ENVIRONMENTAL SUBSURFACE INVESTIGATION

Dean Transmissions Building
2116 4th Avenue
Seattle, Washington

REPORT

Submitted To: Mr. Joe Zlab, PE, SE
Potala Tower Seattle, LLC
PO Box 13261
Everett, WA 98206

Submitted By: Golder Associates Inc.
18300 NE Union Hill Road, Suite 200
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September 26, 2014

Project No. 13-01679.010

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Table of Contents

List of Tables

List of Figures

List of Appendices

1.0 INTRODUCTION

At the request of Potala Tower Seattle, LLC (Potala Tower), Golder Associates Inc. (Golder) performed an Environmental Subsurface Investigation at the property located at 2116 4th Avenue, Seattle, Washington (the Subject Property) in general accordance with Golder's proposal dated July 21, 2014. The purpose of the Environmental Subsurface Investigation was to provide information to assist Potala Tower in making decisions for the disposition of excavated soil during site development.

1.1 Background

Golder understands that Potala Tower plans to redevelop the Subject Property located in the Belltown neighborhood of Seattle. The Subject Property is located approximately mid-block on the northwestern side of 4th Avenue between Blanchard Street and Lenora Street. The Subject Property is currently developed with one single-story 12,900 square foot brick building constructed in 1924. Dean Transmissions, Inc. had operated an automotive repair business on the premises. The building has been used mostly for automotive service since its construction in 1924. The existing building is planned for demolition to accommodate redevelopment of the Subject Property. The development will also include excavation for several levels of underground parking.

The purpose of the Environmental Subsurface Investigation was to investigate shallow soils under the building slab for the presence of typical contaminants likely to occur as a result of potential releases from historical automotive servicing. The contaminants of concern are petroleum products (e.g., gasoline, diesel, oil), volatile organic compounds (VOCs), and metals.

2.0 SCOPE OF INVESTIGATION

Golder performed the Environmental Subsurface Investigation at the Subject Property in general accordance with Golder's proposal dated July 21, 2014. The field investigation occurred on August 15, 2014. Golder's probe investigation included the following:

- Notified Utilities Underground Location Center (UULC) and engaged the services of a private locator (Applied professional Services, Inc.) to locate and mark buried utilities before beginning the subsurface investigation.
- Advanced six direct push probes (GP-1 through GP-6) inside the building at the locations shown in Figure 1. The probes were advanced to a maximum depth of 5 feet below ground surface (bgs), which was the level of the concrete floor inside the building.
- Sampled soil continuously during probe advancement to describe soil conditions and to field screen the samples using an organic vapor monitor equipped with a photo-ionization detector (PID).
- Retained two soil samples for laboratory analysis from each probe; one sample from just below the floor slab and the second sample from 5 feet bgs (total of 12 soil samples).
- Analyzed soil samples for:
  - Gasoline-range organics (GRO) using Method NWTPH-Gx (12 soil samples).
  - Diesel- and lube oil-range organics (DRO and ORO) using Method NWTPH-Dx (12 soil samples).
  - Volatile organic compounds (VOCs) using United States Environmental Protection Agency (EPA) Method 8260 (12 soil samples).
  - One soil sample (GP-5-S) was analyzed for total Resource Conservation and Recovery Act (RCRA) Eight Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver). The same sample was further analyzed for lead using the Toxicity Characteristic Leaching Procedure (TCLP) – EPA Method 1311.

Cascade Drilling of Woodinville, Washington, under subcontract to Golder, provided probing and sampling services. OnSite Environmental Inc. (OnSite Environmental) of Redmond, Washington provided laboratory analytical services.

2.1 Field Methods

Golder followed appropriate and established procedures during the field investigation that included the following:

- OnSite Environmental provided sample containers and preservatives appropriate for the analysis.
- Soil samples for GRO and VOC analysis were collected in accordance with EPA Method 5035 procedures.
- Probe core sampling equipment was pressure-washed with clean water, and a new, clean plastic liner was used for each sample interval.
- Samples were maintained inside a cooler in a chilled state using water-ice and blue ice packs until relinquished to OnSite Environmental.

- Chain-of-custody procedures were followed from the time of collection until the samples were relinquished to OnSite Environmental.

Investigation derived waste (IDW) soil was accumulated in a 15-gallon DOT drum, sealed with a closing lid, labeled, and left on-site.

3.0 FINDINGS

3.1 Subsurface Conditions

The recent geologic history of the Puget Sound Lowland region has been dominated by several glacial episodes. The most recent, the Vashon Stade of the Fraser Glaciation (about 12,000 to 20,000 years ago), is responsible for most of the present day geologic and topographic conditions. As world-wide sea levels lowered and the Puget lobe of the Vashon Stade advanced southward from British Columbia into the Puget Sound Lowland, sediments composed of proglacial lacustrine silt and clay, advance outwash, lodgment till, and recessional outwash were deposited upon either bedrock or older Pre-Vashon sediments. The older Pre-Vashon deposits include predominantly glacial and nonglacial sediments deposited during repeated glacial and interglacial periods during the past two million years. As the Puget Lobe of the Vashon stade glacier retreated northward, it deposited a discontinuous veneer of recessional outwash and local deposits of ablation till upon the glacial landscape. The sculpted landscape was characterized by elongated north-south oriented uplands, and intervening valleys. Post glacial deposits include: alluvium deposited within active stream channels, modern lacustrine deposits, organic silt and local peat deposits within kettle depressions, drainages, and outwash channels; and landslide deposits.

The Subject Property is located in an area that was part of a re-grade in the early 20th century. The re-grade operations removed several tens of feet of native unconsolidated glacial-derived sediments to create a flatter surface for development.

All six probes were advanced through a concrete floor slab of approximately 5-inches in thickness. The subsurface materials encountered below the slab were classified as compact fill material consisting of varying amounts silt, sand, and gravel to a depth of 5 feet below the floor slab, the total depth reached in each probe. Groundwater or wet conditions were not encountered. The boring logs are included in Appendix A.

3.2 Analytical Results

Golder submitted 12 soil samples to OnSite Environmental in Redmond, Washington. OnSite Environmental analyzed all 12 soil samples for GRO using Method NWTPH-Gx; for DRO and ORO using Method NWTPH-Dx; and for VOCs using EPA Method 8260C. One soil sample was analyzed for total RCRA Eight Metals. Table 1 summarizes the analytical results. Appendix B includes the laboratory report.

Petroleum hydrocarbons in the gasoline-range (GRO) were not detected in any of the soil samples. Petroleum hydrocarbons in the diesel and heavy oil-range (DRO and ORO) were detected in three of the 12 samples with only one of those samples, sub-slab sample GP-5-S, exceeding the Model Toxics Control Act (MTCA) Method A cleanup level of 2,000 milligrams per kilogram (mg/kg) for ORO. Sample

GP-5-S had an ORO concentration of 5,600 mg/kg. Sample GP-5 was also analyzed for total metals concentration for the eight listed RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver). Only total lead in sample GP-5-S exceeded the MTCA Method A cleanup level of 250 mg/kg for lead. Sample GP-5-S had a total lead concentration of 600 mg/kg. ORO and lead were not detected in the deeper 5-foot depth sample collected at GP-5, indicating the ORO and lead impacts were limited to shallow depths at GP-5.

Sample GP-5-S was further analyzed for lead using the TCLP - EPA Method 1311. The TCLP lead concentration in sample GP-5-S was 0.26 milligrams per liter (mg/L). This TCLP lead concentration is less than 5.0 mg/L, which is the maximum lead concentration for the toxicity characteristic as set forth in the Washington State Dangerous Waste Regulations (Chapter 173-303 WAC). Therefore, the sample does not represent a Dangerous Waste.

Detected VOCs were limited to acetone (two sub-slab samples, GP-4-S and GP-6-S) and tetrachloroethene (one sub-slab sample, GP-3-S). The results for acetone and tetrachloroethene (PCE) were all less than the respective MTCA Method A cleanup levels for these two compounds as shown in Table 1. The detections of these compounds were limited to shallow sub-slab samples. These compounds were not detected in the deeper 5-foot samples.

4.0 CONCLUSIONS

Limited impacts to soil were identified in a few shallow sub-slab samples. Only one location at GP-5 had concentrations of ORO and lead that exceeded the MTCA Method A cleanup level for these constituents. Based on the planned excavation, some of the impacted soils may not be suitable for clean fill disposal sites and may need special handling and disposal/treatment at an approved facility.

5.0 CLOSING

Golder Associates Inc. appreciates the opportunity to provide our services to Potala Tower Seattle, LLC. If you have questions or require any additional information, please contact one of the undersigned at (425) 883-0777.

GOLDER ASSOCIATES INC.

Neil R. Gilham, LG
Senior Environmental Geologist

Jane P. Mills, CSP, CHMM
Principal and Senior Consultant

NRG/JPM/cb

6.0 REFERENCES

United States Environmental Protection Agency (EPA). Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, USEPA Publication SW-846. (For EPA test methods referenced in this report).

Washington State Department of Ecology. 1997. Analytical Methods for Petroleum Hydrocarbons, Publication No. ECY 97-602. June 1997. (For NWTPH methods referenced in this report).

Washington State Department of Ecology. 2003. Dangerous Waste Regulations - Chapter 173-303 WAC. April 2003.

Washington State Department of Ecology. 2007. Model Toxics Control Act Cleanup Regulation - Chapter 173-340 WAC. November 2007.

TABLE

Table 1: Analytical Results for Soil Samples (milligrams per kilogram)

Boring Number	Sample Number	Depth (feet)	Petroleum Hydrocarbons			Detected VOCs		Total Metals							
			GRO	DRO	ORO	Acetone	Tetrachloroethene	Arsenic	Barium	Cadmium	Chromium[3]	Lead	Mercury	Selenium	Silver
GP-1	GP-1-S	0.5 (sub-slab)	<5.6	<29	<57	<0.0049	<0.00099	NA	NA	NA	NA	NA	NA	NA	NA
	GP-1-5	5	<7.1	<30	<60	<0.0055	<0.0011	NA	NA	NA	NA	NA	NA	NA	NA
GP-2	GP-2-S	0.5 (sub-slab)	<6.0	<28	<56	<0.0052	<0.0010	NA	NA	NA	NA	NA	NA	NA	NA
	GP-2-5	5	<7.1	<30	<60	<0.0057	<0.0011	NA	NA	NA	NA	NA	NA	NA	NA
GP-3	GP-3-S	0.5 (sub-slab)	<6.8	<29	160	<0.0070	0.0021	NA	NA	NA	NA	NA	NA	NA	NA
	GP-3-5	5	<6.2	<28	<57	<0.0068	<0.0014	NA	NA	NA	NA	NA	NA	NA	NA
GP-4	GP-4-S	0.5 (sub-slab)	<5.9	<29	<58	0.034	<0.0012	NA	NA	NA	NA	NA	NA	NA	NA
	GP-4-5	5	<7.9	<33	<66	<0.0081	<0.0016	NA	NA	NA	NA	NA	NA	NA	NA
GP-5	GP-5-S	0.5 (sub-slab)	<8.4	390	5,600	<0.0061	<0.0012	<13	89	<0.64	57	600*	<0.32	<13	3.6
	GP-5-5	5	<6.5	<30	<59	<0.0066	<0.0013	NA	NA	NA	NA	NA	NA	NA	NA
GP-6	GP-6-S	0.5 (sub-slab)	<6.9	<30	<59	0.010	<0.0012	NA	NA	NA	NA	NA	NA	NA	NA
	GP-6-5	5	<7.3	<30	79	<0.0067	<0.0013	NA	NA	NA	NA	NA	NA	NA	NA
MTCA Method A Cleanup Level[1]			100	2,000	2,000	Not listed	0.05	20	Not listed	2	2000	250	2	Not listed	Not listed
MTCA Method B Formula Value[2]			No value	No value	No value	72,000	476	0.667	16,000	80	120,000	No value	No value	400	400

Notes:

* Sample GP-5-S was also analyzed using the Toxicity Characteristic Leaching Procedure (TCLP) - EPA Method 1311. The TCLP result was 0.26 milligrams per liter (mg/L) lead, less than the 5.0 mg/L maximum lead concentration for the toxicity characteristic

[1] - Model Toxics Control Act (MTCA) Cleanup Regulation, Chapter 173-340, Table 740-1 Method A Soil Cleanup Levels for Unrestricted Land Uses

[2] - MTCA Method B Formula Value Cleanup Levels for Unrestrestricted Land Uses (https://fortress.wa.gov/ecy/clarc/CLARCDataTables.aspx)

[3] - Cleanup levels cited for Chromium (III)

GRO = Gasoline-range organics

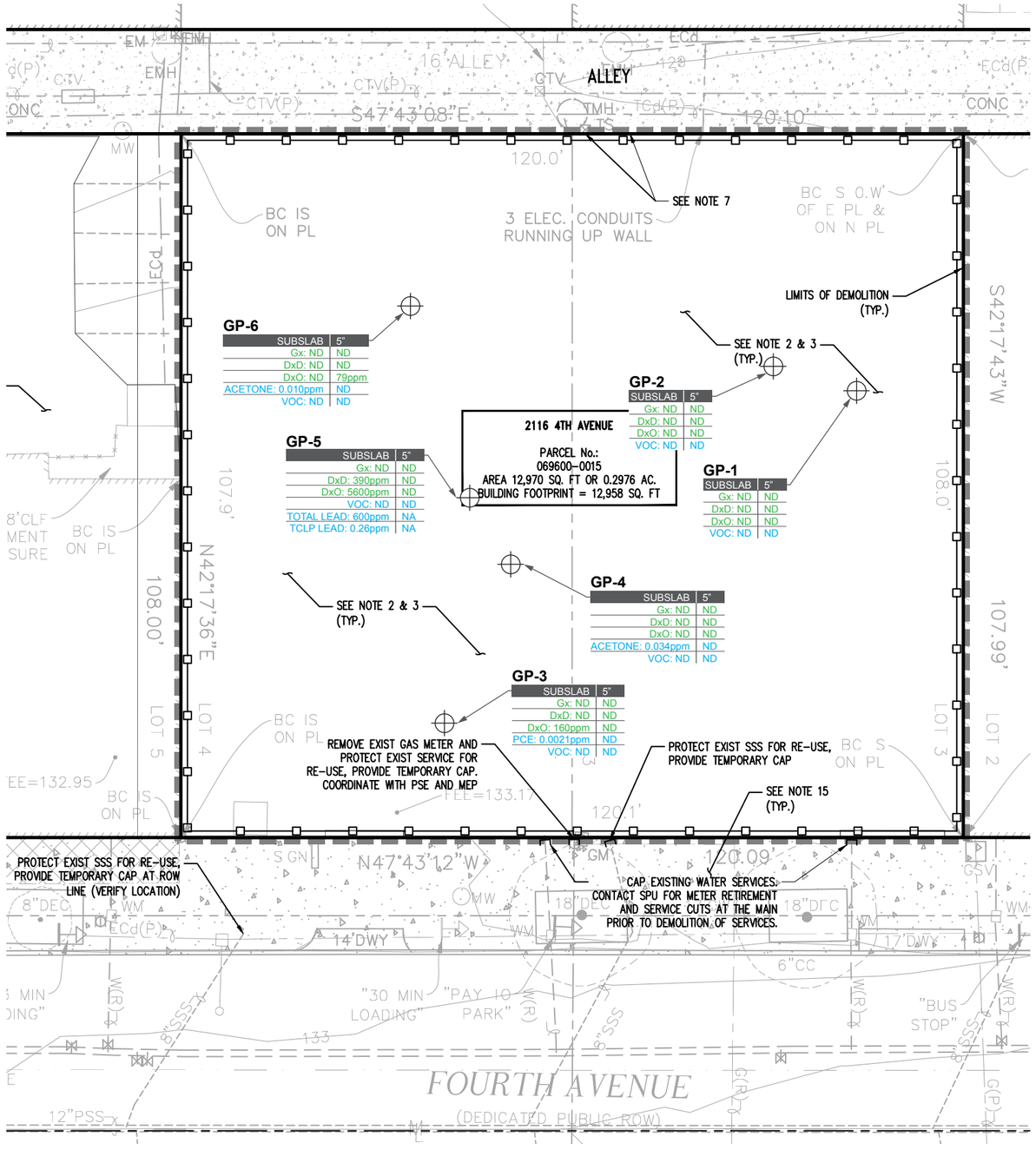
DRO = Diesel-range organics

ORO = Heavy oil-range organics

VOCs = Volatile organic compounds

NA = Not analyzed

FIGURE



LEGEND

GP-1 ⊕	BORING LOCATION AND NUMBER
Gx	GASOLINE-RANGE ORGANICS
DxD	DIESEL-RANGE ORGANICS
DxO	OIL-RANGE ORGANICS
VOC	VOLATILE ORGANIC COMPOUNDS
PCE	TETRACHLOROETHENE
ND	NOT DETECTED
NA	NOT ANALYZED

0 20

SCALE IN FEET

CLIENT

PATH AMERICA

CONSULTANT

Golder Associates

YYYY-MM-DD	2014-09-19
PREPARED	A.PARKIN
DESIGN	
REVIEW	
APPROVED	

PROJECT

ENVIRONMENT SUBSURFACE INVESTIGATION

TITLE

SAMPLE LOCATIONS PLAN WITH RESULTS

PROJECT No.	PHASE	FIGURE
130-1679	010	1

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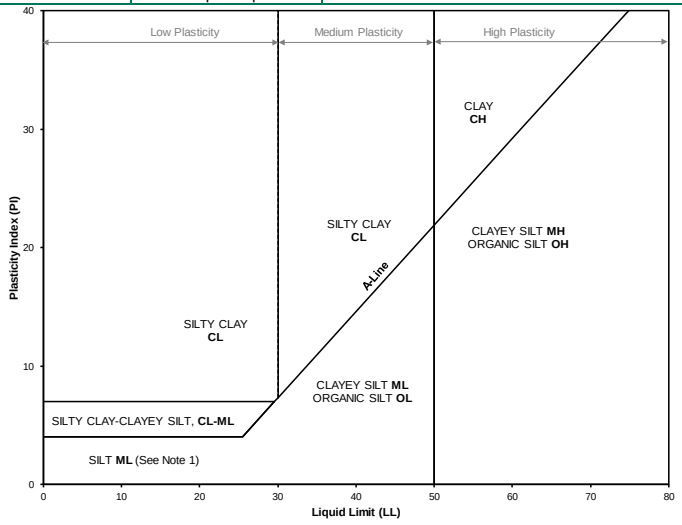
APPENDIX A
BORING LOGS

METHOD OF SOIL CLASSIFICATION

The Golder Associates Inc. Soil Classification System is based on the Unified Soil Classification System (USCS)

Organic or Inorganic	Soil Group	Type of Soil		Gradation or Plasticity	$Cu = \frac{D_{60}}{D_{10}}$	$Cc = \frac{(D_{30})^2}{D_{10} x D_{60}}$	Organic Content	USCS Group Symbol	Group Name
INORGANIC (Organic Content <30% by mass)	COARSE-GRAINED SOILS (>50% by mass is larger than 0.075 mm)	GRAVELS (>50% by mass of coarse fraction is larger than 4.75 mm)	Gravels with <12% * fines (by mass)	Poorly Graded	<4	≤1 or ≥3	<30%	GP	GRAVEL
				Well Graded	≥4	1 to 3		GW	GRAVEL
			Gravels with >12% fines (by mass)	Below A Line	n/a			GM	SILTY GRAVEL
				Above A Line	n/a			GC	CLAYEY GRAVEL
		SANDS (>50% by mass of coarse fraction is smaller than 4.75 mm)	Sands with <12% * fines (by mass)	Poorly Graded	<6	≤1 or ≥3		SP	SAND
				Well Graded	≥6	1 to 3		SW	SAND
			Sands with >12% fines (by mass)	Below A Line	n/a			SM	SILTY SAND
				Above A Line	n/a			SC	CLAYEY SAND

Organic or Inorganic	Soil Group	Type of Soil	Laboratory Tests	Field Indicators					Organic Content	USCS Group Symbol	Primary Name
				Dilatancy	Dry Strength	Shine Test	Thread Diameter	Toughness (of 3 mm thread)			
INORGANIC (Organic Content <30% by mass)	FINE-GRAINED SOILS (≥50% by mass is smaller than 0.075 mm)	SILTS (Non-Plastic or PI and LL plot below A-Line on Plasticity Chart below)	Liquid Limit <50	Rapid	None	None	>6 mm	N/A (can't roll 3 mm thread)	<5%	ML	SILT
				Slow	None to Low	Dull	3 mm to 6 mm	None to low	<5%	ML	CLAYEY SILT
				Slow to very slow	Low to medium	Dull to slight	3 mm to 6 mm	Low	5% to 30%	OL	ORGANIC SILT
			Liquid Limit ≥50	Slow to very slow	Low to medium	Slight	3 mm to 6 mm	Low to medium	<5%	MH	CLAYEY SILT
				None	Medium to high	Dull to slight	1 mm to 3 mm	Medium to high	5% to 30%	OH	ORGANIC SILT
		CLAYS (PI and LL plot above A-Line on Plasticity Chart below)	Liquid Limit <30	None	Low to medium	Slight to shiny	~ 3 mm	Low to medium	0% to 30% (see Note 2, below)	CL	SILTY CLAY
			Liquid Limit 30 to <50	None	Medium to high	Slight to shiny	1 mm to 3 mm	Medium		CL	SILTY CLAY
			Liquid Limit ≥50	None	High	Shiny	<1 mm	High		CH	CLAY
HIGHLY ORGANIC SOILS (Organic Content >30% by mass)		Peat and mineral soil mixtures							30% to 75%	PT	SILTY PEAT, SANDY PEAT
		Predominantly peat, may contain some mineral soil, fibrous, or amorphous peat							75% to 100%		PEAT



Note 1 – Fine-grained materials with PI and LL that plot in this area are named (ML) SILT with slight plasticity. Fine-grained materials which are Non-plastic (i.e. a PL cannot be measured) are named SILT.
Note 2 – For soils with <5% organic content, include the descriptor "trace organics." For soils with between 5% and 30% organic content include the prefix "organic" before the Primary name.

* Dual Symbol — A dual symbol is two symbols separated by a hyphen, for example, GP-GM, SW-SC, and, CL-ML. For non-cohesive soils, the dual symbols must be used when the soil has between 5% and 12% fines (i.e. to identify transitional material between "clean" and "dirty" sand or gravel). For cohesive soils, the dual symbol must be used when the liquid limit and plasticity index values plot in the CL-ML area of the plasticity chart (see plasticity chart at left).

Borderline Symbol — A borderline symbol is two symbols separated by a slash, for example, GM/SM, CL/ML. A borderline symbol should be used to indicate that the soil has been identified as having properties that are on the transition between similar materials. In addition, a borderline symbol may be used to indicate a range of similar soil types within a stratum.

METHOD OF SOIL CLASSIFICATION

PARTICLE SIZES OF CONSTITUENTS

Soil Constituent	Particle Size Description	Millimeters	Inches (US Std. Sieve Size)
BOULDERS	Not Applicable	> 300	> 12
COBBLES	Not Applicable	75 to 300	3 to 12
GRAVEL	Coarse Fine	19 to 75 4.75 to 19	0.75 to 3 (4) to 0.75
SAND	Coarse Medium Fine	2.00 to 4.75 0.425 to 2.00 0.075 to 0.425	(10) to (4) (40) to (10) (200) to (40)
SILT/CLAY	Classified by plasticity	< 0.075	< (200)

MODIFIERS FOR SECONDARY AND MINOR CONSTITUENTS

Percentage by Mass	Modifier
≤ 5	trace
> 5 to 12	some
> 12 to 35	Primary soil name prefixed with "gravelly, sandy, SILTY, CLAYEY" as applicable
> 35	Use 'and' to combine major constituents (*i.e.,* SAND and GRAVEL, SAND and CLAY)

PENETRATION RESISTANCE

Standard Penetration Resistance (SPT), N:

N = the number of blows required to drive a 2 inch (50 mm) split-spoon sampler one foot (300 mm) using a 140 lb (63.5 kg) hammer falling 30 inches (760 mm) after an initial 6 inch (150 mm) seating (ASTM D1586).

Cone Penetration Test (CPT):

An electronic cone penetrometer with a 60° conical tip and a typical projected end area of 10 or 15 cm^2 pushed through ground at a penetration rate of 2 cm/s. Measurements of tip resistance (q_t), porewater pressure (u) and sleeve friction (f_s) are recorded electronically in real time during penetration. The seismic CPT (SCPT) adds measurement of shear wave velocity (V_S) to the standard CPT.

Dynamic Cone Penetration Test (DCP), N_d:

The penetration rate by an 8 kg (17.6 lb) hammer dropped 575 mm (22.6 in.) to drive uncased a 20 mm (0.79 in.) diameter, 60° cone attached to 16 mm (5/8 in.) drive rods (ASTM D6951). Other test methods exist for DCPs with different configurations and different correlations.

PH: Sampler advanced by hydraulic pressure
PM: Sampler advanced by manual pressure
WH: Sampler advanced by static weight of hammer
WR: Sampler advanced by weight of sampler and rod

SAMPLE TYPES

AS	Auger sample
CS	Chunk sample
DO or DP	Drive open (SPT) or direct pushed tube sampler
DS	Denison type sample
FS	Foil sample
PS	Pitcher type sample
RC	Rock core
SC	Soil core
ST	Slotted tube
TO	Thin-walled, open
TP	Thin-walled, piston
WS	Wash sample

SOIL TESTS

M	water content
A	Atterberg limits (plastic and liquid limits)
G, H	grain size, hydrometer
UW	unit weight
Com	compaction
C	consolidation (oedometer) test
U	unconfined compression test
UU	unconsolidated undrained triaxial test
CD	consolidated isotropically drained triaxial test[1]
CU	consolidated isotropically undrained triaxial test with porewater pressure measurement[1]
D	direct shear test
V (FV)	field vane (LV-laboratory vane test)
SG	specific gravity
P	permeability
PD	pinhole dispersion
O	organic content test
PH	pH
CHEM	chemical analysis (refer to text)

1. Tests which are anisotropically consolidated prior to shear are shown as CAD, CAU.

NON-COHESIVE (COHESIONLESS) SOILS

Compactness[1]

Term	SPT 'N' (blows/foot)[2]
Very Loose	0 - 4
Loose	4 to 10
Compact	10 to 30
Dense	30 to 50
Very Dense	>50

1. Definition of compactness descriptions based on SPT 'N' ranges from Terzaghi and Peck (1967) and correspond to typical average N_{60} values.
2. SPT 'N' in accordance with ASTM D1586, uncorrected for overburden pressure effects. 'N'-values should be considered ONLY an approximate guide to consistency; for sensitive clays the 'N'-value approximation for consistency terms does not apply.

Field Moisture Condition

Term	Description
Dry	Soil flows freely through fingers.
Moist	Soils are darker than in the dry condition and may feel cool.
Wet	As moist, but with free water forming on hands when handled.

COHESIVE SOILS

Consistency

Term	Undrained Shear Strength (kPa)	Undrained Shear Strength (tsf)	SPT 'N'[1] (blows/foot)
Very Soft	<12	<0.12	0 to 2
Soft	12 to 25	0.12 to 0.25	2 to 4
Firm	25 to 50	0.25 to 0.5	4 to 8
Stiff	50 to 100	0.5 to 1	8 to 15
Very Stiff	100 to 200	1 to 2	15 to 30
Hard	>200	>2	>30

1. SPT 'N' in accordance with ASTM D1586, uncorrected for overburden pressure effects; approximate only.

Water Content

Term	Description
w < PL	Material is estimated to be drier than the Plastic Limit.
w ~ PL	Material is estimated to be close to the Plastic Limit.
w > PL	Material is estimated to be wetter than the Plastic Limit.

RECORD OF BOREHOLE GP-1

SHEET 1 of 1

PROJECT: Potala Tower Seattle
PROJECT NUMBER: 1301679
LOCATION: South shop, 2116 4th Ave

DRILLING METHOD: Direct Push
DRILLING DATE: 8/15/14
DRILL RIG: GeoProbe

DATUM: MSL
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION:
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. DEPTH (ft)	SAMPLES: NUMBER	TYPE	PID Readings (in ppmv)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS
0	Direct Push	0.0 - 0.4 Concrete slab										
		0.4 - 2.7 FILL (SM) SILTY SAND, fine to coarse, orange/brown/gray, noncohesive, moist, compact, mottled sections.			0.4	GP-1-S						1.6ppm on PID meter just under concrete slab
		2.7 - 5.0 FILL (SM) SILTY SAND, fine to coarse, some gravel, fine to coarse, dark brown, noncohesive, moist, compact.			2.7							
5		Boring completed at 5.0 ft.			5.0	GP-1-5						0ppm on PID meter for .5' to 5' of sample
												Location of boring: south shop building, 15.5' north of south wall and 67.6' east of west wall
10												

1 in to 1 ft
DRILLING CONTRACTOR: Cascade
DRILLER:

LOGGED: D. Erickson
CHECKED: N. Gilham
DATE: 9/19/2014

Golder Associates

ENVIRONMENTAL 1301679 POTOLA TOWER PROJECT FILE.GPJ GLDR_WA.GDT 9/23/14

RECORD OF BOREHOLE GP-2

SHEET 1 of 1

PROJECT: Potala Tower Seattle
PROJECT NUMBER: 1301679
LOCATION: South shop, 2116 4th Ave

DRILLING METHOD: Direct Push
DRILLING DATE: 8/15/14
DRILL RIG: GeoProbe

DATUM: MSL
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION:
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. DEPTH (ft)	SAMPLES: NUMBER	TYPE	PID Readings (in ppmv)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS
0	Direct Push	0.0 - 0.4 Concrete slab										
		0.4 - 2.0 FILL (SM) SILTY SAND, fine to coarse, orange/brown/gray, noncohesive, moist, compact, mottled sections.	SM		0.4	GP-2-S						2ppm on PID meter just under concrete slab
		2.0 - 2.3 Fill, red brick in sample sleeve			2.0							
		2.3 - 3.5 FILL (SM) SILTY SAND, fine to coarse, brown, noncohesive, moist, compact, mottled sections.	SM		2.3							
		3.5 - 5.0 FILL (SM) SILTY SAND, fine to coarse, some gravel, fine to coarse, orange/brown/gray, noncohesive, moist, compact, mottled sections.	SM		3.5							
5		Boring completed at 5.0 ft.			5.0	GP-2-5						from .5 to 5' below slab 0ppm on PID meter
												Boring location: south shop building, 28.9' north of south wall and 71.3' east of west wall
10												

1 in to 1 ft
DRILLING CONTRACTOR: Cascade
DRILLER:

LOGGED: D. Erickson
CHECKED: N. Gilham
DATE: 9/19/2014

Golder Associates

ENVIRONMENTAL 1301679 POTOLA TOWER PROJECT FILE.GPJ GLDR_WA.GDT 9/23/14

RECORD OF BOREHOLE GP-3

SHEET 1 of 1

PROJECT: Potala Tower Seattle
PROJECT NUMBER: 1301679
LOCATION: main shop, 2116 4th Ave

DRILLING METHOD: Direct Push
DRILLING DATE: 8/15/14
DRILL RIG: GeoProbe

DATUM: MSL
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION:
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. DEPTH (ft)	SAMPLES: NUMBER	TYPE	PID Readings (in ppmv)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS
0	Direct Push	0.0 - 0.4 Concrete slab										
		0.4 - 1.5 FILL (SM) SILTY SAND, fine to coarse, trace gravel, fine to coarse, orange/brown/gray, noncohesive, moist, compact.	SM		0.4	GP-3-S						
		1.5 - 3.0 FILL (ML) SILT, trace sand, fine, gray, non-cohesive, moist.	ML		1.5							
		3.0 - 4.0 FILL (SM) SILTY SAND, fine to coarse, some gravel, fine to coarse, gray, noncohesive, moist, compact.	SM		3.0							
		4.0 - 5.0 FILL (ML) SILT, trace sand, fine, gray, non-cohesive, moist.	SM		4.0							
5		Boring completed at 5.0 ft.			5.0	GP-3-5						0ppm on PID meter for 0' to 5' of sample Boring location: main shop building, 20' north of south wall and 16.6' east of west wall
10												

1 in to 1 ft
DRILLING CONTRACTOR: Cascade
DRILLER:

LOGGED: D. Erickson
CHECKED: N. Gilham
DATE: 9/19/2014

Golder Associates

ENVIRONMENTAL 1301679 POTOLA TOWER PROJECT FILE.GPJ GLDR_WA.GDT 9/23/14

RECORD OF BOREHOLE GP-4

SHEET 1 of 1

PROJECT: Potala Tower Seattle
PROJECT NUMBER: 1301679
LOCATION: main shop, 2116 4th Ave

DRILLING METHOD: Direct Push
DRILLING DATE: 8/15/14
DRILL RIG: GeoProbe

DATUM: MSL
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION:
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. DEPTH (ft)	SAMPLES: NUMBER	TYPE	PID Readings (in ppmv)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS
0	Direct Push	0.0 - 0.4 Concrete slab										
		0.4 - 1.0 FILL (ML) SILT, some gravel, fine, gray, non-cohesive, moist, compact.	ML		0.4	GP-4-S						
		1.0 - 2.0 FILL (ML) SILT, trace gravel, fine, gray, non-cohesive, moist, dense.	ML		1.0							
		2.0 - 5.0 FILL (SM) SILTY SAND, fine to coarse, some gravel, fine to coarse some up to 1.5" in diameter, alternating layers of brown to gray, noncohesive, moist, compact.	SM		2.0							
5		Boring completed at 5.0 ft.			5.0	GP-4-5						0ppm on PID meter for 0' to 5' of sample
												Boring Location: main shop building, 9.25' north of south wall and 40.8 east of west wall
10												

1 in to 1 ft
DRILLING CONTRACTOR: Cascade
DRILLER:

LOGGED: D. Erickson
CHECKED: N. Gilham
DATE: 9/19/2014

Golder Associates

ENVIRONMENTAL 1301679 POTOLA TOWER PROJECT FILE.GPJ GLDR_WA.GDT 9/23/14

RECORD OF BOREHOLE GP-5

SHEET 1 of 1

PROJECT: Potala Tower Seattle
PROJECT NUMBER: 1301679
LOCATION: main shop, 2116 4th Ave

DRILLING METHOD: Direct Push
DRILLING DATE: 8/15/14
DRILL RIG: GeoProbe

DATUM: MSL
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION:
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. DEPTH (ft)	SAMPLES: NUMBER	TYPE	PID Readings (in ppmv)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS
0	Direct Push	0.0 - 0.4 Concrete slab										
		0.4 - 2.5 FILL (SM) SILTY SAND, fine to coarse,some gravel, fine to coarse, orange/brown/gray, noncohesive, moist, compact, mottled sections.	SM		0.4	GP-5-S						
		2.5 - 4.0 NO RECOVERY			2.5							
		4.0 - 5.0 FILL (GW) SANDY GRAVEL, fine to coarse, trace silt, dry, loose.	GW		4.0							
5		Boring completed at 5.0 ft.			5.0	GP-5-5						0ppm on PID meter for 0' to 5' of sample Boring location: main shop building, 15.1' north of south wall and 50.75' east of west wall
10												

1 in to 1 ft
DRILLING CONTRACTOR: Cascade
DRILLER:

LOGGED: D. Erickson
CHECKED: N. Gilham
DATE: 9/19/2014

Golder Associates

ENVIRONMENTAL 1301679 POTOLA TOWER PROJECT FILE.GPJ GLDR_WA.GDT 9/23/14

RECORD OF BOREHOLE GP-6

SHEET 1 of 1

PROJECT: Potala Tower Seattle
PROJECT NUMBER: 1301679
LOCATION: main shop, 2116 4th Ave

DRILLING METHOD: Direct Push
DRILLING DATE: 8/15/14
DRILL RIG: GeoProbe

DATUM: MSL
AZIMUTH: N/A
COORDINATES: not surveyed

ELEVATION:
INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE: DESCRIPTION	USCS	GRAPHIC LOG	ELEV. DEPTH (ft)	SAMPLES: NUMBER	TYPE	PID Readings (in ppmv)	N	REC / ATT	PENETRATION RESISTANCE BLOWS / ft ■ (10 20 30 40) WATER CONTENT (PERCENT) W_p W W_l (20 40 60 80)	NOTES WATER LEVELS
0	Direct Push	0.0 - 0.4 Concrete slab										
		0.4 - 3.0 FILL (SM) SILTY SAND, fine to coarse, gray, noncohesive, moist, compact, mottled orange sections.	SM		0.4	GP-6-S						
		3.0 - 3.5 FILL Organic soil, trace roots, dark brown, moist, loose.			3.0							
		3.5 - 5.0 FILL (GW) SANDY GRAVEL, fine to coarse, trace silt, dry, loose.	GW		3.5							
5		Boring completed at 5.0 ft.			5.0	GP-6-5						0ppm on PID meter for 0' to 5' of sample
												Boring location: main shop building, 25' north of south wall and 80.1' east of west wall
10												

1 in to 1 ft
DRILLING CONTRACTOR: Cascade
DRILLER:

LOGGED: D. Erickson
CHECKED: N. Gilham
DATE: 9/19/2014

Golder Associates

ENVIRONMENTAL 1301679 POTOLA TOWER PROJECT FILE.GPJ GLDR_WA.GDT 9/23/14

APPENDIX B
LABORATORY REPORT

OnSite Environmental Inc.

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

September 17, 2014

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

Re: Analytical Data for Project 1301679.010
Laboratory Reference No. 1408-130B

Dear Neil:

Enclosed are the analytical results and associated quality control data for samples submitted on August 16, 2014.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: September 17, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130B
Project: 1301679.010

Case Narrative

Samples were collected on August 15, 2014 and received by the laboratory on August 16, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

Date of Report: September 17, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130B
Project: 1301679.010

TOTAL METALS
EPA 6010C/7471B

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	08-130-09					
Client ID:	**GP-5-S**					
Arsenic	**ND**	13	6010C	9-15-14	9-15-14	
Barium	**89**	3.2	6010C	9-15-14	9-15-14	
Cadmium	**ND**	0.64	6010C	9-15-14	9-15-14	
Chromium	**57**	0.64	6010C	9-15-14	9-15-14	
Lead	**600**	6.4	6010C	9-15-14	9-15-14	
Mercury	**ND**	0.32	7471B	9-16-14	9-16-14	
Selenium	**ND**	13	6010C	9-15-14	9-15-14	
Silver	**3.6**	1.3	6010C	9-15-14	9-15-14	

Date of Report: September 17, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130B
Project: 1301679.010

TOTAL METALS
EPA 6010C
METHOD BLANK QUALITY CONTROL

Date Extracted:	9-15-14
Date Analyzed:	9-15-14
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB0915SM1

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
Selenium	6010C	**ND**	10
Silver	6010C	**ND**	1.0

Date of Report: September 17, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130B
Project: 1301679.010

TOTAL MERCURY
EPA 7471B
METHOD BLANK QUALITY CONTROL

Date Extracted:	9-16-14
Date Analyzed:	9-16-14
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB0916S1

Analyte	Method	Result	PQL
Mercury	7471B	**ND**	0.25

Date of Report: September 17, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130B
Project: 1301679.010

TOTAL METALS
EPA 6010C
DUPLICATE QUALITY CONTROL

Date Extracted: 9-15-14
Date Analyzed: 9-15-14

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-114-05

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	**ND**	**ND**	NA	10	
Barium	**45.0**	**46.2**	3	2.5	
Cadmium	**ND**	**ND**	NA	0.50	
Chromium	**31.1**	**30.0**	4	0.50	
Lead	**ND**	**ND**	NA	5.0	
Selenium	**ND**	**ND**	NA	10	
Silver	**ND**	**ND**	NA	1.0	

Date of Report: September 17, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130B
Project: 1301679.010

TOTAL MERCURY
EPA 7471B
DUPLICATE QUALITY CONTROL

Date Extracted: 9-16-14
Date Analyzed: 9-16-14

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-143-01

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

Date of Report: September 17, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130B
Project: 1301679.010

TOTAL METALS
EPA 6010C
MS/MSD QUALITY CONTROL

Date Extracted: 9-15-14
Date Analyzed: 9-15-14

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-114-05

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	**95.5**	96	**96.4**	96	1	
Barium	100	**145**	100	**143**	98	1	
Cadmium	50.0	**48.5**	97	**48.4**	97	0	
Chromium	100	**120**	89	**120**	89	0	
Lead	250	**239**	96	**239**	96	0	
Selenium	100	**93.2**	93	**93.5**	93	0	
Silver	25.0	**22.2**	89	**22.2**	89	0	

Date of Report: September 17, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130B
Project: 1301679.010

TOTAL MERCURY
EPA 7471B
MS/MSD QUALITY CONTROL

Date Extracted: 9-16-14
Date Analyzed: 9-16-14

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-143-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Mercury	0.500	**0.501**	100	**0.508**	102	1	

Date of Report: September 17, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130B
Project: 1301679.010

TCLP LEAD
EPA 1311/6010C

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	08-130-09					
Client ID:	**GP-5-S**					
Lead	**0.26**	0.20	6010C	9-17-14	9-17-14	

Date of Report: September 17, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130B
Project: 1301679.010

TCLP LEAD
EPA 1311/6010C
METHOD BLANK QUALITY CONTROL

Date Prepared:	9-16-14
Date Extracted:	9-17-14
Date Analyzed:	9-17-14
Matrix:	TCLP Extract
Units:	mg/L (ppm)
Lab ID:	MB0917TM1

Analyte	Method	Result	PQL
Lead	6010C	**ND**	0.20

Date of Report: September 17, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130B
Project: 1301679.010

TCLP LEAD
EPA 1311/6010C
DUPLICATE QUALITY CONTROL

Date Prepared:	9-16-14
Date Extracted:	9-17-14
Date Analyzed:	9-17-14
Matrix:	TCLP Extract
Units:	mg/L (ppm)
Lab ID:	09-143-03

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	**0.856**	**0.820**	4	0.20	

Date of Report: September 17, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130B
Project: 1301679.010

TCLP LEAD
EPA 1311/6010C
MS/MSD QUALITY CONTROL

Date Prepared: 9-16-14
Date Extracted: 9-17-14
Date Analyzed: 9-17-14

Matrix: TCLP Extract
Units: mg/L (ppm)

Lab ID: 09-143-03

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	10.0	**10.3**	94	**10.2**	93	1	

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

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: Golder Associates
Project Number: 1301679.010
Project Name: Potala Tower
Project Manager: Neil Gilham
Sampled by: David Erickson

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

Laboratory Number: 08-130

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 (LEAD)	HEM (oil and grease) 1664A	% Moisture
1	GP-1-S	8/15/14	15:55	S	5			/	/	/												X
2	GP-1-5		16:05		5			/	/	/												X
3	GP-2-S		16:35		5			/	/	/												X
4	GP-2-5		16:40		5			/	/	/												X
5	GP-3-S		18:00		5			/	/	/												X
6	GP-3-5		18:10		5			/	/	/												X
7	GP-4-S		18:20		5			/	/	/												X
8	GP-4-5		18:30		5			/	/	/												X
9	GP-5-S		18:53		5			/	/	/								(X)		O		X
10	GP-5-5		19:15		5			/	/	/												X

	Signature	Company	Date	Time
Relinquished		Golder	8/16/14	11:45
Received		Golder Ea	8/16/14	1145
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
(X) Added 9/15/14. DB (3 day TAT)
O Added 9/16/14. 5:30pm (SAME DAY)

Chromatograms with final report ☐

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

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

Laboratory Number: 08-130

Company: Golder Associates
Project Number: 1301679.010
Project Name: Potala Tower
Project Manager: Neil Gilham
Sampled by: David Erickson

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
11	GP-6-S	8/15/14	19:25	S	5			/	/	/												X
12	GP-6-5	↓	19:35	S	5			/	/	/												X

	Signature	Company	Date	Time
Relinquished		Golder	8/16/14	11:45
Received			8/16/14	1145
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) ☐ _____

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

August 26, 2014

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

Re: Analytical Data for Project 1301679.010
Laboratory Reference No. 1408-130

Dear Neil:

Enclosed are the analytical results and associated quality control data for samples submitted on August 16, 2014.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

Case Narrative

Samples were collected on August 15, 2014 and received by the laboratory on August 16, 2014. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

NWTPH-Gx and 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.

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

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

NWTPH-Gx

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-1-S**					
Laboratory ID:	08-130-01					
Gasoline	**ND**	5.6	NWTPH-Gx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*100*	*71-121*				
Client ID:	**GP-1-5**					
Laboratory ID:	08-130-02					
Gasoline	**ND**	7.1	NWTPH-Gx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*101*	*71-121*				
Client ID:	**GP-2-S**					
Laboratory ID:	08-130-03					
Gasoline	**ND**	6.0	NWTPH-Gx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*94*	*71-121*				
Client ID:	**GP-2-5**					
Laboratory ID:	08-130-04					
Gasoline	**ND**	7.1	NWTPH-Gx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*105*	*71-121*				
Client ID:	**GP-3-S**					
Laboratory ID:	08-130-05					
Gasoline	**ND**	6.8	NWTPH-Gx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*97*	*71-121*				
Client ID:	**GP-3-5**					
Laboratory ID:	08-130-06					
Gasoline	**ND**	6.2	NWTPH-Gx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*101*	*71-121*				

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

NWTPH-Gx

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-4-S**					
Laboratory ID:	08-130-07					
Gasoline	**ND**	5.9	NWTPH-Gx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*103*	*71-121*				
Client ID:	**GP-4-5**					
Laboratory ID:	08-130-08					
Gasoline	**ND**	7.9	NWTPH-Gx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*97*	*71-121*				
Client ID:	**GP-5-S**					
Laboratory ID:	08-130-09					
Gasoline	**ND**	8.4	NWTPH-Gx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*102*	*71-121*				
Client ID:	**GP-5-5**					
Laboratory ID:	08-130-10					
Gasoline	**ND**	6.5	NWTPH-Gx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*103*	*71-121*				
Client ID:	**GP-6-S**					
Laboratory ID:	08-130-11					
Gasoline	**ND**	6.9	NWTPH-Gx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*98*	*71-121*				
Client ID:	**GP-6-5**					
Laboratory ID:	08-130-12					
Gasoline	**ND**	7.3	NWTPH-Gx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*96*	*71-121*				

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

NWTPH-Gx
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0821S1					
Gasoline	**ND**	5.0	NWTPH-Gx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*91*	*71-121*				
Laboratory ID:	MB0821S2					
Gasoline	**ND**	5.0	NWTPH-Gx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*94*	*71-121*				

Analyte	Result		Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE									
Laboratory ID:	08-130-01								
	ORIG	DUP							
Gasoline	**ND**	**ND**	NA	NA	NA	NA	NA	30	
Surrogate:									
Fluorobenzene					*100* *103*	*71-121*			
Laboratory ID:	08-174-03								
	ORIG	DUP							
Gasoline	**ND**	**ND**	NA	NA	NA	NA	NA	30	
Surrogate:									
Fluorobenzene					*91* *99*	*71-121*			

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-1-S**					
Laboratory ID:	08-130-01					
Diesel Range Organics	**ND**	29	NWTPH-Dx	8-21-14	8-21-14	
Lube Oil Range Organics	**ND**	57	NWTPH-Dx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*81*	*50-150*				
Client ID:	**GP-1-5**					
Laboratory ID:	08-130-02					
Diesel Range Organics	**ND**	30	NWTPH-Dx	8-21-14	8-21-14	
Lube Oil Range Organics	**ND**	60	NWTPH-Dx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*82*	*50-150*				
Client ID:	**GP-2-S**					
Laboratory ID:	08-130-03					
Diesel Range Organics	**ND**	28	NWTPH-Dx	8-21-14	8-21-14	
Lube Oil Range Organics	**ND**	56	NWTPH-Dx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*98*	*50-150*				
Client ID:	**GP-2-5**					
Laboratory ID:	08-130-04					
Diesel Range Organics	**ND**	30	NWTPH-Dx	8-21-14	8-21-14	
Lube Oil Range Organics	**ND**	60	NWTPH-Dx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*75*	*50-150*				
Client ID:	**GP-3-S**					
Laboratory ID:	08-130-05					
Diesel Range Organics	**ND**	29	NWTPH-Dx	8-21-14	8-21-14	
Lube Oil	**160**	58	NWTPH-Dx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*71*	*50-150*				
Client ID:	**GP-3-5**					
Laboratory ID:	08-130-06					
Diesel Range Organics	**ND**	28	NWTPH-Dx	8-21-14	8-21-14	
Lube Oil Range Organics	**ND**	57	NWTPH-Dx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*85*	*50-150*				

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-4-S**					
Laboratory ID:	08-130-07					
Diesel Range Organics	**ND**	29	NWTPH-Dx	8-21-14	8-21-14	
Lube Oil Range Organics	**ND**	58	NWTPH-Dx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*76*	*50-150*				
Client ID:	**GP-4-5**					
Laboratory ID:	08-130-08					
Diesel Range Organics	**ND**	33	NWTPH-Dx	8-21-14	8-21-14	
Lube Oil Range Organics	**ND**	66	NWTPH-Dx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*82*	*50-150*				
Client ID:	**GP-5-S**					
Laboratory ID:	08-130-09					
Diesel Range Organics	**390**	160	NWTPH-Dx	8-21-14	8-22-14	N
Lube Oil	**5600**	320	NWTPH-Dx	8-21-14	8-22-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*82*	*50-150*				
Client ID:	**GP-5-5**					
Laboratory ID:	08-130-10					
Diesel Range Organics	**ND**	30	NWTPH-Dx	8-21-14	8-21-14	
Lube Oil Range Organics	**ND**	59	NWTPH-Dx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*78*	*50-150*				
Client ID:	**GP-6-S**					
Laboratory ID:	08-130-11					
Diesel Range Organics	**ND**	30	NWTPH-Dx	8-21-14	8-21-14	
Lube Oil Range Organics	**ND**	59	NWTPH-Dx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*81*	*50-150*				
Client ID:	**GP-6-5**					
Laboratory ID:	08-130-12					
Diesel Range Organics	**ND**	30	NWTPH-Dx	8-21-14	8-21-14	
Lube Oil	**79**	60	NWTPH-Dx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*83*	*50-150*				

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0821S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	8-21-14	8-21-14	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	8-21-14	8-21-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*104*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	08-130-03										
	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						*98*	*72*	*50-150*			
Laboratory ID:	08-130-06										
	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						*85*	*92*	*50-150*			

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-1-S**					
Laboratory ID:	08-130-01					
Dichlorodifluoromethane	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Chloromethane	ND	0.0049	EPA 8260C	8-19-14	8-19-14	
Vinyl Chloride	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Bromomethane	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Chloroethane	ND	0.0049	EPA 8260C	8-19-14	8-19-14	
Trichlorofluoromethane	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Acetone	ND	0.0049	EPA 8260C	8-19-14	8-19-14	
Iodomethane	ND	0.0049	EPA 8260C	8-19-14	8-19-14	
Carbon Disulfide	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Methylene Chloride	ND	0.0067	EPA 8260C	8-19-14	8-19-14	
(trans) 1,2-Dichloroethene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Methyl t-Butyl Ether	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethane	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Vinyl Acetate	ND	0.0049	EPA 8260C	8-19-14	8-19-14	
2,2-Dichloropropane	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
(cis) 1,2-Dichloroethene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
2-Butanone	ND	0.0049	EPA 8260C	8-19-14	8-19-14	
Bromochloromethane	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Chloroform	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
1,1,1-Trichloroethane	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Carbon Tetrachloride	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloropropene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Benzene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloroethane	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Trichloroethene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloropropane	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Dibromomethane	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Bromodichloromethane	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
2-Chloroethyl Vinyl Ether	ND	0.0049	EPA 8260C	8-19-14	8-19-14	
(cis) 1,3-Dichloropropene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Methyl Isobutyl Ketone	ND	0.0062	EPA 8260C	8-19-14	8-19-14	
Toluene	ND	0.0049	EPA 8260C	8-19-14	8-19-14	
(trans) 1,3-Dichloropropene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-1-S**					
Laboratory ID:	08-130-01					
1,1,2-Trichloroethane	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Tetrachloroethene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
1,3-Dichloropropane	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
2-Hexanone	ND	0.0064	EPA 8260C	8-19-14	8-19-14	
Dibromochloromethane	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromoethane	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Chlorobenzene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
1,1,1,2-Tetrachloroethane	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Ethylbenzene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
m,p-Xylene	ND	0.0020	EPA 8260C	8-19-14	8-19-14	
o-Xylene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Styrene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Bromoform	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Isopropylbenzene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Bromobenzene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
1,1,2,2-Tetrachloroethane	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
n-Propylbenzene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
2-Chlorotoluene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
4-Chlorotoluene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
1,3,5-Trimethylbenzene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
tert-Butylbenzene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trimethylbenzene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
sec-Butylbenzene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
1,3-Dichlorobenzene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
p-Isopropyltoluene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
1,4-Dichlorobenzene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
1,2-Dichlorobenzene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
n-Butylbenzene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromo-3-chloropropane	ND	0.0049	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trichlorobenzene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Hexachlorobutadiene	ND	0.0049	EPA 8260C	8-19-14	8-19-14	
Naphthalene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichlorobenzene	ND	0.00099	EPA 8260C	8-19-14	8-19-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*109*	*65-129*				
Toluene-d8	*101*	*77-122*				
4-Bromofluorobenzene	*92*	*73-124*				

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-1-5**					
Laboratory ID:	08-130-02					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Chloromethane	ND	0.0055	EPA 8260C	8-19-14	8-19-14	
Vinyl Chloride	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Bromomethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Chloroethane	ND	0.0055	EPA 8260C	8-19-14	8-19-14	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Acetone	ND	0.0055	EPA 8260C	8-19-14	8-19-14	
Iodomethane	ND	0.0055	EPA 8260C	8-19-14	8-19-14	
Carbon Disulfide	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Methylene Chloride	ND	0.0075	EPA 8260C	8-19-14	8-19-14	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Methyl t-Butyl Ether	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Vinyl Acetate	ND	0.0055	EPA 8260C	8-19-14	8-19-14	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
2-Butanone	ND	0.0055	EPA 8260C	8-19-14	8-19-14	
Bromochloromethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Chloroform	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Benzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Trichloroethene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Dibromomethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Bromodichloromethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
2-Chloroethyl Vinyl Ether	ND	0.0055	EPA 8260C	8-19-14	8-19-14	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Methyl Isobutyl Ketone	ND	0.0070	EPA 8260C	8-19-14	8-19-14	
Toluene	ND	0.0055	EPA 8260C	8-19-14	8-19-14	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-1-5**					
Laboratory ID:	08-130-02					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Tetrachloroethene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
2-Hexanone	ND	0.0072	EPA 8260C	8-19-14	8-19-14	
Dibromochloromethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Chlorobenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Ethylbenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
m,p-Xylene	ND	0.0022	EPA 8260C	8-19-14	8-19-14	
o-Xylene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Styrene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Bromoform	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Isopropylbenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Bromobenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichloropropane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
n-Propylbenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
2-Chlorotoluene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
4-Chlorotoluene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,3,5-Trimethylbenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
tert-Butylbenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trimethylbenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
sec-Butylbenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
p-Isopropyltoluene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
n-Butylbenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromo-3-chloropropane	ND	0.0055	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Hexachlorobutadiene	ND	0.0055	EPA 8260C	8-19-14	8-19-14	
Naphthalene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*110*	*65-129*				
Toluene-d8	*107*	*77-122*				
4-Bromofluorobenzene	*98*	*73-124*				

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-2-S**					
Laboratory ID:	08-130-03					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Chloromethane	ND	0.0052	EPA 8260C	8-19-14	8-19-14	
Vinyl Chloride	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Bromomethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Chloroethane	ND	0.0052	EPA 8260C	8-19-14	8-19-14	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Acetone	ND	0.0052	EPA 8260C	8-19-14	8-19-14	
Iodomethane	ND	0.0052	EPA 8260C	8-19-14	8-19-14	
Carbon Disulfide	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Methylene Chloride	ND	0.0070	EPA 8260C	8-19-14	8-19-14	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Vinyl Acetate	ND	0.0052	EPA 8260C	8-19-14	8-19-14	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
2-Butanone	ND	0.0052	EPA 8260C	8-19-14	8-19-14	
Bromochloromethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Chloroform	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Benzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Trichloroethene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Dibromomethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Bromodichloromethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
2-Chloroethyl Vinyl Ether	ND	0.0052	EPA 8260C	8-19-14	8-19-14	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Methyl Isobutyl Ketone	ND	0.0065	EPA 8260C	8-19-14	8-19-14	
Toluene	ND	0.0052	EPA 8260C	8-19-14	8-19-14	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-2-S**					
Laboratory ID:	08-130-03					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Tetrachloroethene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
2-Hexanone	ND	0.0067	EPA 8260C	8-19-14	8-19-14	
Dibromochloromethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Chlorobenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Ethylbenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
m,p-Xylene	ND	0.0021	EPA 8260C	8-19-14	8-19-14	
o-Xylene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Styrene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Bromoform	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Isopropylbenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Bromobenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
n-Propylbenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
2-Chlorotoluene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
4-Chlorotoluene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
tert-Butylbenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
sec-Butylbenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
n-Butylbenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromo-3-chloropropane	ND	0.0052	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Hexachlorobutadiene	ND	0.0052	EPA 8260C	8-19-14	8-19-14	
Naphthalene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*100*	*65-129*				
Toluene-d8	*100*	*77-122*				
4-Bromofluorobenzene	*88*	*73-124*				

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-2-5**					
Laboratory ID:	08-130-04					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Chloromethane	ND	0.0057	EPA 8260C	8-19-14	8-19-14	
Vinyl Chloride	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Bromomethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Chloroethane	ND	0.0057	EPA 8260C	8-19-14	8-19-14	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Acetone	ND	0.0057	EPA 8260C	8-19-14	8-19-14	
Iodomethane	ND	0.0057	EPA 8260C	8-19-14	8-19-14	
Carbon Disulfide	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Methylene Chloride	ND	0.0078	EPA 8260C	8-19-14	8-19-14	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Methyl t-Butyl Ether	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Vinyl Acetate	ND	0.0057	EPA 8260C	8-19-14	8-19-14	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
2-Butanone	ND	0.0057	EPA 8260C	8-19-14	8-19-14	
Bromochloromethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Chloroform	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Benzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Trichloroethene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Dibromomethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Bromodichloromethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
2-Chloroethyl Vinyl Ether	ND	0.0057	EPA 8260C	8-19-14	8-19-14	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Methyl Isobutyl Ketone	ND	0.0072	EPA 8260C	8-19-14	8-19-14	
Toluene	ND	0.0057	EPA 8260C	8-19-14	8-19-14	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-2-5**					
Laboratory ID:	08-130-04					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Tetrachloroethene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
2-Hexanone	ND	0.0074	EPA 8260C	8-19-14	8-19-14	
Dibromochloromethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Chlorobenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Ethylbenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
m,p-Xylene	ND	0.0023	EPA 8260C	8-19-14	8-19-14	
o-Xylene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Styrene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Bromoform	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Isopropylbenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Bromobenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichloropropane	ND	0.0015	EPA 8260C	8-19-14	8-19-14	
n-Propylbenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
2-Chlorotoluene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
4-Chlorotoluene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,3,5-Trimethylbenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
tert-Butylbenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trimethylbenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
sec-Butylbenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
p-Isopropyltoluene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
n-Butylbenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromo-3-chloropropane	ND	0.0057	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Hexachlorobutadiene	ND	0.0057	EPA 8260C	8-19-14	8-19-14	
Naphthalene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	8-19-14	8-19-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*106*	*65-129*				
Toluene-d8	*103*	*77-122*				
4-Bromofluorobenzene	*94*	*73-124*				

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-3-S**					
Laboratory ID:	08-130-05					
Dichlorodifluoromethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Chloromethane	ND	0.0070	EPA 8260C	8-19-14	8-19-14	
Vinyl Chloride	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Bromomethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Chloroethane	ND	0.0070	EPA 8260C	8-19-14	8-19-14	
Trichlorofluoromethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Acetone	ND	0.0070	EPA 8260C	8-19-14	8-19-14	
Iodomethane	ND	0.0070	EPA 8260C	8-19-14	8-19-14	
Carbon Disulfide	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Methylene Chloride	ND	0.0095	EPA 8260C	8-19-14	8-19-14	
(trans) 1,2-Dichloroethene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Methyl t-Butyl Ether	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Vinyl Acetate	ND	0.0070	EPA 8260C	8-19-14	8-19-14	
2,2-Dichloropropane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
(cis) 1,2-Dichloroethene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
2-Butanone	ND	0.0070	EPA 8260C	8-19-14	8-19-14	
Bromochloromethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Chloroform	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,1,1-Trichloroethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Carbon Tetrachloride	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloropropene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Benzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloroethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Trichloroethene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloropropane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Dibromomethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Bromodichloromethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
2-Chloroethyl Vinyl Ether	ND	0.0070	EPA 8260C	8-19-14	8-19-14	
(cis) 1,3-Dichloropropene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Methyl Isobutyl Ketone	ND	0.0088	EPA 8260C	8-19-14	8-19-14	
Toluene	ND	0.0070	EPA 8260C	8-19-14	8-19-14	
(trans) 1,3-Dichloropropene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-3-S**					
Laboratory ID:	08-130-05					
1,1,2-Trichloroethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Tetrachloroethene	0.0021	0.0014	EPA 8260C	8-19-14	8-19-14	
1,3-Dichloropropane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
2-Hexanone	ND	0.0090	EPA 8260C	8-19-14	8-19-14	
Dibromochloromethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromoethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Chlorobenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,1,1,2-Tetrachloroethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Ethylbenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
m,p-Xylene	ND	0.0028	EPA 8260C	8-19-14	8-19-14	
o-Xylene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Styrene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Bromoform	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Isopropylbenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Bromobenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,1,2,2-Tetrachloroethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichloropropane	ND	0.0018	EPA 8260C	8-19-14	8-19-14	
n-Propylbenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
2-Chlorotoluene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
4-Chlorotoluene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,3,5-Trimethylbenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
tert-Butylbenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trimethylbenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
sec-Butylbenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,3-Dichlorobenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
p-Isopropyltoluene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,4-Dichlorobenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,2-Dichlorobenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
n-Butylbenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromo-3-chloropropane	ND	0.0070	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trichlorobenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Hexachlorobutadiene	ND	0.0070	EPA 8260C	8-19-14	8-19-14	
Naphthalene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichlorobenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*106*	*65-129*				
Toluene-d8	*99*	*77-122*				
4-Bromofluorobenzene	*83*	*73-124*				

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-3-5**					
Laboratory ID:	08-130-06					
Dichlorodifluoromethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Chloromethane	ND	0.0068	EPA 8260C	8-19-14	8-19-14	
Vinyl Chloride	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Bromomethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Chloroethane	ND	0.0068	EPA 8260C	8-19-14	8-19-14	
Trichlorofluoromethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Acetone	ND	0.0068	EPA 8260C	8-19-14	8-19-14	
Iodomethane	ND	0.0068	EPA 8260C	8-19-14	8-19-14	
Carbon Disulfide	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Methylene Chloride	ND	0.0092	EPA 8260C	8-19-14	8-19-14	
(trans) 1,2-Dichloroethene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Methyl t-Butyl Ether	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Vinyl Acetate	ND	0.0068	EPA 8260C	8-19-14	8-19-14	
2,2-Dichloropropane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
(cis) 1,2-Dichloroethene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
2-Butanone	ND	0.0068	EPA 8260C	8-19-14	8-19-14	
Bromochloromethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Chloroform	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,1,1-Trichloroethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Carbon Tetrachloride	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloropropene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Benzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloroethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Trichloroethene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloropropane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Dibromomethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Bromodichloromethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
2-Chloroethyl Vinyl Ether	ND	0.0068	EPA 8260C	8-19-14	8-19-14	
(cis) 1,3-Dichloropropene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Methyl Isobutyl Ketone	ND	0.0086	EPA 8260C	8-19-14	8-19-14	
Toluene	ND	0.0068	EPA 8260C	8-19-14	8-19-14	
(trans) 1,3-Dichloropropene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-3-5**					
Laboratory ID:	08-130-06					
1,1,2-Trichloroethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Tetrachloroethene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,3-Dichloropropane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
2-Hexanone	ND	0.0088	EPA 8260C	8-19-14	8-19-14	
Dibromochloromethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromoethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Chlorobenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,1,1,2-Tetrachloroethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Ethylbenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
m,p-Xylene	ND	0.0027	EPA 8260C	8-19-14	8-19-14	
o-Xylene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Styrene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Bromoform	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Isopropylbenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Bromobenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,1,2,2-Tetrachloroethane	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichloropropane	ND	0.0018	EPA 8260C	8-19-14	8-19-14	
n-Propylbenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
2-Chlorotoluene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
4-Chlorotoluene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,3,5-Trimethylbenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
tert-Butylbenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trimethylbenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
sec-Butylbenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,3-Dichlorobenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
p-Isopropyltoluene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,4-Dichlorobenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,2-Dichlorobenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
n-Butylbenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromo-3-chloropropane	ND	0.0068	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trichlorobenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Hexachlorobutadiene	ND	0.0068	EPA 8260C	8-19-14	8-19-14	
Naphthalene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichlorobenzene	ND	0.0014	EPA 8260C	8-19-14	8-19-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*104*	*65-129*				
Toluene-d8	*104*	*77-122*				
4-Bromofluorobenzene	*97*	*73-124*				

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-4-S**					
Laboratory ID:	08-130-07					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Chloromethane	ND	0.0059	EPA 8260C	8-19-14	8-19-14	
Vinyl Chloride	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Bromomethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Chloroethane	ND	0.0059	EPA 8260C	8-19-14	8-19-14	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Acetone	0.034	0.0059	EPA 8260C	8-19-14	8-19-14	
Iodomethane	ND	0.0059	EPA 8260C	8-19-14	8-19-14	
Carbon Disulfide	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Methylene Chloride	ND	0.0080	EPA 8260C	8-19-14	8-19-14	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Methyl t-Butyl Ether	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Vinyl Acetate	ND	0.0059	EPA 8260C	8-19-14	8-19-14	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
2-Butanone	ND	0.0059	EPA 8260C	8-19-14	8-19-14	
Bromochloromethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Chloroform	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Benzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Trichloroethene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Dibromomethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Bromodichloromethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
2-Chloroethyl Vinyl Ether	ND	0.0059	EPA 8260C	8-19-14	8-19-14	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Methyl Isobutyl Ketone	ND	0.0074	EPA 8260C	8-19-14	8-19-14	
Toluene	ND	0.0059	EPA 8260C	8-19-14	8-19-14	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-4-S**					
Laboratory ID:	08-130-07					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Tetrachloroethene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
2-Hexanone	ND	0.0077	EPA 8260C	8-19-14	8-19-14	
Dibromochloromethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Chlorobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Ethylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
m,p-Xylene	ND	0.0024	EPA 8260C	8-19-14	8-19-14	
o-Xylene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Styrene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Bromoform	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Isopropylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Bromobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichloropropane	ND	0.0015	EPA 8260C	8-19-14	8-19-14	
n-Propylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
2-Chlorotoluene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
4-Chlorotoluene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,3,5-Trimethylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
tert-Butylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trimethylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
sec-Butylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
p-Isopropyltoluene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
n-Butylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromo-3-chloropropane	ND	0.0059	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Hexachlorobutadiene	ND	0.0059	EPA 8260C	8-19-14	8-19-14	
Naphthalene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*111*	*65-129*				
Toluene-d8	*101*	*77-122*				
4-Bromofluorobenzene	*88*	*73-124*				

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-4-5**					
Laboratory ID:	08-130-08					
Dichlorodifluoromethane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Chloromethane	ND	0.0081	EPA 8260C	8-19-14	8-19-14	
Vinyl Chloride	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Bromomethane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Chloroethane	ND	0.0081	EPA 8260C	8-19-14	8-19-14	
Trichlorofluoromethane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Acetone	ND	0.0081	EPA 8260C	8-19-14	8-19-14	
Iodomethane	ND	0.0081	EPA 8260C	8-19-14	8-19-14	
Carbon Disulfide	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Methylene Chloride	ND	0.011	EPA 8260C	8-19-14	8-19-14	
(trans) 1,2-Dichloroethene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Methyl t-Butyl Ether	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Vinyl Acetate	ND	0.0081	EPA 8260C	8-19-14	8-19-14	
2,2-Dichloropropane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
(cis) 1,2-Dichloroethene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
2-Butanone	ND	0.0081	EPA 8260C	8-19-14	8-19-14	
Bromochloromethane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Chloroform	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
1,1,1-Trichloroethane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Carbon Tetrachloride	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloropropene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Benzene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloroethane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Trichloroethene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloropropane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Dibromomethane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Bromodichloromethane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
2-Chloroethyl Vinyl Ether	ND	0.0081	EPA 8260C	8-19-14	8-19-14	
(cis) 1,3-Dichloropropene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Methyl Isobutyl Ketone	ND	0.010	EPA 8260C	8-19-14	8-19-14	
Toluene	ND	0.0081	EPA 8260C	8-19-14	8-19-14	
(trans) 1,3-Dichloropropene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	

Date of Report: August 26, 2014
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Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-4-5**					
Laboratory ID:	08-130-08					
1,1,2-Trichloroethane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Tetrachloroethene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
1,3-Dichloropropane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
2-Hexanone	ND	0.010	EPA 8260C	8-19-14	8-19-14	
Dibromochloromethane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromoethane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Chlorobenzene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
1,1,1,2-Tetrachloroethane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Ethylbenzene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
m,p-Xylene	ND	0.0032	EPA 8260C	8-19-14	8-19-14	
o-Xylene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Styrene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Bromoform	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Isopropylbenzene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Bromobenzene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
1,1,2,2-Tetrachloroethane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichloropropane	ND	0.0021	EPA 8260C	8-19-14	8-19-14	
n-Propylbenzene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
2-Chlorotoluene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
4-Chlorotoluene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
1,3,5-Trimethylbenzene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
tert-Butylbenzene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trimethylbenzene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
sec-Butylbenzene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
1,3-Dichlorobenzene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
p-Isopropyltoluene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
1,4-Dichlorobenzene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
1,2-Dichlorobenzene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
n-Butylbenzene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromo-3-chloropropane	ND	0.0081	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trichlorobenzene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Hexachlorobutadiene	ND	0.0081	EPA 8260C	8-19-14	8-19-14	
Naphthalene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichlorobenzene	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*105*	*65-129*				
Toluene-d8	*100*	*77-122*				
4-Bromofluorobenzene	*88*	*73-124*				

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-5-S**					
Laboratory ID:	08-130-09					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Chloromethane	ND	0.0061	EPA 8260C	8-19-14	8-19-14	
Vinyl Chloride	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Bromomethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Chloroethane	ND	0.0061	EPA 8260C	8-19-14	8-19-14	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Acetone	ND	0.0061	EPA 8260C	8-19-14	8-19-14	
Iodomethane	ND	0.0061	EPA 8260C	8-19-14	8-19-14	
Carbon Disulfide	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Methylene Chloride	ND	0.0083	EPA 8260C	8-19-14	8-19-14	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Methyl t-Butyl Ether	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Vinyl Acetate	ND	0.0061	EPA 8260C	8-19-14	8-19-14	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
2-Butanone	ND	0.0061	EPA 8260C	8-19-14	8-19-14	
Bromochloromethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Chloroform	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Benzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Trichloroethene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Dibromomethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Bromodichloromethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
2-Chloroethyl Vinyl Ether	ND	0.0061	EPA 8260C	8-19-14	8-19-14	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Methyl Isobutyl Ketone	ND	0.0077	EPA 8260C	8-19-14	8-19-14	
Toluene	ND	0.0061	EPA 8260C	8-19-14	8-19-14	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-5-S**					
Laboratory ID:	08-130-09					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Tetrachloroethene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
2-Hexanone	ND	0.0079	EPA 8260C	8-19-14	8-19-14	
Dibromochloromethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Chlorobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Ethylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
m,p-Xylene	ND	0.0024	EPA 8260C	8-19-14	8-19-14	
o-Xylene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Styrene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Bromoform	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Isopropylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Bromobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichloropropane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
n-Propylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
2-Chlorotoluene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
4-Chlorotoluene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,3,5-Trimethylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
tert-Butylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trimethylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
sec-Butylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
p-Isopropyltoluene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
n-Butylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromo-3-chloropropane	ND	0.0061	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Hexachlorobutadiene	ND	0.0061	EPA 8260C	8-19-14	8-19-14	
Naphthalene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*99*	*65-129*				
Toluene-d8	*102*	*77-122*				
4-Bromofluorobenzene	*92*	*73-124*				

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-5-5**					
Laboratory ID:	08-130-10					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Chloromethane	ND	0.0066	EPA 8260C	8-19-14	8-19-14	
Vinyl Chloride	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Bromomethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Chloroethane	ND	0.0066	EPA 8260C	8-19-14	8-19-14	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Acetone	ND	0.0066	EPA 8260C	8-19-14	8-19-14	
Iodomethane	ND	0.0066	EPA 8260C	8-19-14	8-19-14	
Carbon Disulfide	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Methylene Chloride	ND	0.0090	EPA 8260C	8-19-14	8-19-14	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Methyl t-Butyl Ether	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Vinyl Acetate	ND	0.0066	EPA 8260C	8-19-14	8-19-14	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
2-Butanone	ND	0.0066	EPA 8260C	8-19-14	8-19-14	
Bromochloromethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Chloroform	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Benzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Trichloroethene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Dibromomethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Bromodichloromethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
2-Chloroethyl Vinyl Ether	ND	0.0066	EPA 8260C	8-19-14	8-19-14	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Methyl Isobutyl Ketone	ND	0.0083	EPA 8260C	8-19-14	8-19-14	
Toluene	ND	0.0066	EPA 8260C	8-19-14	8-19-14	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-5-5**					
Laboratory ID:	08-130-10					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Tetrachloroethene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
2-Hexanone	ND	0.0086	EPA 8260C	8-19-14	8-19-14	
Dibromochloromethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Chlorobenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Ethylbenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
m,p-Xylene	ND	0.0026	EPA 8260C	8-19-14	8-19-14	
o-Xylene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Styrene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Bromoform	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Isopropylbenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Bromobenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichloropropane	ND	0.0017	EPA 8260C	8-19-14	8-19-14	
n-Propylbenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
2-Chlorotoluene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
4-Chlorotoluene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,3,5-Trimethylbenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
tert-Butylbenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trimethylbenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
sec-Butylbenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
p-Isopropyltoluene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
n-Butylbenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromo-3-chloropropane	ND	0.0066	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Hexachlorobutadiene	ND	0.0066	EPA 8260C	8-19-14	8-19-14	
Naphthalene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*104*	*65-129*				
Toluene-d8	*104*	*77-122*				
4-Bromofluorobenzene	*96*	*73-124*				

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-6-S**					
Laboratory ID:	08-130-11					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Chloromethane	ND	0.0060	EPA 8260C	8-19-14	8-19-14	
Vinyl Chloride	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Bromomethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Chloroethane	ND	0.0060	EPA 8260C	8-19-14	8-19-14	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Acetone	0.010	0.0060	EPA 8260C	8-19-14	8-19-14	
Iodomethane	ND	0.0060	EPA 8260C	8-19-14	8-19-14	
Carbon Disulfide	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Methylene Chloride	ND	0.0082	EPA 8260C	8-19-14	8-19-14	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Methyl t-Butyl Ether	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Vinyl Acetate	ND	0.0060	EPA 8260C	8-19-14	8-19-14	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
2-Butanone	ND	0.0060	EPA 8260C	8-19-14	8-19-14	
Bromochloromethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Chloroform	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Benzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Trichloroethene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Dibromomethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Bromodichloromethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
2-Chloroethyl Vinyl Ether	ND	0.0060	EPA 8260C	8-19-14	8-19-14	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Methyl Isobutyl Ketone	ND	0.0076	EPA 8260C	8-19-14	8-19-14	
Toluene	ND	0.0060	EPA 8260C	8-19-14	8-19-14	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-6-S**					
Laboratory ID:	08-130-11					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Tetrachloroethene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
2-Hexanone	ND	0.0078	EPA 8260C	8-19-14	8-19-14	
Dibromochloromethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Chlorobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Ethylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
m,p-Xylene	ND	0.0024	EPA 8260C	8-19-14	8-19-14	
o-Xylene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Styrene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Bromoform	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Isopropylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Bromobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichloropropane	ND	0.0016	EPA 8260C	8-19-14	8-19-14	
n-Propylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
2-Chlorotoluene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
4-Chlorotoluene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,3,5-Trimethylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
tert-Butylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trimethylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
sec-Butylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
p-Isopropyltoluene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
n-Butylbenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromo-3-chloropropane	ND	0.0060	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Hexachlorobutadiene	ND	0.0060	EPA 8260C	8-19-14	8-19-14	
Naphthalene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	8-19-14	8-19-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*102*	*65-129*				
Toluene-d8	*95*	*77-122*				
4-Bromofluorobenzene	*86*	*73-124*				

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-6-5**					
Laboratory ID:	08-130-12					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Chloromethane	ND	0.0067	EPA 8260C	8-19-14	8-19-14	
Vinyl Chloride	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Bromomethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Chloroethane	ND	0.0067	EPA 8260C	8-19-14	8-19-14	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Acetone	ND	0.0067	EPA 8260C	8-19-14	8-19-14	
Iodomethane	ND	0.0067	EPA 8260C	8-19-14	8-19-14	
Carbon Disulfide	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Methylene Chloride	ND	0.0092	EPA 8260C	8-19-14	8-19-14	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Methyl t-Butyl Ether	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Vinyl Acetate	ND	0.0067	EPA 8260C	8-19-14	8-19-14	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
2-Butanone	ND	0.0067	EPA 8260C	8-19-14	8-19-14	
Bromochloromethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Chloroform	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Benzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Trichloroethene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Dibromomethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Bromodichloromethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
2-Chloroethyl Vinyl Ether	ND	0.0067	EPA 8260C	8-19-14	8-19-14	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Methyl Isobutyl Ketone	ND	0.0085	EPA 8260C	8-19-14	8-19-14	
Toluene	ND	0.0067	EPA 8260C	8-19-14	8-19-14	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**GP-6-5**					
Laboratory ID:	08-130-12					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Tetrachloroethene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
2-Hexanone	ND	0.0087	EPA 8260C	8-19-14	8-19-14	
Dibromochloromethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Chlorobenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Ethylbenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
m,p-Xylene	ND	0.0027	EPA 8260C	8-19-14	8-19-14	
o-Xylene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Styrene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Bromoform	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Isopropylbenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Bromobenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichloropropane	ND	0.0017	EPA 8260C	8-19-14	8-19-14	
n-Propylbenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
2-Chlorotoluene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
4-Chlorotoluene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,3,5-Trimethylbenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
tert-Butylbenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trimethylbenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
sec-Butylbenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
p-Isopropyltoluene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
n-Butylbenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromo-3-chloropropane	ND	0.0067	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Hexachlorobutadiene	ND	0.0067	EPA 8260C	8-19-14	8-19-14	
Naphthalene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*106*	*65-129*				
Toluene-d8	*103*	*77-122*				
4-Bromofluorobenzene	*91*	*73-124*				

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

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

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0819S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Chloromethane	ND	0.0050	EPA 8260C	8-19-14	8-19-14	
Vinyl Chloride	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Bromomethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Chloroethane	ND	0.0050	EPA 8260C	8-19-14	8-19-14	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Acetone	ND	0.0050	EPA 8260C	8-19-14	8-19-14	
Iodomethane	ND	0.0050	EPA 8260C	8-19-14	8-19-14	
Carbon Disulfide	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Methylene Chloride	ND	0.0068	EPA 8260C	8-19-14	8-19-14	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Vinyl Acetate	ND	0.0050	EPA 8260C	8-19-14	8-19-14	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
2-Butanone	ND	0.0050	EPA 8260C	8-19-14	8-19-14	
Bromochloromethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Chloroform	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Benzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Trichloroethene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Dibromomethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Bromodichloromethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	8-19-14	8-19-14	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Methyl Isobutyl Ketone	ND	0.0063	EPA 8260C	8-19-14	8-19-14	
Toluene	ND	0.0050	EPA 8260C	8-19-14	8-19-14	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

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

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0819S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Tetrachloroethene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
2-Hexanone	ND	0.0065	EPA 8260C	8-19-14	8-19-14	
Dibromochloromethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Chlorobenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Ethylbenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
m,p-Xylene	ND	0.0020	EPA 8260C	8-19-14	8-19-14	
o-Xylene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Styrene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Bromoform	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Isopropylbenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Bromobenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	8-19-14	8-19-14	
n-Propylbenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
2-Chlorotoluene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
4-Chlorotoluene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
tert-Butylbenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
sec-Butylbenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
n-Butylbenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	8-19-14	8-19-14	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	8-19-14	8-19-14	
Naphthalene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	8-19-14	8-19-14	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*109*	*65-129*				
Toluene-d8	*105*	*77-122*				
4-Bromofluorobenzene	*100*	*73-124*				

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

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
SPIKE BLANKS										
Laboratory ID:	SB0819S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0452**	**0.0469**	0.0500	0.0500	90	94	56-141	4	15	
Benzene	**0.0451**	**0.0460**	0.0500	0.0500	90	92	70-121	2	15	
Trichloroethene	**0.0491**	**0.0490**	0.0500	0.0500	98	98	74-118	0	15	
Toluene	**0.0459**	**0.0463**	0.0500	0.0500	92	93	75-120	1	15	
Chlorobenzene	**0.0446**	**0.0451**	0.0500	0.0500	89	90	75-120	1	15	
Surrogate:										
Dibromofluoromethane					*103*	*103*	*65-129*			
Toluene-d8					*99*	*99*	*77-122*			
4-Bromofluorobenzene					*93*	*93*	*73-124*			

Date of Report: August 26, 2014
Samples Submitted: August 16, 2014
Laboratory Reference: 1408-130
Project: 1301679.010

% MOISTURE

Date Analyzed: 8-20-14

Client ID	Lab ID	% Moisture
GP-1-S	08-130-01	13
GP-1-5	08-130-02	17
GP-2-S	08-130-03	10
GP-2-5	08-130-04	17
GP-3-S	08-130-05	13
GP-3-5	08-130-06	11
GP-4-S	08-130-07	13
GP-4-5	08-130-08	25
GP-5-S	08-130-09	21
GP-5-5	08-130-10	15
GP-6-S	08-130-11	15
GP-6-5	08-130-12	17

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

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: Golder Associates
Project Number: 1301679.010
Project Name: Potala Tower
Project Manager: Neil Gilham
Sampled by: David Erickson

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 08-130

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	GP-1-S	8/15/14	15:55	S	5			/	/	/																	X
2	GP-1-5		16:05		5			/	/	/																	X
3	GP-2-S		16:35		5			/	/	/																	X
4	GP-2-5		16:40		5			/	/	/																	X
5	GP-3-S		18:00		5			/	/	/																	X
6	GP-3-5		18:10		5			/	/	/																	X
7	GP-4-S		18:20		5			/	/	/																	X
8	GP-4-5		18:30		5			/	/	/																	X
9	GP-5-S		18:53		5			/	/	/																	X
10	GP-5-5		19:15		5			/	/	/																	X

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished		Golder	8/16/14	11:45	
Received			8/16/14	1145	
Relinquished					
Received					
Relinquished					
Received					

Reviewed/Date | Reviewed/Date | Chromatograms with final report ☐

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

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: Golder Associates
Project Number: 1301679.010
Project Name: Potala Tower
Project Manager: Neil Gilham
Sampled by: David Erickson

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

Laboratory Number: 08-130

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
11	GP-6-S	8/15/14	19:25	S	5			/	/	/																	X
12	GP-6-5	↓	19:35	S	5			/	/	/																	X

	Signature	Company	Date	Time
Relinquished		Golder	8/16/14	11:45
Received			8/16/14	1145
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Chromatograms with final report ☐

Data Package: Standard ☐ Level III ☐ Level IV ☐

Electronic Data Deliverables (EDDs) ☐ _____

Established in 1960, Golder Associates is a global, employee-owned organization that helps clients find sustainable solutions to the challenges of finite resources, energy and water supply and management, waste management, urbanization, and climate change. We provide a wide range of independent consulting, design, and construction services in our specialist areas of earth, environment, and energy. By building strong relationships and meeting the needs of clients, our people have created one of the most trusted professional services organizations in the world.

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Golder Associates

Engineering Earth's Development, Preserving Earth's Integrity