2-4-15	
Dibenz[a,h]anthracene	**0.018**	0.010	EPA 8270D/SIM	1-30-15	2-4-15	
Benzo[g,h,i]perylene	**0.037**	0.010	EPA 8270D/SIM	1-30-15	2-4-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*57*	*32 - 114*				
Pyrene-d10	*60*	*33 - 121*				
Terphenyl-d14	*57*	*31 - 116*				

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Date of Report: February 5, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-195
Project: 6776

PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**DPT-2-10"**					
Laboratory ID:	01-195-03					
Naphthalene	**ND**	0.0082	EPA 8270D/SIM	1-30-15	2-4-15	
2-Methylnaphthalene	**ND**	0.0082	EPA 8270D/SIM	1-30-15	2-4-15	
1-Methylnaphthalene	**ND**	0.0082	EPA 8270D/SIM	1-30-15	2-4-15	
Acenaphthylene	**ND**	0.0082	EPA 8270D/SIM	1-30-15	2-4-15	
Acenaphthene	**ND**	0.0082	EPA 8270D/SIM	1-30-15	2-4-15	
Fluorene	**ND**	0.0082	EPA 8270D/SIM	1-30-15	2-4-15	
Phenanthrene	**0.0097**	0.0082	EPA 8270D/SIM	1-30-15	2-4-15	
Anthracene	**ND**	0.0082	EPA 8270D/SIM	1-30-15	2-4-15	
Fluoranthene	**0.014**	0.0082	EPA 8270D/SIM	1-30-15	2-4-15	
Pyrene	**0.011**	0.0082	EPA 8270D/SIM	1-30-15	2-4-15	
Benzo[a]anthracene	**ND**	0.0082	EPA 8270D/SIM	1-30-15	2-4-15	
Chrysene	**ND**	0.0082	EPA 8270D/SIM	1-30-15	2-4-15	
Benzo[b]fluoranthene	**ND**	0.0082	EPA 8270D/SIM	1-30-15	2-4-15	
Benzo(j,k)fluoranthene	**ND**	0.0082	EPA 8270D/SIM	1-30-15	2-4-15	
Benzo[a]pyrene	**ND**	0.0082	EPA 8270D/SIM	1-30-15	2-4-15	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0082	EPA 8270D/SIM	1-30-15	2-4-15	
Dibenz[a,h]anthracene	**ND**	0.0082	EPA 8270D/SIM	1-30-15	2-4-15	
Benzo[g,h,i]perylene	**ND**	0.0082	EPA 8270D/SIM	1-30-15	2-4-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*69*	*32 - 114*				
Pyrene-d10	*67*	*33 - 121*				
Terphenyl-d14	*60*	*31 - 116*				

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Date of Report: February 5, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-195
Project: 6776

PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**DPT-3-10"**					
Laboratory ID:	01-195-05					
Naphthalene	**ND**	0.011	EPA 8270D/SIM	1-30-15	2-4-15	
2-Methylnaphthalene	**ND**	0.011	EPA 8270D/SIM	1-30-15	2-4-15	
1-Methylnaphthalene	**ND**	0.011	EPA 8270D/SIM	1-30-15	2-4-15	
Acenaphthylene	**ND**	0.011	EPA 8270D/SIM	1-30-15	2-4-15	
Acenaphthene	**ND**	0.011	EPA 8270D/SIM	1-30-15	2-4-15	
Fluorene	**ND**	0.011	EPA 8270D/SIM	1-30-15	2-4-15	
Phenanthrene	**ND**	0.011	EPA 8270D/SIM	1-30-15	2-4-15	
Anthracene	**ND**	0.011	EPA 8270D/SIM	1-30-15	2-4-15	
Fluoranthene	**ND**	0.011	EPA 8270D/SIM	1-30-15	2-4-15	
Pyrene	**ND**	0.011	EPA 8270D/SIM	1-30-15	2-4-15	
Benzo[a]anthracene	**ND**	0.011	EPA 8270D/SIM	1-30-15	2-4-15	
Chrysene	**ND**	0.011	EPA 8270D/SIM	1-30-15	2-4-15	
Benzo[b]fluoranthene	**ND**	0.011	EPA 8270D/SIM	1-30-15	2-4-15	
Benzo(j,k)fluoranthene	**ND**	0.011	EPA 8270D/SIM	1-30-15	2-4-15	
Benzo[a]pyrene	**ND**	0.011	EPA 8270D/SIM	1-30-15	2-4-15	
Indeno(1,2,3-c,d)pyrene	**ND**	0.011	EPA 8270D/SIM	1-30-15	2-4-15	
Dibenz[a,h]anthracene	**ND**	0.011	EPA 8270D/SIM	1-30-15	2-4-15	
Benzo[g,h,i]perylene	**ND**	0.011	EPA 8270D/SIM	1-30-15	2-4-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*76*	*32 - 114*				
Pyrene-d10	*76*	*33 - 121*				
Terphenyl-d14	*69*	*31 - 116*				

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Date of Report: February 5, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-195
Project: 6776

PAHs EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0130S1					
Naphthalene	**ND**	0.0067	EPA 8270D/SIM	1-30-15	2-3-15	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	1-30-15	2-3-15	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	1-30-15	2-3-15	
Acenaphthylene	**ND**	0.0067	EPA 8270D/SIM	1-30-15	2-3-15	
Acenaphthene	**ND**	0.0067	EPA 8270D/SIM	1-30-15	2-3-15	
Fluorene	**ND**	0.0067	EPA 8270D/SIM	1-30-15	2-3-15	
Phenanthrene	**ND**	0.0067	EPA 8270D/SIM	1-30-15	2-3-15	
Anthracene	**ND**	0.0067	EPA 8270D/SIM	1-30-15	2-3-15	
Fluoranthene	**ND**	0.0067	EPA 8270D/SIM	1-30-15	2-3-15	
Pyrene	**ND**	0.0067	EPA 8270D/SIM	1-30-15	2-3-15	
Benzo[a]anthracene	**ND**	0.0067	EPA 8270D/SIM	1-30-15	2-3-15	
Chrysene	**ND**	0.0067	EPA 8270D/SIM	1-30-15	2-3-15	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270D/SIM	1-30-15	2-3-15	
Benzo(j,k)fluoranthene	**ND**	0.0067	EPA 8270D/SIM	1-30-15	2-3-15	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270D/SIM	1-30-15	2-3-15	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0067	EPA 8270D/SIM	1-30-15	2-3-15	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270D/SIM	1-30-15	2-3-15	
Benzo[g,h,i]perylene	**ND**	0.0067	EPA 8270D/SIM	1-30-15	2-3-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*102*	*32 - 114*				
Pyrene-d10	*88*	*33 - 121*				
Terphenyl-d14	*77*	*31 - 116*				

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Samples Submitted: January 28, 2015
Laboratory Reference: 1501-195
Project: 6776

PAHs 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:	SB0130S1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.0785**	**0.0809**	0.0833	0.0833	94	97	63 - 113	3	19	
Acenaphthylene	**0.0924**	**0.0957**	0.0833	0.0833	111	115	61 - 125	4	16	
Acenaphthene	**0.0920**	**0.0949**	0.0833	0.0833	110	113	66 - 113	3	16	
Fluorene	**0.0914**	**0.0933**	0.0833	0.0833	110	112	60 - 117	2	16	
Phenanthrene	**0.0848**	**0.0873**	0.0833	0.0833	102	105	63 - 116	3	12	
Anthracene	**0.0956**	**0.0975**	0.0833	0.0833	115	117	66 - 141	2	19	
Fluoranthene	**0.0892**	**0.0915**	0.0833	0.0833	107	110	60 - 125	3	13	
Pyrene	**0.0898**	**0.0932**	0.0833	0.0833	108	112	66 - 126	4	15	
Benzo[a]anthracene	**0.0939**	**0.0960**	0.0833	0.0833	113	115	60 - 128	2	15	
Chrysene	**0.0793**	**0.0831**	0.0833	0.0833	95	100	60 - 117	5	13	
Benzo[b]fluoranthene	**0.0766**	**0.0760**	0.0833	0.0833	92	91	60 - 131	1	16	
Benzo(j,k)fluoranthene	**0.0780**	**0.0818**	0.0833	0.0833	94	98	57 - 126	5	20	
Benzo[a]pyrene	**0.0812**	**0.0833**	0.0833	0.0833	97	100	62 - 136	3	16	
Indeno(1,2,3-c,d)pyrene	**0.0827**	**0.0846**	0.0833	0.0833	99	102	60 - 127	2	19	
Dibenz[a,h]anthracene	**0.0841**	**0.0870**	0.0833	0.0833	101	104	62 - 133	3	22	
Benzo[g,h,i]perylene	**0.0822**	**0.0849**	0.0833	0.0833	99	102	63 - 129	3	22	
Surrogate:										
2-Fluorobiphenyl					*116*	*107*	*32 - 114*			Q
Pyrene-d10					*91*	*94*	*33 - 121*			
Terphenyl-d14					*79*	*82*	*31 - 116*			

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

Date of Report: February 5, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-195
Project: 6776

% MOISTURE

Date Analyzed: 1-30-15

Client ID	Lab ID	% Moisture
DPT-1-10"	01-195-01	36
DPT-2-10	01-195-03	18
DPT-3-10"	01-195-05	39

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.

OnSite Environmental Inc.

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-napthalene) 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

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.

Chain of Custody

Page 1 of 1

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

Laboratory Number: 01-195

Company: Tera Associates Inc
Project Number: 6776
Project Name: ——
Project Manager: Chuck Liu
Sampled by:

Turnaround Request (in working days)
(Check One)
NO
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
1	DPT-1 -10"	1/28/15	11:00	Soil	1								X									✓
2	DPT-1 -3'		11:05																			✓
3	DPT-2 -10"		11:15										X									✓
4	DPT-2 -2.5'		11:20																			✓
5	DPT-3 -10"		11:25										X									✓
6	DPT-3 -2.5"		11:30																			✓

	Signature	Company	Date	Time
Relinquished		TAI	1/28/15	1305
Received		OSE	1/28/15	1305
Relinquished				
Received				
Relinquished				
Received				

Comments/Special Instructions
~~Hold for analysis~~
~~for vost~~
Added 1/29/15. DB (STA)
Archive for 6 months.

Reviewed/Date
Reviewed/Date
Chromatograms with final report ☐

Data Package: Standard ☐ Level III ☐ Level IV ☐
Electronic Data Deliverables (EDDs) ☐ _____

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

February 5, 2015

Chuck Lie
Terra Associates, Inc.
12525 Willows Road, Suite 101
Kirkland, WA 98034

Re: Analytical Data for Project 6776
Laboratory Reference No. 1501-196

Dear Chuck:

Enclosed are the analytical results and associated quality control data for samples submitted on January 28, 2015.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

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

Date of Report: February 5, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-196
Project: 6776

Case Narrative

Samples were collected on January 28, 2015 and received by the laboratory on January 28, 2015. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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%.

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

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

Date of Report: February 5, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-196
Project: 6776

PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**Asphalt Sub-base**					
Laboratory ID:	01-196-01					
Naphthalene	**ND**	0.067	EPA 8270D/SIM	2-2-15	2-3-15	
2-Methylnaphthalene	**0.13**	0.067	EPA 8270D/SIM	2-2-15	2-3-15	
1-Methylnaphthalene	**0.099**	0.067	EPA 8270D/SIM	2-2-15	2-3-15	
Acenaphthylene	**ND**	0.067	EPA 8270D/SIM	2-2-15	2-3-15	
Acenaphthene	**0.14**	0.067	EPA 8270D/SIM	2-2-15	2-3-15	
Fluorene	**ND**	0.067	EPA 8270D/SIM	2-2-15	2-3-15	
Phenanthrene	**0.85**	0.067	EPA 8270D/SIM	2-2-15	2-3-15	
Anthracene	**ND**	0.067	EPA 8270D/SIM	2-2-15	2-3-15	
Fluoranthene	**0.13**	0.067	EPA 8270D/SIM	2-2-15	2-3-15	
Pyrene	**0.19**	0.067	EPA 8270D/SIM	2-2-15	2-3-15	
Benzo[a]anthracene	**0.12**	0.067	EPA 8270D/SIM	2-2-15	2-3-15	
Chrysene	**0.28**	0.067	EPA 8270D/SIM	2-2-15	2-3-15	
Benzo[b]fluoranthene	**0.076**	0.067	EPA 8270D/SIM	2-2-15	2-3-15	
Benzo(j,k)fluoranthene	**ND**	0.067	EPA 8270D/SIM	2-2-15	2-3-15	
Benzo[a]pyrene	**ND**	0.067	EPA 8270D/SIM	2-2-15	2-3-15	
Indeno(1,2,3-c,d)pyrene	**ND**	0.067	EPA 8270D/SIM	2-2-15	2-3-15	
Dibenz[a,h]anthracene	**ND**	0.067	EPA 8270D/SIM	2-2-15	2-3-15	
Benzo[g,h,i]perylene	**0.11**	0.067	EPA 8270D/SIM	2-2-15	2-3-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*84*	*32 - 114*				
Pyrene-d10	*77*	*33 - 121*				
Terphenyl-d14	*75*	*31 - 116*				

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

Date of Report: February 5, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-196
Project: 6776

PAHs EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0202S1					
Naphthalene	**ND**	0.0067	EPA 8270D/SIM	2-2-15	2-3-15	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	2-2-15	2-3-15	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	2-2-15	2-3-15	
Acenaphthylene	**ND**	0.0067	EPA 8270D/SIM	2-2-15	2-3-15	
Acenaphthene	**ND**	0.0067	EPA 8270D/SIM	2-2-15	2-3-15	
Fluorene	**ND**	0.0067	EPA 8270D/SIM	2-2-15	2-3-15	
Phenanthrene	**ND**	0.0067	EPA 8270D/SIM	2-2-15	2-3-15	
Anthracene	**ND**	0.0067	EPA 8270D/SIM	2-2-15	2-3-15	
Fluoranthene	**ND**	0.0067	EPA 8270D/SIM	2-2-15	2-3-15	
Pyrene	**ND**	0.0067	EPA 8270D/SIM	2-2-15	2-3-15	
Benzo[a]anthracene	**ND**	0.0067	EPA 8270D/SIM	2-2-15	2-3-15	
Chrysene	**ND**	0.0067	EPA 8270D/SIM	2-2-15	2-3-15	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270D/SIM	2-2-15	2-3-15	
Benzo(j,k)fluoranthene	**ND**	0.0067	EPA 8270D/SIM	2-2-15	2-3-15	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270D/SIM	2-2-15	2-3-15	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0067	EPA 8270D/SIM	2-2-15	2-3-15	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270D/SIM	2-2-15	2-3-15	
Benzo[g,h,i]perylene	**ND**	0.0067	EPA 8270D/SIM	2-2-15	2-3-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*116*	*32 - 114*				Q
Pyrene-d10	*95*	*33 - 121*				
Terphenyl-d14	*85*	*31 - 116*				

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

Date of Report: February 5, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-196
Project: 6776

PAHs 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:	SB0202S1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.0814**	**0.0800**	0.0833	0.0833	98	96	63 - 113	2	19	
Acenaphthylene	**0.0944**	**0.0931**	0.0833	0.0833	113	112	61 - 125	1	16	
Acenaphthene	**0.0920**	**0.0927**	0.0833	0.0833	110	111	66 - 113	1	16	
Fluorene	**0.0959**	**0.0930**	0.0833	0.0833	115	112	60 - 117	3	16	
Phenanthrene	**0.0889**	**0.0879**	0.0833	0.0833	107	106	63 - 116	1	12	
Anthracene	**0.0934**	**0.0942**	0.0833	0.0833	112	113	66 - 141	1	19	
Fluoranthene	**0.0927**	**0.0939**	0.0833	0.0833	111	113	60 - 125	1	13	
Pyrene	**0.0938**	**0.0952**	0.0833	0.0833	113	114	66 - 126	1	15	
Benzo[a]anthracene	**0.0964**	**0.0991**	0.0833	0.0833	116	119	60 - 128	3	15	
Chrysene	**0.0829**	**0.0854**	0.0833	0.0833	100	103	60 - 117	3	13	
Benzo[b]fluoranthene	**0.0800**	**0.0842**	0.0833	0.0833	96	101	60 - 131	5	16	
Benzo(j,k)fluoranthene	**0.0704**	**0.0780**	0.0833	0.0833	85	94	57 - 126	10	20	
Benzo[a]pyrene	**0.0800**	**0.0844**	0.0833	0.0833	96	101	62 - 136	5	16	
Indeno(1,2,3-c,d)pyrene	**0.0848**	**0.0877**	0.0833	0.0833	102	105	60 - 127	3	19	
Dibenz[a,h]anthracene	**0.0874**	**0.0904**	0.0833	0.0833	105	109	62 - 133	3	22	
Benzo[g,h,i]perylene	**0.0857**	**0.0885**	0.0833	0.0833	103	106	63 - 129	3	22	
Surrogate:										
2-Fluorobiphenyl					*108*	*106*	*32 - 114*			
Pyrene-d10					*95*	*96*	*33 - 121*			
Terphenyl-d14					*79*	*83*	*31 - 116*			

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

Date of Report: February 5, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-196
Project: 6776

% MOISTURE

Date Analyzed: 1-30-15

Client ID	Lab ID	% Moisture
Asphalt Sub-base	01-196-01	1

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.

OnSite Environmental Inc.

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-napthalene) 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

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.

Chain of Custody

Page 1 of 1

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

Laboratory Number: 01-196

Company: Tara Associates Inc
Project Number: 6776
Project Name: —
Project Manager: Chuck Lio
Sampled by: Nicolas R. Hoffman

Turnaround Request (in working days)

(Check One)

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

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
1	Asphalt Sub-base	1/28/15	11:07	Asphalt	1								X									X
2	Asphalt edge	1/28/15	11:35	Asphalt	1																	

	Signature	Company	Date	Time
Relinquished		TAI	~~1/28/15~~ 1/28/15	12:10
Received		CCAS	1/28/15	1210
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

~~Hold for analysis request~~ X Added 1/29/15 - DB (STA)

Archive for 6 months

Chromatograms with final report ☐

Data Package: Standard ☐ Level III ☐ Level IV ☐

Electronic Data Deliverables (EDDs) ☐ _____

OnSite Environmental Inc.

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

February 6, 2015

Chuck Lie
Terra Associates, Inc.
12525 Willows Road, Suite 101
Kirkland, WA 98034

Re: Analytical Data for Project 6776
Laboratory Reference No. 1501-197

Dear Chuck:

Enclosed are the analytical results and associated quality control data for samples submitted on January 28, 2015.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

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

Date of Report: February 6, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-197
Project: 6776

Case Narrative

Samples were collected on January 28, 2015 and received by the laboratory on January 28, 2015. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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

Date of Report: February 6, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-197
Project: 6776

PAHs EPA 8270D/SIM

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**DPT-W**					
Laboratory ID:	01-197-01					
Naphthalene	**ND**	0.094	EPA 8270D/SIM	1-29-15	1-29-15	
2-Methylnaphthalene	**ND**	0.094	EPA 8270D/SIM	1-29-15	1-29-15	
1-Methylnaphthalene	**ND**	0.094	EPA 8270D/SIM	1-29-15	1-29-15	
Acenaphthylene	**ND**	0.094	EPA 8270D/SIM	1-29-15	1-29-15	
Acenaphthene	**ND**	0.094	EPA 8270D/SIM	1-29-15	1-29-15	
Fluorene	**ND**	0.094	EPA 8270D/SIM	1-29-15	1-29-15	
Phenanthrene	**ND**	0.094	EPA 8270D/SIM	1-29-15	1-29-15	
Anthracene	**ND**	0.094	EPA 8270D/SIM	1-29-15	1-29-15	
Fluoranthene	**ND**	0.094	EPA 8270D/SIM	1-29-15	1-29-15	
Pyrene	**ND**	0.094	EPA 8270D/SIM	1-29-15	1-29-15	
Benzo[a]anthracene	**ND**	0.0094	EPA 8270D/SIM	1-29-15	1-29-15	
Chrysene	**ND**	0.0094	EPA 8270D/SIM	1-29-15	1-29-15	
Benzo[b]fluoranthene	**ND**	0.0094	EPA 8270D/SIM	1-29-15	1-29-15	
Benzo(j,k)fluoranthene	**ND**	0.0094	EPA 8270D/SIM	1-29-15	1-29-15	
Benzo[a]pyrene	**ND**	0.0094	EPA 8270D/SIM	1-29-15	1-29-15	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0094	EPA 8270D/SIM	1-29-15	1-29-15	
Dibenz[a,h]anthracene	**ND**	0.0094	EPA 8270D/SIM	1-29-15	1-29-15	
Benzo[g,h,i]perylene	**ND**	0.0094	EPA 8270D/SIM	1-29-15	1-29-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*87*	*39 - 109*				
Pyrene-d10	*82*	*53 - 131*				
Terphenyl-d14	*85*	*44 - 104*				

This report pertains to the samples analyzed in accordance with the chain of custody,
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Date of Report: February 6, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-197
Project: 6776

PAHs EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0129W1					
Naphthalene	**ND**	0.10	EPA 8270D/SIM	1-29-15	1-29-15	
2-Methylnaphthalene	**ND**	0.10	EPA 8270D/SIM	1-29-15	1-29-15	
1-Methylnaphthalene	**ND**	0.10	EPA 8270D/SIM	1-29-15	1-29-15	
Acenaphthylene	**ND**	0.10	EPA 8270D/SIM	1-29-15	1-29-15	
Acenaphthene	**ND**	0.10	EPA 8270D/SIM	1-29-15	1-29-15	
Fluorene	**ND**	0.10	EPA 8270D/SIM	1-29-15	1-29-15	
Phenanthrene	**ND**	0.10	EPA 8270D/SIM	1-29-15	1-29-15	
Anthracene	**ND**	0.10	EPA 8270D/SIM	1-29-15	1-29-15	
Fluoranthene	**ND**	0.10	EPA 8270D/SIM	1-29-15	1-29-15	
Pyrene	**ND**	0.10	EPA 8270D/SIM	1-29-15	1-29-15	
Benzo[a]anthracene	**ND**	0.010	EPA 8270D/SIM	1-29-15	1-29-15	
Chrysene	**ND**	0.010	EPA 8270D/SIM	1-29-15	1-29-15	
Benzo[b]fluoranthene	**ND**	0.010	EPA 8270D/SIM	1-29-15	1-29-15	
Benzo(j,k)fluoranthene	**ND**	0.010	EPA 8270D/SIM	1-29-15	1-29-15	
Benzo[a]pyrene	**ND**	0.010	EPA 8270D/SIM	1-29-15	1-29-15	
Indeno(1,2,3-c,d)pyrene	**ND**	0.010	EPA 8270D/SIM	1-29-15	1-29-15	
Dibenz[a,h]anthracene	**ND**	0.010	EPA 8270D/SIM	1-29-15	1-29-15	
Benzo[g,h,i]perylene	**ND**	0.010	EPA 8270D/SIM	1-29-15	1-29-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*78*	*39 - 109*				
Pyrene-d10	*85*	*53 - 131*				
Terphenyl-d14	*95*	*44 - 104*				

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Date of Report: February 6, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-197
Project: 6776

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:	SB0129W1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.350**	**0.437**	0.500	0.500	70	87	41 - 105	22	46	
Acenaphthylene	**0.431**	**0.504**	0.500	0.500	86	101	48 - 109	16	43	
Acenaphthene	**0.372**	**0.444**	0.500	0.500	74	89	52 - 105	18	40	
Fluorene	**0.408**	**0.456**	0.500	0.500	82	91	60 - 108	11	41	
Phenanthrene	**0.388**	**0.427**	0.500	0.500	78	85	61 - 110	10	36	
Anthracene	**0.395**	**0.445**	0.500	0.500	79	89	57 - 130	12	37	
Fluoranthene	**0.407**	**0.440**	0.500	0.500	81	88	60 - 120	8	35	
Pyrene	**0.403**	**0.437**	0.500	0.500	81	87	66 - 127	8	37	
Benzo[a]anthracene	**0.432**	**0.475**	0.500	0.500	86	95	60 - 135	9	34	
Chrysene	**0.364**	**0.385**	0.500	0.500	73	77	64 - 113	6	34	
Benzo[b]fluoranthene	**0.357**	**0.402**	0.500	0.500	71	80	66 - 126	12	37	
Benzo(j,k)fluoranthene	**0.470**	**0.498**	0.500	0.500	94	100	66 - 123	6	39	
Benzo[a]pyrene	**0.424**	**0.463**	0.500	0.500	85	93	63 - 130	9	37	
Indeno(1,2,3-c,d)pyrene	**0.450**	**0.475**	0.500	0.500	90	95	63 - 130	5	42	
Dibenz[a,h]anthracene	**0.447**	**0.474**	0.500	0.500	89	95	60 - 124	6	44	
Benzo[g,h,i]perylene	**0.429**	**0.450**	0.500	0.500	86	90	60 - 119	5	45	
Surrogate:										
2-Fluorobiphenyl					*79*	*93*	*39 - 109*			
Pyrene-d10					*82*	*88*	*53 - 131*			
Terphenyl-d14					*91*	*97*	*44 - 104*			

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Date of Report: February 6, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-197
Project: 6776

NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**DPT-W**					
Laboratory ID:	01-197-01					
Diesel Range Organics	**ND**	0.26	NWTPH-Dx	2-3-15	2-3-15	
Lube Oil Range Organics	**ND**	0.41	NWTPH-Dx	2-3-15	2-3-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*74*	*50-150*				

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Date of Report: February 6, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-197
Project: 6776

NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0203W1					
Diesel Range Organics	**ND**	0.25	NWTPH-Dx	2-3-15	2-3-15	
Lube Oil Range Organics	**ND**	0.40	NWTPH-Dx	2-3-15	2-3-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*68*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	01-197-01										
	ORIG	DUP									
Diesel Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	
Surrogate:											
o-Terphenyl						*74*	*74*	*50-150*			

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Date of Report: February 6, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-197
Project: 6776

DISSOLVED METALS
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-197-01					
Client ID:	**DPT-W**					
Aluminum	**68**	50	200.8		2-5-15	
Cadmium	**ND**	4.0	200.8		2-5-15	
Chromium	**ND**	10	200.8		2-5-15	
Lead	**ND**	1.0	200.8		2-5-15	

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Date of Report: February 6, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-197
Project: 6776

DISSOLVED METALS
EPA 200.8
METHOD BLANK QUALITY CONTROL

Date Analyzed: 2-5-15

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0205D1

Analyte	Method	Result	PQL
Aluminum	200.8	**ND**	50
Cadmium	200.8	**ND**	4.0
Chromium	200.8	**ND**	10
Lead	200.8	**ND**	1.0

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Date of Report: February 6, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-197
Project: 6776

DISSOLVED METALS
EPA 200.8
DUPLICATE QUALITY CONTROL

Date Analyzed: 2-5-15

Matrix: Water
Units: ug/L (ppb)

Lab ID: 01-197-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Aluminum	**67.9**	**67.6**	1	50	
Cadmium	**ND**	**ND**	NA	4.0	
Chromium	**ND**	**ND**	NA	10	
Lead	**ND**	**ND**	NA	1.0	

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Date of Report: February 6, 2015
Samples Submitted: January 28, 2015
Laboratory Reference: 1501-197
Project: 6776

DISSOLVED METALS
EPA 200.8
MS/MSD QUALITY CONTROL

Date Analyzed: 2-5-15

Matrix: Water
Units: ug/L (ppb)

Lab ID: 01-197-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Aluminum	200	**270**	101	**269**	101	1	
Cadmium	200	**208**	104	**210**	105	1	
Chromium	200	**204**	102	**204**	102	0	
Lead	200	**191**	95	**190**	95	0	

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OnSite Environmental Inc.

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-napthalene) 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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Chain of Custody

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

Page 1 of 1

Company: Terra Associates Inc.
Project Number: 6776
Project Name: —
Project Manager: Chuck Liu
Sampled by: Nicolas R. Hoffman

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

Laboratory Number: 01-197

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals Dissolved Pb, As Cd	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
1	DPT-W	1/29/15	9:50	water	5				O				X						O			

	Signature	Company	Date	Time
Relinquished		TAI	01/29/15	12:05
Received		OSE	1/29/15	1205
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
Hold for analysis instructions
O ADDED 2/2/15 - (STA)
X Added 1/29/15. JB (STA)
* Field Filtered
Archive 6 months

Chromatograms with final report ☐

Data Package: Standard ☐ Level III ☐ Level IV ☐
Electronic Data Deliverables (EDDs) ☐ _____

OnSite Environmental Inc.

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

February 18, 2015

Chuck Lie
Terra Associates, Inc.
12525 Willows Road, Suite 101
Kirkland, WA 98034

Re: Analytical Data for Project 6776
Laboratory Reference No. 1502-149

Dear Chuck:

Enclosed are the analytical results and associated quality control data for samples submitted on February 17, 2015.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
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Date of Report: February 18, 2015
Samples Submitted: February 17, 2015
Laboratory Reference: 1502-149
Project: 6776

Case Narrative

Samples were collected on February 16, 2015 and received by the laboratory on February 17, 2015. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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Date of Report: February 18, 2015
Samples Submitted: February 17, 2015
Laboratory Reference: 1502-149
Project: 6776

PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**2-16-1**					
Laboratory ID:	02-149-01					
Naphthalene	**ND**	0.0093	EPA 8270D/SIM	2-17-15	2-17-15	
2-Methylnaphthalene	**ND**	0.0093	EPA 8270D/SIM	2-17-15	2-17-15	
1-Methylnaphthalene	**ND**	0.0093	EPA 8270D/SIM	2-17-15	2-17-15	
Acenaphthylene	**ND**	0.0093	EPA 8270D/SIM	2-17-15	2-17-15	
Acenaphthene	**ND**	0.0093	EPA 8270D/SIM	2-17-15	2-17-15	
Fluorene	**ND**	0.0093	EPA 8270D/SIM	2-17-15	2-17-15	
Phenanthrene	**ND**	0.0093	EPA 8270D/SIM	2-17-15	2-17-15	
Anthracene	**ND**	0.0093	EPA 8270D/SIM	2-17-15	2-17-15	
Fluoranthene	**ND**	0.0093	EPA 8270D/SIM	2-17-15	2-17-15	
Pyrene	**ND**	0.0093	EPA 8270D/SIM	2-17-15	2-17-15	
Benzo[a]anthracene	**ND**	0.0093	EPA 8270D/SIM	2-17-15	2-17-15	
Chrysene	**ND**	0.0093	EPA 8270D/SIM	2-17-15	2-17-15	
Benzo[b]fluoranthene	**ND**	0.0093	EPA 8270D/SIM	2-17-15	2-17-15	
Benzo(j,k)fluoranthene	**ND**	0.0093	EPA 8270D/SIM	2-17-15	2-17-15	
Benzo[a]pyrene	**ND**	0.0093	EPA 8270D/SIM	2-17-15	2-17-15	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0093	EPA 8270D/SIM	2-17-15	2-17-15	
Dibenz[a,h]anthracene	**ND**	0.0093	EPA 8270D/SIM	2-17-15	2-17-15	
Benzo[g,h,i]perylene	**ND**	0.0093	EPA 8270D/SIM	2-17-15	2-17-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*77*	*32 - 114*				
Pyrene-d10	*62*	*33 - 121*				
Terphenyl-d14	*56*	*31 - 116*				

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Date of Report: February 18, 2015
Samples Submitted: February 17, 2015
Laboratory Reference: 1502-149
Project: 6776

PAHs EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0217S1					
Naphthalene	**ND**	0.0067	EPA 8270D/SIM	2-17-15	2-17-15	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	2-17-15	2-17-15	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	2-17-15	2-17-15	
Acenaphthylene	**ND**	0.0067	EPA 8270D/SIM	2-17-15	2-17-15	
Acenaphthene	**ND**	0.0067	EPA 8270D/SIM	2-17-15	2-17-15	
Fluorene	**ND**	0.0067	EPA 8270D/SIM	2-17-15	2-17-15	
Phenanthrene	**ND**	0.0067	EPA 8270D/SIM	2-17-15	2-17-15	
Anthracene	**ND**	0.0067	EPA 8270D/SIM	2-17-15	2-17-15	
Fluoranthene	**ND**	0.0067	EPA 8270D/SIM	2-17-15	2-17-15	
Pyrene	**ND**	0.0067	EPA 8270D/SIM	2-17-15	2-17-15	
Benzo[a]anthracene	**ND**	0.0067	EPA 8270D/SIM	2-17-15	2-17-15	
Chrysene	**ND**	0.0067	EPA 8270D/SIM	2-17-15	2-17-15	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270D/SIM	2-17-15	2-17-15	
Benzo(j,k)fluoranthene	**ND**	0.0067	EPA 8270D/SIM	2-17-15	2-17-15	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270D/SIM	2-17-15	2-17-15	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0067	EPA 8270D/SIM	2-17-15	2-17-15	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270D/SIM	2-17-15	2-17-15	
Benzo[g,h,i]perylene	**ND**	0.0067	EPA 8270D/SIM	2-17-15	2-17-15	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*92*	*32 - 114*				
Pyrene-d10	*83*	*33 - 121*				
Terphenyl-d14	*78*	*31 - 116*				

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Date of Report: February 18, 2015
Samples Submitted: February 17, 2015
Laboratory Reference: 1502-149
Project: 6776

PAHs 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:	SB0217S1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.0717**	**0.0689**	0.0833	0.0833	86	83	63 - 113	4	19	
Acenaphthylene	**0.0866**	**0.0833**	0.0833	0.0833	104	100	61 - 125	4	16	
Acenaphthene	**0.0736**	**0.0723**	0.0833	0.0833	88	87	66 - 113	2	16	
Fluorene	**0.0783**	**0.0733**	0.0833	0.0833	94	88	60 - 117	7	16	
Phenanthrene	**0.0645**	**0.0611**	0.0833	0.0833	77	73	63 - 116	5	12	
Anthracene	**0.0821**	**0.0789**	0.0833	0.0833	99	95	66 - 141	4	19	
Fluoranthene	**0.0803**	**0.0768**	0.0833	0.0833	96	92	60 - 125	4	13	
Pyrene	**0.0771**	**0.0733**	0.0833	0.0833	93	88	66 - 126	5	15	
Benzo[a]anthracene	**0.0728**	**0.0698**	0.0833	0.0833	87	84	60 - 128	4	15	
Chrysene	**0.0684**	**0.0647**	0.0833	0.0833	82	78	60 - 117	6	13	
Benzo[b]fluoranthene	**0.0685**	**0.0635**	0.0833	0.0833	82	76	60 - 131	8	16	
Benzo(j,k)fluoranthene	**0.0825**	**0.0720**	0.0833	0.0833	99	86	57 - 126	14	20	
Benzo[a]pyrene	**0.0759**	**0.0727**	0.0833	0.0833	91	87	62 - 136	4	16	
Indeno(1,2,3-c,d)pyrene	**0.0742**	**0.0715**	0.0833	0.0833	89	86	60 - 127	4	19	
Dibenz[a,h]anthracene	**0.0728**	**0.0695**	0.0833	0.0833	87	83	62 - 133	5	22	
Benzo[g,h,i]perylene	**0.0722**	**0.0695**	0.0833	0.0833	87	83	63 - 129	4	22	
Surrogate:										
2-Fluorobiphenyl					*99*	*96*	*32 - 114*			
Pyrene-d10					*88*	*85*	*33 - 121*			
Terphenyl-d14					*84*	*79*	*31 - 116*			

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Date of Report: February 18, 2015
Samples Submitted: February 17, 2015
Laboratory Reference: 1502-149
Project: 6776

% MOISTURE

Date Analyzed: 2-17-15

Client ID	Lab ID	% Moisture
2-16-1	02-149-01	29

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.

OnSite Environmental Inc.

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-napthalene) 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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Chain of Custody

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

Company: Terra Associates Inc.
Project Number: 6776
Project Name: ———
Project Manager: Chuck Lia
Sampled by: Nicolas R. Hoffman

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 02-149

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260C	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	% Moisture
1	Z-16-1	2/6/15	11:00	Soil	1								X									X

	Signature	Company	Date	Time
Relinquished	[signature]	TAI	2/17/15	12:27
Received	[signature]	OSE	2/17/15	1227
Relinquished				
Received				
Relinquished				
Received				

Comments/Special Instructions

Reviewed/Date

Reviewed/Date

Chromatograms with final report ☐

Data Package: Standard ☐ Level III ☐ Level IV ☐

Electronic Data Deliverables (EDDs) ☐ _____

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone 800-337-7455	4. Waste Tracking Number 02252015-01

5. Generator's Name and Mailing Address: LAND R ENTERPRISES, LLC, 31211 SE REDMOND FALL CITY RD, FALL CITY, WA 98024

Generator's Site Address (if different than mailing address): 9225 151ST AVE NE, REDMOND, WA 98052

Generator's Phone:

6. Transporter 1 Company Name: DH ENVIRONMENTAL, INC. — U.S. EPA ID Number: WAH 000047217

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: CHEMICAL WASTE MANAGEMENT, 17629 CEDAR SPRINGS LANE, ARLINGTON, OR 97812 — U.S. EPA ID Number: ORD 089452353

Facility's Phone: 541-454-2030

9. Waste Shipping Name and Description	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.	
1. MATERIAL NOT REGULATED BY DOT (NON-HAZARDOUS SOIL)	004	DM	2400	P	X004
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information
PROFILE # OR326541

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Scott Overdick — Signature: [signature] — Month 2 Day 25 Year 15

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Travis Forslund — Signature: [signature] — Month 02 Day 25 Year 15
Transporter 2 Printed/Typed Name — Signature — Month Day Year

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name — Signature — Month Day Year

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

169-BLC-O 6 10498 (Rev. 9/09)

GENERATOR'S/SHIPPER'S INITIAL COPY