

Phase II Environmental Site Assessment

Hamilton Property
Pierce County Parcel No. 0416231052
Eatonville, Washington

for
Nisqually Land Trust

March 6, 2013



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File No. 20894-001-01

March 6, 2013

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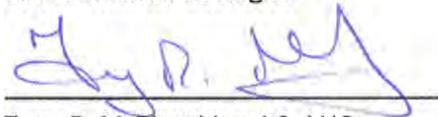
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1.0 INTRODUCTION

This report presents the results of our Phase II Environmental Site Assessment (ESA) completed for the Nisqually Land Trust at the Hamilton property (Pierce County Parcel No. 0416231052) located along the Mashel River south of 433 Center Street East in Eatonville, Washington. The parcel is herein referred to as the “subject property”. The subject property is currently undeveloped. See Figure 1 for a Vicinity Map and Figure 2 for the layout of site.

1.1. Previous Investigations

We completed a Phase I ESA of the subject property in December 2012 at the request of Nisqually Land Trust. The results of this Phase I ESA are discussed in our report titled “Phase I Environmental Site Assessment, Hamilton Property, South of 433 Center Street East, Eatonville, Washington” dated December 6, 2012. The Recognized Environmental Conditions (RECs)¹ identified during the Phase I ESA are briefly summarized below.

- A mill pond is located north and adjacent to the western portion of the subject property. The pond was utilized between 1905 and 1954 to store logs prior to milling according to Mr. Dan Hamilton, property owner representative. Petroleum hydrocarbons were not detected in five sediment samples collected in the pond. Metals and polycyclic aromatic hydrocarbons (PAHs) are typical contaminants of milling processes and were not analyzed in the sediment samples.

Metal and petroleum-impacted ash was remediated in the area of the burners adjacent and north of the mill pond. Petroleum hydrocarbons, volatile organic compounds (VOCs) and dissolved metals were not detected in one groundwater sample collected between the burners and the mill pond. Total arsenic, lead and chromium were detected at concentrations greater than Ecology’s Model Toxics Control Act (MTCA) Method A groundwater cleanup level in the groundwater sample. The total metal concentration appears to be related to turbidity in the groundwater sample. There is a potential that contaminated ash was deposited in the mill pond within the last 100 years. Mr. Hamilton indicated the pond water infiltrates into the subsurface and/or discharges through an outlet on the west side of the pond towards the river. A portion of the discharge ditch is located on the subject property.

The potential impacts to sediment in the discharge ditch is considered a potential REC to the subject property and may be a risk to wildlife in the area via direct contact with soil and surface water runoff. The potential impact to groundwater on the subject property from the mill pond is considered an REC to the subject property. There is also likely communication between the groundwater on the subject property and nearby surface water of the Mashel River.

¹ Recognized Environmental Conditions are defined in ASTM E-1527.05 as “the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or in the ground, ground water or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions generally do not present a threat to the human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not recognized environmental conditions.”

- A manmade levee is located on the subject property just south of the mill pond. The levee was constructed with lumber-tied cables and fill material during operation of the lumber mill in the early 1900s according to Mr. Dan Hamilton. The source of the fill is unknown and considered an REC to the subject property and may be a risk to wildlife in the area via direct contact with soil and surface water runoff.
- A rail spur and log dump were located on the subject property between at least 1923 and 1959. It is unknown if the ties associated with the rail spur have been removed. Petroleum hydrocarbons and metals are typically associated with rail activities due to spills, dust from brakes and creosote-treated ties. The presence of the rail spur and log dump is considered a potential REC if the soil and/or groundwater has been impacted by petroleum hydrocarbons and metals.

2.0 SCOPE OF SERVICES

The scope of our Phase II services is listed below.

1. Coordinated the location of subsurface utilities at the site. A private locate service was utilized for the on-site utility locate.
2. Prepared a health and safety plan for our representatives in accordance with Washington Administrative Code (WAC) 296-24.
3. Retained a drilling subcontractor to advance up to four soil borings at the site using direct-push drilling methods. Soil samples were collected during the drilling activities for chemical analysis. Groundwater samples were collected from two of the soil borings during drilling activities.
4. Completed one hand auger to a depth of 1-foot below ground surface (bgs) in the area of the mill pond discharge ditch. Soil samples were collected for chemical analysis.
5. Submitted seven soil samples for analysis of hydrocarbon identification by Ecology-approved method NWTPH-HCID, Resource Conservation and Recovery Act (RCRA) metals by Environmental Protection Agency (EPA) method 6000/7000 series, PAHs by EPA method 8270/SIM. The soil samples were submitted to the laboratory requesting a standard 10-working day turnaround.
6. Submitted two groundwater samples for analysis of hydrocarbon identification by Ecology-approved method NWTPH-HCID, dissolved RCRA metals by EPA method 6000/7000 series and PAHs by EPA method 8270/SIM. The groundwater samples were submitted requesting a standard 10-working day turnaround.
7. Evaluated the data with respect to Ecology's MTCA cleanup levels.
8. Prepared this report that summarizes the Phase II ESA results.

3.0 SUBSURFACE EXPLORATIONS

A total of five soil borings (DP01 through DP04 and HA01) were completed on the subject property on January 30, 2013 in the areas identified as RECs during the Phase I ESA.

Four borings (DPO1 through DPO4) were completed using direct-push drilling methods. A 4-foot core sampler with an acetate liner was used to collect the soil samples. Two of the direct-push soil borings (DPO1 and DPO4) were completed to an approximate depth of 20 feet bgs in the area south of the mill pond along the former rail spur. Two of the direct-push soil borings (DPO2 and DPO3) were completed to an approximate depth of 12 feet bgs within the mill pond levee. One boring (HA01) was advanced using a manual hand auger to a depth of approximately 1 foot bgs. The hand auger was located in the discharge ditch between the mill pond and the Mashel River. The boring locations are shown on Figure 2. Soil samples were collected continuously in each of the explorations to the full depth explored.

The borings were monitored by a representative of GeoEngineers who visually classified the soil samples obtained during advancement of the borings and performed field screening tests on soil samples collected from the borings for evidence of petroleum hydrocarbons and photoionizable vapors. Subsurface conditions and field screening results are shown on the boring logs presented in Appendix A. The borings were abandoned in accordance with Ecology regulations.

3.1. Soil Conditions

Soils observed in the borings generally consisted of brown to gray sands and gravels with various amounts of silt. Wood debris was observed at various depths in borings DPO3 and DPO4.

3.1.1. Field Screening Results

No sheen was observed in the soil samples collected from the soil borings. Concentrations of photoionizable vapors were not measured in the soil samples collected during drilling activities.

3.2. Groundwater Conditions

Groundwater was encountered at depths ranging between 11 and 16 feet bgs in borings DPO1 and DPO4. Groundwater was not encountered in borings DPO2, DPO3 and HA01.

4.0 CHEMICAL ANALYTICAL PROGRAM

Soil and groundwater samples were submitted to OnSite Environmental Inc., in Redmond, Washington. The chemical analytical data are summarized in Tables 1 and 2. Chemicals that were not detected at or greater than the laboratory reporting limits in the analyzed samples are typically not included on the tables. A copy of the laboratory report is presented in Appendix B.

4.1. Soil

A total of seven soil samples were submitted for chemical analysis. The samples collected from the borings were identified using the following identification system: DP#- collection depth – date, where DP# is the boring number, collection depth is the depth the specific sample was collected and date is the date the sample was collected (e.g., DPO1-10-130130 was collected from boring DPO1 at 10 feet bgs on January 30, 2013).

The chemical analytical data for groundwater are described below and summarized in Table 1. The chemical analytical data are described relative to MTCA Method A Unrestricted Land Use (ULU) and Industrial Land Use (ILU) cleanup levels for soil. Method B ULU and Method C ILU criteria were

used for comparison of barium, selenium and silver and specific PAHs because Method A cleanup levels have not been established for these compounds.

4.1.1. Petroleum Hydrocarbons

Gasoline-, diesel- and lube oil-range petroleum hydrocarbons were not detected in the analyzed soil samples.

4.1.2. Metals

RCRA metals (arsenic, barium, cadmium, total chromium, lead, mercury, selenium, and silver) were either not detected or were detected at concentrations less than the respective MTCA Method A ULU cleanup levels and Method B ULU criteria in the analyzed soil samples.

One sample (DP04-8-130130) was also analyzed for hexavalent chromium. Hexavalent chromium was not detected at or greater than the laboratory reporting limit in the analyzed soil sample.

4.1.3. PAHs

PAHs were either not detected or were detected at concentrations less than the respective MTCA Method A ULU cleanup levels and Method B ULU criteria in the analyzed soil samples.

4.2. Groundwater

Two groundwater samples (DP01-130130 and DP04-130130) were submitted for chemical analysis. The groundwater samples were identified using the following identification system: DP#-date, where DP# is the boring number and date indicates the date the water sample was collected (e.g., DP01-130130 was collected from boring DP01 on January 30, 2013).

The chemical analytical data for groundwater are described below and summarized in Table 2. The chemical analytical data are described below relative to MTCA Method A cleanup levels or Method B criteria for groundwater.

4.2.1. Petroleum Hydrocarbons

Gasoline-, diesel- and lube oil-range petroleum hydrocarbons were not detected in the analyzed groundwater samples.

4.2.2. Metals

RCRA metals (arsenic, barium, cadmium, total chromium, lead, mercury, selenium, and silver) were either not detected or were detected at concentrations less than the respective MTCA Method A groundwater cleanup levels or Method B criteria in the analyzed groundwater samples.

4.2.3. PAHs

PAHs and cPAHs were either not detected or were detected at concentrations less than the respective MTCA Method A groundwater cleanup level and Method B criteria in the analyzed groundwater samples.

5.0 CONCLUSIONS

Five borings were completed in areas identified as RECs in the Phase I ESA as described in Section 1.1. Soil and groundwater samples were submitted for chemical analysis of petroleum hydrocarbons, metals and PAHs. Analytical results indicate soil and groundwater do not appear to be impacted with petroleum hydrocarbons, metals and PAHs in the boring location areas.

6.0 LIMITATIONS

GeoEngineers has performed this Phase II ESA at the subject property as defined in this report in general accordance with our Services Agreement dated December 6, 2012 and generally accepted environmental science practices in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

This Phase II ESA has been prepared for use by the Nisqually Land Trust. No one except the Nisqually Land Trust should rely on this report without a third party reliance letter because this environmental report is not intended for use by others.

Within the limitations of scope, schedule and budget, our services have been executed in accordance with the generally accepted environmental science practices for Phase II ESAs in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

Please refer to Appendix C titled “Report Limitations and Guidelines for Use” for additional information pertaining to use of this report.

TABLE 1

**SUMMARY OF CHEMICAL ANALYTICAL RESULTS FOR PETROLEUM HYDROCARBONS, METALS, AND PAHs¹ - SOIL
HAMILTON PROPERTY PHASE II ENVIRONMENTAL SITE ASSESSMENT
EATONVILLE, WASHINGTON**

Boring Location	HA01	DP01	DP02	DP03	DP04	DP04	DP04	MTCA Method A ULU Cleanup Level
Sample Identification	HA01-130130	DP01-10-130130	DP02-4-130130	DP03-6-130130	DP04-8-130130	DP04-10-130130	DP04-15-130130	
Approximate Depth of Sample (feet bgs)	0 to 1	10 to 11	4 to 5	6 to 7	8 to 9	10 to 11	15 to 16	
NWTPH-HCID² (mg/kg)								
Gasoline Range	U(23)	U(22)	U(25)	U(27)	U(25)	U(26)	U(23)	30/100 ⁶
Diesel Range	U(56)	U(55)	U(63)	U(66)	U(63)	U(66)	U(57)	2,000
Lube-Oil Range	U(110)	U(110)	U(130)	U(130)	U(130)	U(130)	U(120)	2,000
RCRA Metals³ (mg/kg)								
Arsenic	U(11)	U(11)	14	U(13)	U(13)	U(13)	U(11)	20
Barium	54	55	71	33	120	100	100	16,000 ⁷
Cadmium	U(0.56)	U(0.55)	U(0.63)	U(0.66)	U(0.63)	U(0.66)	U(0.57)	2.0
Total Chromium	17	14	26	19	33	25	26	2,000 ⁸
Hexavalent Chromium	--	--	--	--	U(1.3)	--	--	19
Lead	U(5.6)	U(5.5)	U(6.3)	U(6.6)	U(6.3)	7.3	U(5.7)	250
Mercury	U(0.28)	U(0.28)	U(0.32)	U(0.33)	U(0.31)	U(0.33)	U(0.29)	2.0
Selenium	U(11)	U(11)	U(13)	U(13)	U(13)	U(13)	U(11)	400 ⁷
Silver	U(1.1)	U(1.1)	U(1.3)	U(1.3)	U(1.3)	U(1.3)	U(1.1)	400 ⁷
PAHs⁴ (mg/kg)								
Total Naphthalenes ⁵	U(0.0075)	U(0.0074)	U(0.0084)	U(0.0088)	0.082	0.054	0.0090	MTCA Method A ULU Cleanup Level for the sum of all Naphthalenes is 5 mg/kg
Acenaphthylene	U(0.0075)	U(0.0074)	U(0.0084)	U(0.0088)	U(0.0084)	U(0.0088)	U(0.0076)	NE
Acenaphthene	U(0.0075)	U(0.0074)	U(0.0084)	U(0.0088)	U(0.0084)	U(0.0088)	U(0.0076)	4,800 ⁷
Fluorene	U(0.0075)	U(0.0074)	U(0.0084)	U(0.0088)	U(0.0084)	U(0.0088)	U(0.0076)	3,200 ⁷
Phenanthrene	U(0.0075)	0.012	0.024	U(0.0088)	0.043	0.033	0.021	NE
Anthracene	U(0.0075)	U(0.0074)	U(0.0084)	U(0.0088)	U(0.0084)	U(0.0088)	U(0.0076)	NE
Fluoranthene	U(0.0075)	U(0.0074)	0.019	U(0.0088)	U(0.0084)	U(0.0088)	U(0.0076)	3,200 ⁷
Pyrene	U(0.0075)	U(0.0074)	0.017	U(0.0088)	U(0.0084)	U(0.0088)	U(0.0076)	2,400 ⁷
Benzo[g,h,i]perylene	U(0.0075)	U(0.0074)	U(0.0084)	U(0.0088)	U(0.0084)	U(0.0088)	U(0.0076)	NE
cPAHs (mg/kg)								
Benzo (a) anthracene (TEF 0.1)	U(0.0075)	U(0.0074)	0.0094	U(0.0088)	U(0.0084)	U(0.0088)	U(0.0076)	MTCA ULU cleanup level for the sum of all cPAHs is 0.1 mg/kg
Benzo (a) pyrene (TEF 1)	U(0.0075)	U(0.0074)	U(0.0084)	U(0.0088)	U(0.0084)	U(0.0088)	U(0.0076)	
Benzo (b) fluoranthene (TEF 0.1)	U(0.0075)	U(0.0074)	U(0.0084)	U(0.0088)	U(0.0084)	U(0.0088)	U(0.0076)	
Benzo (k) fluoranthene (TEF 0.1)	U(0.0075)	U(0.0074)	U(0.0084)	U(0.0088)	U(0.0084)	U(0.0088)	U(0.0076)	
Chrysene (TEF 0.01)	U(0.0075)	U(0.0074)	0.0092	U(0.0088)	U(0.0084)	U(0.0088)	U(0.0076)	
Dibenz (a,h) anthracene (TEF 0.1)	U(0.0075)	U(0.0074)	U(0.0084)	U(0.0088)	U(0.0084)	U(0.0088)	U(0.0076)	
Indeno (1,2,3-cd) pyrene (TEF 0.1)	U(0.0075)	U(0.0074)	U(0.0084)	U(0.0088)	U(0.0084)	U(0.0088)	U(0.0076)	
Total TTEC of cPAHs (detect only)	--	--	0.0010	--	--	--	--	0.1

Notes:

- ¹ Chemical analysis performed by OnSite Environmental, Inc. located in Redmond, Washington.
 - ² Washington State Department of Ecology-approved method NWTPH-HCID.
 - ³ Resource Conservation Recovery Act (RCRA) metals analyzed by EPA 6000/7000 series method.
 - ⁴ Polycyclic aromatic hydrocarbons (PAHs) were analyzed by EPA method 8270D/SIM.
 - ⁵ Total naphthalenes consists of 1-methylnaphthalene, 2-methylnaphthalene and naphthalene.
 - ⁶ The cleanup level for gasoline-range petroleum hydrocarbons is 30 mg/kg if benzene is present and 100 mg/kg if benzene is not present.
 - ⁷ Method B ULU criteria level represented because MTCA Method A cleanup level has not been established.
 - ⁸ MTCA Method A Cleanup Level for Trivalent Chromium.
- TEF = Toxicity Equivalency Factor as defined in WAC 173-340-900 Table 708-2
 Total Toxic Equivalent Concentration (TTEC) is the sum of each individual cPAH concentration multiplied by its corresponding TEF in parenthesis.
 NE = Cleanup level not established
 U = Analyte was not detected at or greater than the listed reporting limit
 MTCA = Model Toxics Control Act
 ULU = Unrestricted Land Use
 bgs = below ground surface
 mg/kg = milligram per kilogram

TABLE 2

SUMMARY OF CHEMICAL ANALYTICAL RESULTS FOR PETROLEUM HYDROCARBONS, METALS AND PAHs¹ - GROUNDWATER HAMILTON PROPERTY PHASE II ENVIRONMENTAL SITE ASSESSMENT EATONVILLE, WASHINGTON

Temporary Well Location	Boring DP01	Boring DP04	
Sample Identification	DP01-130130	DP04-130130	MTCA Method A Cleanup Level
NWTPH-HCID² (mg/l)			
Gasoline-Range	ND	ND	0.8/1.0 ⁶
Diesel-Range	ND	ND	0.5
Lube Oil-Range	ND	ND	0.5
Dissolved RCRA Metals³ (µg/l)			
Arsenic	U(3.0)	3.3	5
Barium	U(25)	27	3,200 ⁷
Cadmium	U(4.0)	U(4.0)	5
Total Chromium	U(10)	U(10)	50 ⁸
Lead	U(1.0)	U(1.0)	15
Mercury	U(0.50)	U(0.50)	2
Selenium	U(5.0)	U(5.0)	80 ⁷
Silver	U(10)	U(10)	80 ⁷
PAHs⁴ (µg/l)			
			MTCA Method A Cleanup Level for the sum of all Naphthalenes is 160 µg/l
Total Naphthalenes ⁵	U(0.10)	U(0.10)	
Benzo[g,h,i]perylene	0.013	U(0.010)	NE
cPAHs (µg/l)			
Benzo (a) anthracene (TEF 0.1)	0.014	U(0.010)	MTCA Cleanup Level for the sum of all cPAHs is 0.1 µg/l
Benzo (a) pyrene (TEF 1)	U(0.010)	U(0.010)	
Benzo (b) fluoranthene (TEF 0.1)	0.011	U(0.010)	
Benzo (k) fluoranthene (TEF 0.1)	U(0.010)	U(0.010)	
Chrysene (TEF 0.01)	U(0.010)	U(0.010)	
Dibenz (a,h) anthracene (TEF 0.1)	0.010	U(0.010)	
Indeno (1,2,3-cd) pyrene (TEF 0.1)	0.012	U(0.010)	
Total TTEC of cPAHs (detect only)	0.0047	--	0.1

Notes:

¹ Chemical analysis performed by OnSite Environmental, Inc. located in Redmond, Washington.

² Washington State Department of Ecology-approved method NWTPH-HCID.

³ Resource Conservation Recovery Act (RCRA) metals analyzed by EPA 200.8/7000 Series method.

⁴ Polycyclic aromatic hydrocarbons (PAHs) were analyzed by EPA method 8270D/SIM. PAHs that were not detected are not shown.

⁵ Total naphthalenes consists of 1-methylnaphthalene, 2-methylnaphthalene and naphthalene.

⁶ The cleanup level for gasoline-range petroleum hydrocarbons is 0.8 mg/l if benzene is present and 1.0 mg/l if benzene is not present.

⁷ MTCA Method B criteria level represented because MTCA Method A cleanup level has not been established.

⁸ MTCA Method A cleanup level for Trivalent Chromium.

TEF = Toxicity Equivalency Factor as defined in WAC 173-340-900 Table 708-2.

Total Toxic Equivalent Concentration (TTEC) is the sum of each individual cPAH concentration multiplied by its corresponding TEF in parenthesis.

ND = Not detected

MTCA = Model Toxics Control Act

NE = Cleanup level not established

U = Analyte was not detected at or greater than the listed reporting limit

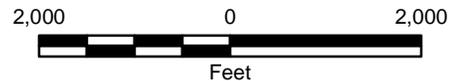
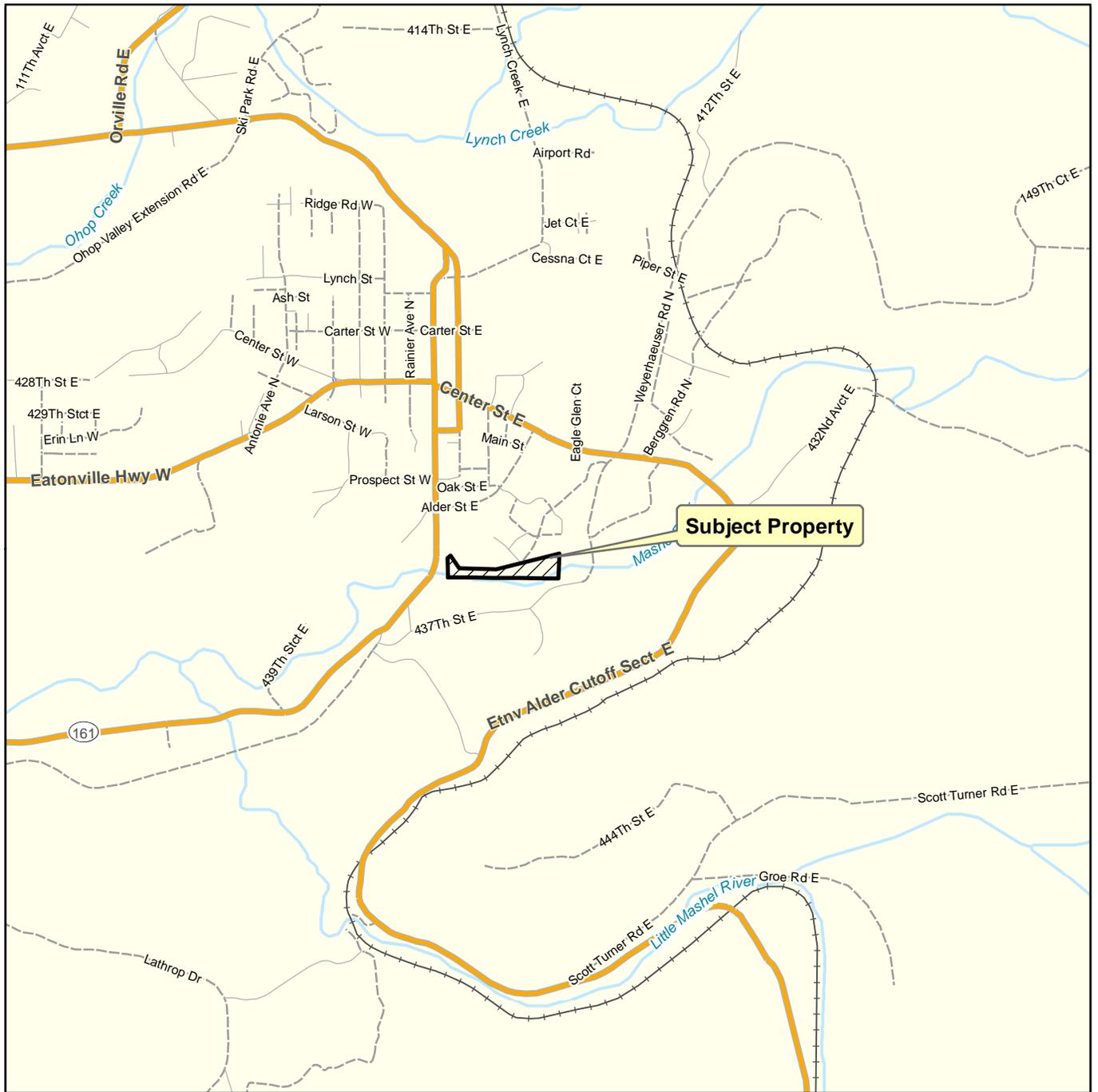
mg/l = milligram per liter

µg/l = microgram per liter

Map Revised: 06 March 2013 tdeome

Path: P:\20120894001\GIS\2089400101_fig1.mxd

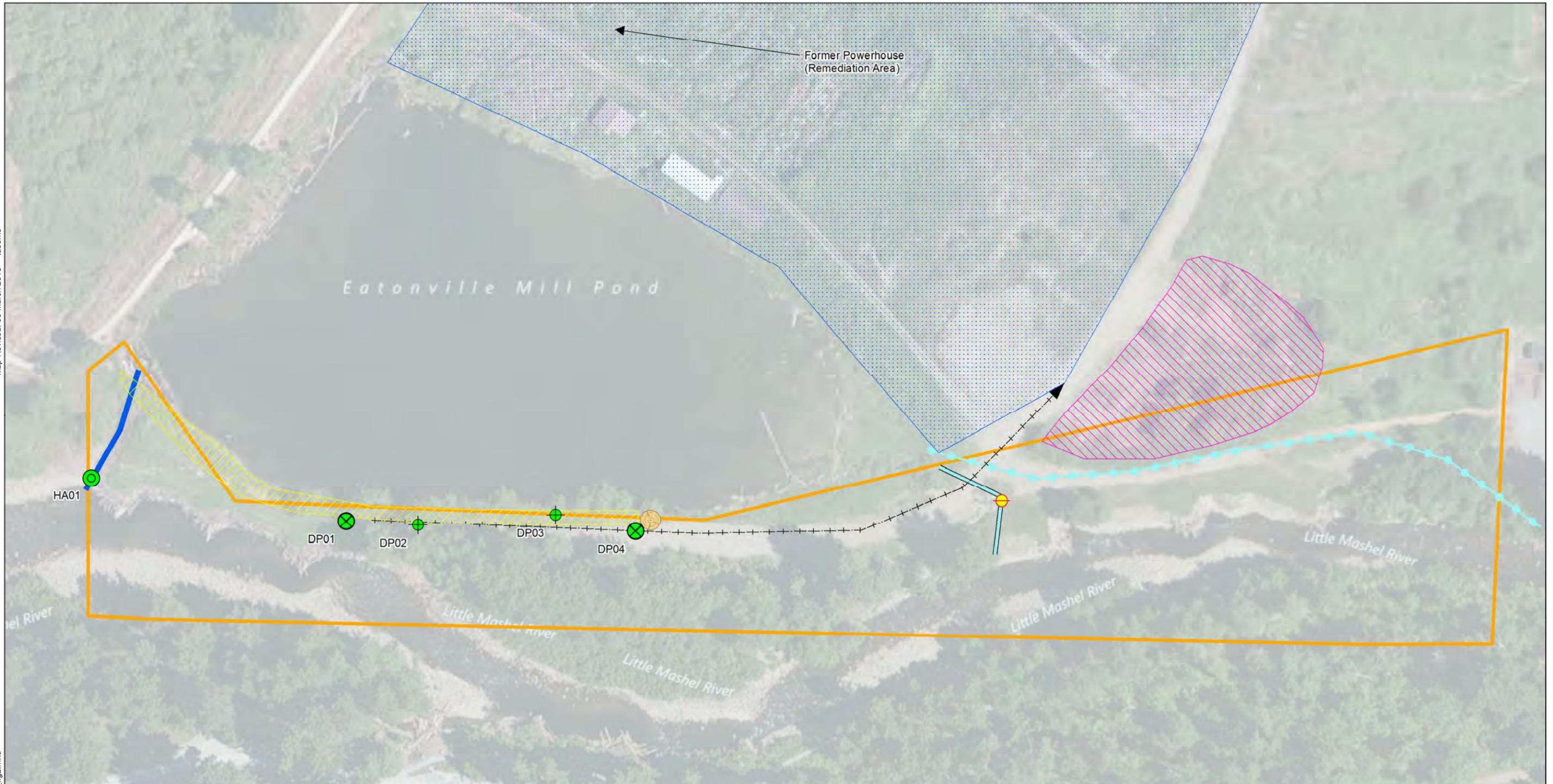
Office: TAC



Notes:

- UWT = University of Washington Tacoma
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 - 2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
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- Data Sources: ESRI Data & Maps
Projection: NAD 1983 UTM Zone 10N

Vicinity Map	
Hamilton Property Phase II ESA Eatonville, Washington	
	Figure 1



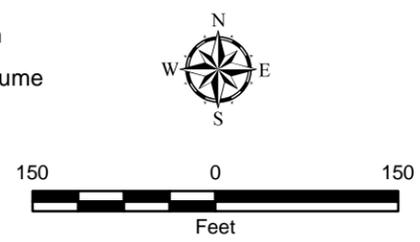
Data Source: Historical features were located from aerial photographs and maps referenced in the attached Phase I ESA. Current features were observed by a representative of GeoEngineers, Inc on November 27, 2012.

Projection: WGS 1984 Web Mercator Auxiliary Sphere

Notes:
 ESA = Environmental Site Assessment
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Legend

Approximate Subject Property Boundary	Pond Intake Ditch
Approximate Location of Hand Auger	Pond Discharge Ditch
Approximate Location of Boring and Identification Within Levee	Former Location of Flume
Approximate Location of Boring and Identification With Groundwater Sample	Former Rail Spur
Main Operations of Former Mill	Former Log Dump
Approximate Location of Former Bunkhouses	Manhole Lid
Approximate Location of Manmade Levee	



Site Plan

Hamilton Property Phase II ESA
Eatonville, Washington

GEOENGINEERS

Figure 2

APPENDIX A

FIELD EXPLORATION PROGRAM

General

Subsurface conditions were explored by completing five soil borings at the site to evaluate the potential presence of petroleum hydrocarbons, metals and PAHs in soil and groundwater on January 30, 2013.

A representative of GeoEngineers selected the locations for borings, observed and classified the soils encountered and prepared a detailed log of each boring. The soils were classified according to the system described in Figure A-1. The boring logs are presented in Figures A-2 through A-6.

Soil Sampling

Soil samples were collected continuously using direct-push drilling equipment or a manual hand auger. Direct-push boring soil samples were collected using a 4-foot-long core sampler with acetate liner. The sampler was driven into the soil using a pneumatic hammer. Upon retrieval, the sampler was opened and a representative of GeoEngineers examined the soil and performed field screening tests.

The manual hand auger soil samples were collected using an 8-inch-long decontaminated hand auger sampler. Soil was collected in the hand auger, removed with a decontaminated spoon onto a plastic bag. The representative of GeoEngineers examined the soil and performed field screening tests.

Selected soil samples were collected in glass jars (supplied by the analytical laboratory), labeled and stored in an ice-chest pending delivery to the laboratory. GeoEngineers' personnel used the recommended Method 5035A sampling protocols to collect soil samples for analysis of volatile organic compounds. The soil was extracted by the laboratory within 48-hours. All sampling and mixing equipment was decontaminated between samples using an Alconox soap wash and distilled water rinse.

Field Screening Methods

Our representative conducted field screening on each of the soil samples obtained from the borings. Field screening results can be used as a general guideline to delineate areas of potential petroleum-related contamination in soils. In addition, screening results are often used as a basis for selecting soil samples for chemical analysis. The screening methods employed included: 1) visual examination, 2) screening for organic vapors and 3) water sheen testing.

Visual screening consists of observing the soil for stains indicative of petroleum-related contamination. Visual screening is generally more effective when contamination is related to heavy petroleum hydrocarbons such as motor oil, or when hydrocarbon concentrations are high. Sheen screening and headspace screening are more sensitive screening methods that can be effective in detecting petroleum-based products in concentrations lower than regulatory cleanup guidelines.

Water sheen testing involves placing soil in pan of distilled water and observing the water surface for signs of sheen. The results of water sheen testing on soil samples from the borings are presented on the boring logs. Sheens are classified as follows:

No Sheen (NS)	No visible sheen on water surface.
Slight Sheen (SS)	Light colorless film, spotty to globular; spread is irregular, not rapid; areas of no sheen remain; film dissipates rapidly.
Moderate Sheen (MS)	Light to heavy film, may have some color or iridescence, globular to stringy, spread is irregular to flowing; few remaining areas of no sheen on water surface.
Heavy Sheen (HS)	Heavy colorful film with iridescence; stringy, spread is rapid; sheen flows off the sample; most of water surface may be covered with sheen.

Groundwater Sampling

Groundwater samples were collected using a peristaltic pump. Clean polyethylene tubing, connected to the pump, was placed down the drill rod to the screened interval below top of groundwater. Groundwater was pumped to the surface for sample collection.

Groundwater samples were collected in borings DPO1 and DPO4. Each groundwater sample was collected into clean laboratory-supplied containers and capped with a plastic lid. The sample was labeled at the time of collection using a unique identifying label and recorded on a Chain-of-Custody form. The sample was then promptly stored in a cooler with ice.

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS MORE THAN 50% RETAINED ON NO. 200 SIEVE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS <small>(LITTLE OR NO FINES)</small>		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES
		GRAVELS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES
		CLEAN SANDS <small>(LITTLE OR NO FINES)</small>		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	CLEAN SANDS <small>(LITTLE OR NO FINES)</small>		SW	WELL-GRADED SANDS, GRAVELLY SANDS
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		SP	POORLY-GRADED SANDS, GRAVELLY SAND
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		SM	SILTY SANDS, SAND - SILT MIXTURES
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS MORE THAN 50% PASSING NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50	SILTS AND CLAYS		ML	INORGANIC SILTS, ROCK FLOUR, CLAYEY SILTS WITH SLIGHT PLASTICITY
		SILTS AND CLAYS		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
		SILTS AND CLAYS		OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50	SILTS AND CLAYS		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS
		SILTS AND CLAYS		CH	INORGANIC CLAYS OF HIGH PLASTICITY
		SILTS AND CLAYS		OH	ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS			PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS	

NOTE: Multiple symbols are used to indicate borderline or dual soil classifications

Sampler Symbol Descriptions

	2.4-inch I.D. split barrel
	Standard Penetration Test (SPT)
	Shelby tube
	Piston
	Direct-Push
	Bulk or grab

Blowcount is recorded for driven samplers as the number of blows required to advance sampler 12 inches (or distance noted). See exploration log for hammer weight and drop.

A "P" indicates sampler pushed using the weight of the drill rig.

ADDITIONAL MATERIAL SYMBOLS

SYMBOLS		TYPICAL DESCRIPTIONS
GRAPH	LETTER	
	AC	Asphalt Concrete
	CC	Cement Concrete
	CR	Crushed Rock/Quarry Spalls
	TS	Topsoil/Forest Duff/Sod

Groundwater Contact



Measured groundwater level in exploration, well, or piezometer



Measured free product in well or piezometer

Graphic Log Contact



Distinct contact between soil strata or geologic units



Approximate location of soil strata change within a geologic soil unit

Material Description Contact



Distinct contact between soil strata or geologic units



Approximate location of soil strata change within a geologic soil unit

Laboratory / Field Tests

%F AL CA CP CS DS HA MC MD OC PM PI PP PPM SA TX UC VS	Percent fines Atterberg limits Chemical analysis Laboratory compaction test Consolidation test Direct shear Hydrometer analysis Moisture content Moisture content and dry density Organic content Permeability or hydraulic conductivity Plasticity index Pocket penetrometer Parts per million Sieve analysis Triaxial compression Unconfined compression Vane shear
---	--

Sheen Classification

NS SS MS HS NT	No Visible Sheen Slight Sheen Moderate Sheen Heavy Sheen Not Tested
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NOTE: The reader must refer to the discussion in the report text and the logs of explorations for a proper understanding of subsurface conditions. Descriptions on the logs apply only at the specific exploration locations and at the time the explorations were made; they are not warranted to be representative of subsurface conditions at other locations or times.

KEY TO EXPLORATION LOGS

Drilled	Start 1/30/2013	End 1/30/2013	Total Depth (ft)	16	Logged By Checked By	PDR JCD	Driller	ESN	Drilling Method	Direct Push		
Surface Elevation (ft) Vertical Datum			Undetermined		Hammer Data		Autohammer		Drilling Equipment		AM5 Power Probe	
Easting (X) Northing (Y)		465137.96 1221554.13			System Datum		Groundwater		Date Measured		Depth to Water (ft)	Elevation (ft)
Notes:								1/30/2013		11.0		

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS			
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level					Graphic Log	Group Classification	
0	40						SM			Dark brown silty fine sand with organics	NS	0	
							GP-GM			Gray fine to coarse gravel with fine to coarse sand and silt (moist)			
5	0									No recovery/rock in shoe	NS	0	
10	24									Gray fine to coarse gravel with silt and fine to coarse sand (moist)	NS	0	
										Wet at 11 feet			
15	30												
							SP-SM			Dark gray fine to coarse sand with fine to coarse gravel and silt (wet)	NS	0	

Note: See Figure A-1 for explanation of symbols.

Log of Boring DP01



Project: Hamilton Property Phase II ESA
 Project Location: Eatonville, Washington
 Project Number: 20894-001-01

Figure A-2
 Sheet 1 of 1

Drilled	Start 1/30/2013	End 1/30/2013	Total Depth (ft)	8	Logged By Checked By	PDR JCD	Driller	ESN ESN	Drilling Method	Direct Push		
Surface Elevation (ft) Vertical Datum			Undetermined		Hammer Data		Autohammer		Drilling Equipment		AM5 Power Probe	
Easting (X) Northing (Y)		465137.94 1221552.96			System Datum		Groundwater		Date Measured		Depth to Water (ft)	Elevation (ft)
Notes:								Not Encountered				

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level				
0	12						ML	NS	0	
							SP-SM			
5	36			DP02-4 CA				NS	0	
				DP02-8			SP-SM	NS	0	

Note: See Figure A-1 for explanation of symbols.

Log of Boring DP02



Project: Hamilton Property Phase II ESA
 Project Location: Eatonville, Washington
 Project Number: 20894-001-01

Figure A-3
 Sheet 1 of 1

Drilled	Start 1/30/2013	End 1/30/2013	Total Depth (ft)	12	Logged By Checked By	PDR JCD	Driller	ESN	Drilling Method	Direct Push	
Surface Elevation (ft) Vertical Datum			Undetermined		Hammer Data			Autohammer		Drilling Equipment	AM5 Power Probe
Easting (X) Northing (Y)		465138.02 1221550.83			System Datum		Groundwater		Depth to Water (ft)	Elevation (ft)	
Notes:								Date Measured			Not Encountered

Elevation (feet)	FIELD DATA						MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval Depth (feet)	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level				
0	20						SM			
5	32			DP03-6 CA			ML/CL		NS	0
10	36			DP03-10			SM		NS	0
							GM		NS	0

Note: See Figure A-1 for explanation of symbols.

Log of Boring DP03



Project: Hamilton Property Phase II ESA
 Project Location: Eatonville, Washington
 Project Number: 20894-001-01

Figure A-4
 Sheet 1 of 1

Drilled	Start 1/30/2013	End 1/30/2013	Total Depth (ft)	20	Logged By Checked By	PDR JCD	Driller	ESN	Drilling Method	Direct Push		
Surface Elevation (ft) Vertical Datum			Undetermined		Hammer Data		Autohammer		Drilling Equipment		AM5 Power Probe	
Easting (X) Northing (Y)		465137.86 1221549.77			System Datum		Groundwater		Date Measured		Depth to Water (ft)	Elevation (ft)
Notes:								1/30/2013		16.0		

Elevation (feet)	FIELD DATA					Water Level	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing							
0	40						GP	Gray fine to coarse gravel with fine to coarse sand and trace silt and organics (moist)	NS	0		
							ML	Brown silt with fine sand, occasional medium to coarse sand and fine gravel and some wood debris (moist)	NS	0		
5	36						SP-SM	Light brown fine to coarse sand with silt and occasional fine to coarse gravel (moist)				
							WD	Burnt wood debris				
							SM	Red/brown silty fine to medium sand (moist)				
									NS	0		
					DP04-8 CA		WD	Wood debris				
10							SM	Brown silty fine to coarse sand (moist)	NS	0		
							GP-GM	Light gray fine to coarse gravel with fine to coarse sand and silt (moist)				
							GP-GM	Brown fine to coarse gravel with silt and fine to coarse sand (moist)				
15									NS	0		
							SP	Gray fine to coarse sand with fine to coarse gravel, trace silt laminated with silty sand to sandy silt lenses				
20									NS	0		

Exploration advanced to 24 feet bgs to get water sample, no soil sample collected

Note: See Figure A-1 for explanation of symbols.

Log of Boring DP04



Project: Hamilton Property Phase II ESA
 Project Location: Eatonville, Washington
 Project Number: 20894-001-01

Figure A-5
 Sheet 1 of 1

Date Excavated: 1/30/2013

Logged By: PDR

Equipment: Hand Auger

Total Depth (ft) 1.0

Elevation (feet)	Depth (feet)	SAMPLE		Graphic Log	Group Classification	Encountered Water	MATERIAL DESCRIPTION	Shreen	Headspace Vapor PID	Notes
		Testing Sample	Sample Name Testing							
	1	X	HA01 CA		GM		Brown silty fine to coarse gravel with fine to coarse sand (moist)	NS	0	
<p>Hand auger completed at 1 foot No groundwater seepage observed No caving observed</p>										

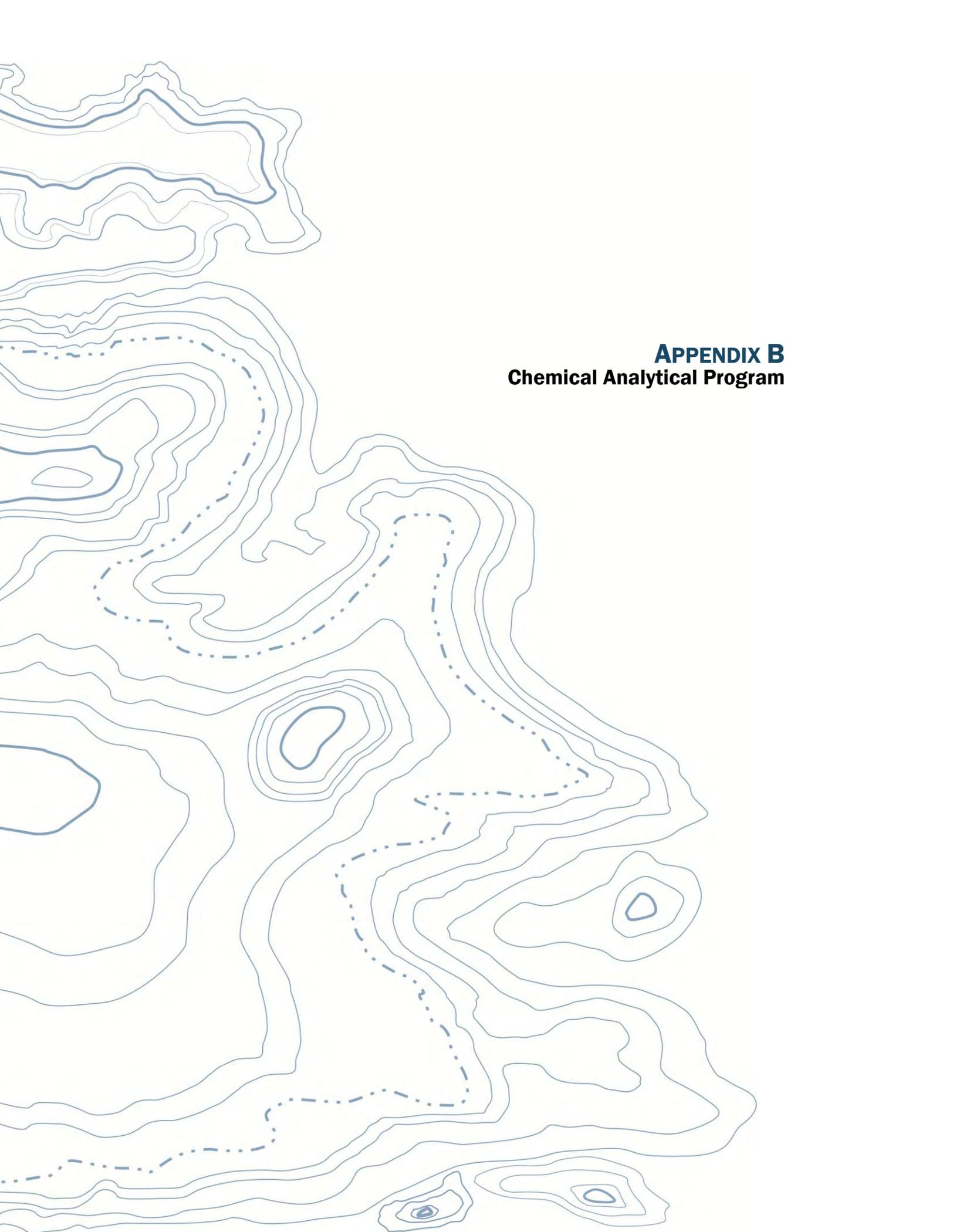
Note: See Figure A-1 for explanation of symbols.

Log of Hand Auger HA01



Project: Hamilton Property Phase II ESA
 Project Location: Eatonville, Washington
 Project Number: 20894-001-01

Figure A-6
 Sheet 1 of 1



APPENDIX B
Chemical Analytical Program



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

February 15, 2013

Tricia DeOme
GeoEngineers, Inc.
1101 Fawcett Avenue South, Suite 200
Tacoma, WA 98402

Re: Analytical Data for Project 20894-001-01
Laboratory Reference No. 1301-226

Dear Tricia:

Enclosed are the analytical results and associated quality control data for samples submitted on January 31, 2013.

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "DB", with a long horizontal flourish extending to the right.

David Baumeister
Project Manager

Enclosures

Date of Report: February 15, 2013
Samples Submitted: January 31, 2013
Laboratory Reference: 1301-226
Project: 20894-001-01

Case Narrative

Samples were collected on January 30, 2013 and received by the laboratory on January 31, 2013. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

PAHs EPA 8270D/SIM (water) Analysis

Sample DP04-130130 had one surrogate recovery out of control limits. This is within allowance of our standard operating procedure as long as the recovery is above 10%.

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

Date of Report: February 15, 2013
Samples Submitted: January 31, 2013
Laboratory Reference: 1301-226
Project: 20894-001-01

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
DP01-130130	01-226-01	Water	1-30-13	1-31-13	
DP04-130130	01-226-02	Water	1-30-13	1-31-13	
DP01-10-130130	01-226-03	Soil	1-30-13	1-31-13	
HA01-130130	01-226-05	Soil	1-30-13	1-31-13	
DP02-4-130130	01-226-06	Soil	1-30-13	1-31-13	
DP03-6-130130	01-226-08	Soil	1-30-13	1-31-13	
DP04-8-130130	01-226-10	Soil	1-30-13	1-31-13	
DP04-10-130130	01-226-11	Soil	1-30-13	1-31-13	
DP04-15-130130	01-226-12	Soil	1-30-13	1-31-13	

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

NWTPH-HCID
 (with acid/silica gel clean-up)

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DP01-130130					
Laboratory ID:	01-226-01					
Gasoline Range Organics	ND	0.11	NWTPH-HCID	2-4-13	2-4-13	
Diesel Range Organics	ND	0.28	NWTPH-HCID	2-4-13	2-4-13	
Lube Oil Range Organics	ND	0.45	NWTPH-HCID	2-4-13	2-4-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	84	50-150				

Client ID:	DP04-130130					
Laboratory ID:	01-226-02					
Gasoline Range Organics	ND	0.11	NWTPH-HCID	2-4-13	2-4-13	
Diesel Range Organics	ND	0.28	NWTPH-HCID	2-4-13	2-4-13	
Lube Oil Range Organics	ND	0.46	NWTPH-HCID	2-4-13	2-4-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	87	50-150				

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

NWTPH-HCID
 (with acid/silica gel clean-up)

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DP01-10-130130					
Laboratory ID:	01-226-03					
Gasoline Range Organics	ND	22	NWTPH-HCID	2-5-13	2-6-13	
Diesel Range Organics	ND	55	NWTPH-HCID	2-5-13	2-6-13	
Lube Oil Range Organics	ND	110	NWTPH-HCID	2-5-13	2-6-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	112	50-150				

Client ID:	HA01-130130					
Laboratory ID:	01-226-05					
Gasoline Range Organics	ND	23	NWTPH-HCID	2-5-13	2-5-13	
Diesel Range Organics	ND	56	NWTPH-HCID	2-5-13	2-5-13	
Lube Oil Range Organics	ND	110	NWTPH-HCID	2-5-13	2-5-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	113	50-150				

Client ID:	DP02-4-130130					
Laboratory ID:	01-226-06					
Gasoline Range Organics	ND	25	NWTPH-HCID	2-5-13	2-5-13	
Diesel Range Organics	ND	63	NWTPH-HCID	2-5-13	2-5-13	
Lube Oil Range Organics	ND	130	NWTPH-HCID	2-5-13	2-5-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	115	50-150				

Client ID:	DP03-6-130130					
Laboratory ID:	01-226-08					
Gasoline Range Organics	ND	27	NWTPH-HCID	2-5-13	2-5-13	
Diesel Range Organics	ND	66	NWTPH-HCID	2-5-13	2-5-13	
Lube Oil Range Organics	ND	130	NWTPH-HCID	2-5-13	2-5-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	109	50-150				

Client ID:	DP04-8-130130					
Laboratory ID:	01-226-10					
Gasoline Range Organics	ND	25	NWTPH-HCID	2-5-13	2-5-13	
Diesel Range Organics	ND	63	NWTPH-HCID	2-5-13	2-5-13	
Lube Oil Range Organics	ND	130	NWTPH-HCID	2-5-13	2-5-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	114	50-150				

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

NWTPH-HCID
 (with acid/silica gel clean-up)

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DP04-10-130130					
Laboratory ID:	01-226-11					
Gasoline Range Organics	ND	26	NWTPH-HCID	2-5-13	2-5-13	
Diesel Range Organics	ND	66	NWTPH-HCID	2-5-13	2-5-13	
Lube Oil Range Organics	ND	130	NWTPH-HCID	2-5-13	2-5-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>108</i>	<i>50-150</i>				

Client ID:	DP04-15-130130					
Laboratory ID:	01-226-12					
Gasoline Range Organics	ND	23	NWTPH-HCID	2-5-13	2-6-13	
Diesel Range Organics	ND	57	NWTPH-HCID	2-5-13	2-6-13	
Lube Oil Range Organics	ND	120	NWTPH-HCID	2-5-13	2-6-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>109</i>	<i>50-150</i>				

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

PAHs by EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DP01-130130					
Laboratory ID:	01-226-01					
Naphthalene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
2-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
1-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Acenaphthylene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Acenaphthene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Fluorene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Phenanthrene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Anthracene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Fluoranthene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Pyrene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Benzo[a]anthracene	0.014	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Chrysene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Benzo[b]fluoranthene	0.011	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Indeno(1,2,3-c,d)pyrene	0.012	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Dibenz[a,h]anthracene	0.010	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Benzo[g,h,i]perylene	0.013	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>85</i>	<i>40 - 107</i>				
<i>Pyrene-d10</i>	<i>79</i>	<i>41 - 106</i>				
<i>Terphenyl-d14</i>	<i>120</i>	<i>44 - 124</i>				

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

PAHs by EPA 8270D/SIM

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DP04-130130					
Laboratory ID:	01-226-02					
Naphthalene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
2-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
1-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Acenaphthylene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Acenaphthene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Fluorene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Phenanthrene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Anthracene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Fluoranthene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Pyrene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Chrysene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorobiphenyl	92	40 - 107				
Pyrene-d10	89	41 - 106				
Terphenyl-d14	134	44 - 124				

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Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

PAHs by EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DP01-10-130130					
Laboratory ID:	01-226-03					
Naphthalene	ND	0.0074	EPA 8270D/SIM	2-7-13	2-7-13	
2-Methylnaphthalene	ND	0.0074	EPA 8270D/SIM	2-7-13	2-7-13	
1-Methylnaphthalene	ND	0.0074	EPA 8270D/SIM	2-7-13	2-7-13	
Acenaphthylene	ND	0.0074	EPA 8270D/SIM	2-7-13	2-7-13	
Acenaphthene	ND	0.0074	EPA 8270D/SIM	2-7-13	2-7-13	
Fluorene	ND	0.0074	EPA 8270D/SIM	2-7-13	2-7-13	
Phenanthrene	0.012	0.0074	EPA 8270D/SIM	2-7-13	2-7-13	
Anthracene	ND	0.0074	EPA 8270D/SIM	2-7-13	2-7-13	
Fluoranthene	ND	0.0074	EPA 8270D/SIM	2-7-13	2-7-13	
Pyrene	ND	0.0074	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[a]anthracene	ND	0.0074	EPA 8270D/SIM	2-7-13	2-7-13	
Chrysene	ND	0.0074	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[b]fluoranthene	ND	0.0074	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo(j,k)fluoranthene	ND	0.0074	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[a]pyrene	ND	0.0074	EPA 8270D/SIM	2-7-13	2-7-13	
Indeno(1,2,3-c,d)pyrene	ND	0.0074	EPA 8270D/SIM	2-7-13	2-7-13	
Dibenz[a,h]anthracene	ND	0.0074	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[g,h,i]perylene	ND	0.0074	EPA 8270D/SIM	2-7-13	2-7-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorobiphenyl	68	43 - 116				
Pyrene-d10	82	33 - 124				
Terphenyl-d14	88	38 - 125				

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

PAHs by EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	HA01-130130					
Laboratory ID:	01-226-05					
Naphthalene	ND	0.0075	EPA 8270D/SIM	2-7-13	2-7-13	
2-Methylnaphthalene	ND	0.0075	EPA 8270D/SIM	2-7-13	2-7-13	
1-Methylnaphthalene	ND	0.0075	EPA 8270D/SIM	2-7-13	2-7-13	
Acenaphthylene	ND	0.0075	EPA 8270D/SIM	2-7-13	2-7-13	
Acenaphthene	ND	0.0075	EPA 8270D/SIM	2-7-13	2-7-13	
Fluorene	ND	0.0075	EPA 8270D/SIM	2-7-13	2-7-13	
Phenanthrene	ND	0.0075	EPA 8270D/SIM	2-7-13	2-7-13	
Anthracene	ND	0.0075	EPA 8270D/SIM	2-7-13	2-7-13	
Fluoranthene	ND	0.0075	EPA 8270D/SIM	2-7-13	2-7-13	
Pyrene	ND	0.0075	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[a]anthracene	ND	0.0075	EPA 8270D/SIM	2-7-13	2-7-13	
Chrysene	ND	0.0075	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[b]fluoranthene	ND	0.0075	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo(j,k)fluoranthene	ND	0.0075	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[a]pyrene	ND	0.0075	EPA 8270D/SIM	2-7-13	2-7-13	
Indeno(1,2,3-c,d)pyrene	ND	0.0075	EPA 8270D/SIM	2-7-13	2-7-13	
Dibenz[a,h]anthracene	ND	0.0075	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[g,h,i]perylene	ND	0.0075	EPA 8270D/SIM	2-7-13	2-7-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorobiphenyl	65	43 - 116				
Pyrene-d10	81	33 - 124				
Terphenyl-d14	88	38 - 125				

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

PAHs by EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DP02-4-130130					
Laboratory ID:	01-226-06					
Naphthalene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
2-Methylnaphthalene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
1-Methylnaphthalene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Acenaphthylene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Acenaphthene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Fluorene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Phenanthrene	0.024	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Anthracene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Fluoranthene	0.019	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Pyrene	0.017	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[a]anthracene	0.0094	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Chrysene	0.0092	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[b]fluoranthene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo(j,k)fluoranthene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[a]pyrene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Indeno(1,2,3-c,d)pyrene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Dibenz[a,h]anthracene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[g,h,i]perylene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorobiphenyl	68	43 - 116				
Pyrene-d10	80	33 - 124				
Terphenyl-d14	87	38 - 125				

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

PAHs by EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DP03-6-130130					
Laboratory ID:	01-226-08					
Naphthalene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
2-Methylnaphthalene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
1-Methylnaphthalene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Acenaphthylene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Acenaphthene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Fluorene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Phenanthrene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Anthracene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Fluoranthene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Pyrene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[a]anthracene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Chrysene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[b]fluoranthene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo(j,k)fluoranthene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[a]pyrene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Indeno(1,2,3-c,d)pyrene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Dibenz[a,h]anthracene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[g,h,i]perylene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorobiphenyl	68	43 - 116				
Pyrene-d10	79	33 - 124				
Terphenyl-d14	90	38 - 125				

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

PAHs by EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DP04-8-130130					
Laboratory ID:	01-226-10					
Naphthalene	0.020	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
2-Methylnaphthalene	0.034	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
1-Methylnaphthalene	0.028	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Acenaphthylene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Acenaphthene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Fluorene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Phenanthrene	0.043	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Anthracene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Fluoranthene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Pyrene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[a]anthracene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Chrysene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[b]fluoranthene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo(j,k)fluoranthene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[a]pyrene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Indeno(1,2,3-c,d)pyrene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Dibenz[a,h]anthracene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[g,h,i]perylene	ND	0.0084	EPA 8270D/SIM	2-7-13	2-7-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>54</i>	<i>43 - 116</i>				
<i>Pyrene-d10</i>	<i>63</i>	<i>33 - 124</i>				
<i>Terphenyl-d14</i>	<i>66</i>	<i>38 - 125</i>				

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

PAHs by EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DP04-10-130130					
Laboratory ID:	01-226-11					
Naphthalene	0.028	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
2-Methylnaphthalene	0.015	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
1-Methylnaphthalene	0.011	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Acenaphthylene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Acenaphthene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Fluorene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Phenanthrene	0.033	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Anthracene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Fluoranthene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Pyrene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[a]anthracene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Chrysene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[b]fluoranthene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo(j,k)fluoranthene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[a]pyrene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Indeno(1,2,3-c,d)pyrene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Dibenz[a,h]anthracene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[g,h,i]perylene	ND	0.0088	EPA 8270D/SIM	2-7-13	2-7-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>67</i>	<i>43 - 116</i>				
<i>Pyrene-d10</i>	<i>72</i>	<i>33 - 124</i>				
<i>Terphenyl-d14</i>	<i>91</i>	<i>38 - 125</i>				

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

PAHs by EPA 8270D/SIM

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	DP04-15-130130					
Laboratory ID:	01-226-12					
Naphthalene	0.0090	0.0076	EPA 8270D/SIM	2-7-13	2-7-13	
2-Methylnaphthalene	ND	0.0076	EPA 8270D/SIM	2-7-13	2-7-13	
1-Methylnaphthalene	ND	0.0076	EPA 8270D/SIM	2-7-13	2-7-13	
Acenaphthylene	ND	0.0076	EPA 8270D/SIM	2-7-13	2-7-13	
Acenaphthene	ND	0.0076	EPA 8270D/SIM	2-7-13	2-7-13	
Fluorene	ND	0.0076	EPA 8270D/SIM	2-7-13	2-7-13	
Phenanthrene	0.021	0.0076	EPA 8270D/SIM	2-7-13	2-7-13	
Anthracene	ND	0.0076	EPA 8270D/SIM	2-7-13	2-7-13	
Fluoranthene	ND	0.0076	EPA 8270D/SIM	2-7-13	2-7-13	
Pyrene	ND	0.0076	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[a]anthracene	ND	0.0076	EPA 8270D/SIM	2-7-13	2-7-13	
Chrysene	ND	0.0076	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[b]fluoranthene	ND	0.0076	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo(j,k)fluoranthene	ND	0.0076	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[a]pyrene	ND	0.0076	EPA 8270D/SIM	2-7-13	2-7-13	
Indeno(1,2,3-c,d)pyrene	ND	0.0076	EPA 8270D/SIM	2-7-13	2-7-13	
Dibenz[a,h]anthracene	ND	0.0076	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[g,h,i]perylene	ND	0.0076	EPA 8270D/SIM	2-7-13	2-7-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>71</i>	<i>43 - 116</i>				
<i>Pyrene-d10</i>	<i>76</i>	<i>33 - 124</i>				
<i>Terphenyl-d14</i>	<i>84</i>	<i>38 - 125</i>				

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-226-01					
Client ID:	DP01-130130					
Arsenic	ND	3.0	200.8	1-31-13	2-7-13	
Barium	ND	25	200.8	1-31-13	2-7-13	
Cadmium	ND	4.0	200.8	1-31-13	2-7-13	
Chromium	ND	10	200.8	1-31-13	2-7-13	
Lead	ND	1.0	200.8	1-31-13	2-7-13	
Mercury	ND	0.50	7470A	1-31-13	2-7-13	
Selenium	ND	5.0	200.8	1-31-13	2-7-13	
Silver	ND	10	200.8	1-31-13	2-7-13	

Lab ID:	01-226-02					
Client ID:	DP04-130130					
Arsenic	3.3	3.0	200.8	1-31-13	2-7-13	
Barium	27	25	200.8	1-31-13	2-7-13	
Cadmium	ND	4.0	200.8	1-31-13	2-7-13	
Chromium	ND	10	200.8	1-31-13	2-7-13	
Lead	ND	1.0	200.8	1-31-13	2-7-13	
Mercury	ND	0.50	7470A	1-31-13	2-7-13	
Selenium	ND	5.0	200.8	1-31-13	2-7-13	
Silver	ND	10	200.8	1-31-13	2-7-13	

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-226-03					
Client ID:	DP01-10-130130					
Arsenic	ND	11	6010C	2-1-13	2-1-13	
Barium	55	2.8	6010C	2-1-13	2-1-13	
Cadmium	ND	0.55	6010C	2-1-13	2-1-13	
Chromium	14	0.55	6010C	2-1-13	2-1-13	
Lead	ND	5.5	6010C	2-1-13	2-1-13	
Mercury	ND	0.28	7471B	2-1-13	2-1-13	
Selenium	ND	11	6010C	2-1-13	2-1-13	
Silver	ND	1.1	6010C	2-1-13	2-1-13	

Lab ID:	01-226-05					
Client ID:	HA01-130130					
Arsenic	ND	11	6010C	2-1-13	2-1-13	
Barium	54	2.8	6010C	2-1-13	2-1-13	
Cadmium	ND	0.56	6010C	2-1-13	2-1-13	
Chromium	17	0.56	6010C	2-1-13	2-1-13	
Lead	ND	5.6	6010C	2-1-13	2-1-13	
Mercury	ND	0.28	7471B	2-1-13	2-1-13	
Selenium	ND	11	6010C	2-1-13	2-1-13	
Silver	ND	1.1	6010C	2-1-13	2-1-13	

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-226-06					
Client ID:	DP02-4-130130					
Arsenic	14	13	6010C	2-1-13	2-1-13	
Barium	71	3.2	6010C	2-1-13	2-1-13	
Cadmium	ND	0.63	6010C	2-1-13	2-1-13	
Chromium	26	0.63	6010C	2-1-13	2-1-13	
Lead	ND	6.3	6010C	2-1-13	2-1-13	
Mercury	ND	0.32	7471B	2-1-13	2-1-13	
Selenium	ND	13	6010C	2-1-13	2-1-13	
Silver	ND	1.3	6010C	2-1-13	2-1-13	

Lab ID:	01-226-08					
Client ID:	DP03-6-130130					
Arsenic	ND	13	6010C	2-1-13	2-1-13	
Barium	33	3.3	6010C	2-1-13	2-1-13	
Cadmium	ND	0.66	6010C	2-1-13	2-1-13	
Chromium	19	0.66	6010C	2-1-13	2-1-13	
Lead	ND	6.6	6010C	2-1-13	2-1-13	
Mercury	ND	0.33	7471B	2-1-13	2-1-13	
Selenium	ND	13	6010C	2-1-13	2-1-13	
Silver	ND	1.3	6010C	2-1-13	2-1-13	

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-226-10					
Client ID:	DP04-8-130130					
Arsenic	ND	13	6010C	2-1-13	2-1-13	
Barium	120	3.1	6010C	2-1-13	2-1-13	
Cadmium	ND	0.63	6010C	2-1-13	2-1-13	
Chromium	33	0.63	6010C	2-1-13	2-1-13	
Lead	ND	6.3	6010C	2-1-13	2-1-13	
Mercury	ND	0.31	7471B	2-1-13	2-1-13	
Selenium	ND	13	6010C	2-1-13	2-1-13	
Silver	ND	1.3	6010C	2-1-13	2-1-13	

Lab ID:	01-226-11					
Client ID:	DP04-10-130130					
Arsenic	ND	13	6010C	2-1-13	2-1-13	
Barium	100	3.3	6010C	2-1-13	2-1-13	
Cadmium	ND	0.66	6010C	2-1-13	2-1-13	
Chromium	25	0.66	6010C	2-1-13	2-1-13	
Lead	7.3	6.6	6010C	2-1-13	2-1-13	
Mercury	ND	0.33	7471B	2-1-13	2-1-13	
Selenium	ND	13	6010C	2-1-13	2-1-13	
Silver	ND	1.3	6010C	2-1-13	2-1-13	

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

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

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	01-226-12					
Client ID:	DP04-15-130130					
Arsenic	ND	11	6010C	2-1-13	2-1-13	
Barium	100	2.9	6010C	2-1-13	2-1-13	
Cadmium	ND	0.57	6010C	2-1-13	2-1-13	
Chromium	26	0.57	6010C	2-1-13	2-1-13	
Lead	ND	5.7	6010C	2-1-13	2-1-13	
Mercury	ND	0.29	7471B	2-1-13	2-1-13	
Selenium	ND	11	6010C	2-1-13	2-1-13	
Silver	ND	1.1	6010C	2-1-13	2-1-13	

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

**SOLUBLE HEXAVALENT CHROMIUM
 WATER EXTRACTION
 EPA 7196A**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date	Date	Flags
				Prepared	Analyzed	
Lab ID:	01-226-10					
Client ID:	DP04-8-130130					
Hexavalent Chromium	ND	1.3	7196A mod	2-14-13	2-14-13	

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

**NWTPH-HCID
 QUALITY CONTROL
 (with acid/silica gel clean-up)**

Matrix: Water
 Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0204W1					
Gasoline Range Organics	ND	0.10	NWTPH-HCID	2-4-13	2-4-13	
Diesel Range Organics	ND	0.25	NWTPH-HCID	2-4-13	2-4-13	
Lube Oil Range Organics	ND	0.40	NWTPH-HCID	2-4-13	2-4-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	<i>94</i>	<i>50-150</i>				

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
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 Project: 20894-001-01

**NWTPH-HCID
 QUALITY CONTROL
 (with acid/silica gel clean-up)**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0205S2					
Gasoline Range Organics	ND	20	NWTPH-HCID	2-5-13	2-6-13	
Diesel Range Organics	ND	50	NWTPH-HCID	2-5-13	2-6-13	
Lube Oil Range Organics	ND	100	NWTPH-HCID	2-5-13	2-6-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>o-Terphenyl</i>	116	50-150				

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

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

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0204W1					
Naphthalene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
2-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
1-Methylnaphthalene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Acenaphthylene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Acenaphthene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Fluorene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Phenanthrene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Anthracene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Fluoranthene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Pyrene	ND	0.10	EPA 8270D/SIM	2-4-13	2-5-13	
Benzo[a]anthracene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Chrysene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Benzo[b]fluoranthene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Benzo(j,k)fluoranthene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Benzo[a]pyrene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Indeno(1,2,3-c,d)pyrene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Dibenz[a,h]anthracene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
Benzo[g,h,i]perylene	ND	0.010	EPA 8270D/SIM	2-4-13	2-5-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>86</i>	<i>40 - 107</i>				
<i>Pyrene-d10</i>	<i>93</i>	<i>41 - 106</i>				
<i>Terphenyl-d14</i>	<i>113</i>	<i>44 - 124</i>				

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

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

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery	RPD	RPD	Flags
					SB	SBD	Limits	Limit		
SPIKE BLANKS										
Laboratory ID:	SB0204W1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	0.406	0.401	0.500	0.500	81	80	31 - 110	1	46	
Acenaphthylene	0.437	0.407	0.500	0.500	87	81	40 - 118	7	43	
Acenaphthene	0.436	0.413	0.500	0.500	87	83	38 - 112	5	40	
Fluorene	0.468	0.444	0.500	0.500	94	89	45 - 114	5	41	
Phenanthrene	0.489	0.452	0.500	0.500	98	90	47 - 112	8	36	
Anthracene	0.484	0.449	0.500	0.500	97	90	46 - 122	8	37	
Fluoranthene	0.493	0.455	0.500	0.500	99	91	51 - 127	8	35	
Pyrene	0.486	0.446	0.500	0.500	97	89	50 - 125	9	37	
Benzo[a]anthracene	0.463	0.436	0.500	0.500	93	87	46 - 123	6	34	
Chrysene	0.480	0.438	0.500	0.500	96	88	49 - 120	9	34	
Benzo[b]fluoranthene	0.492	0.472	0.500	0.500	98	94	46 - 126	4	37	
Benzo(j,k)fluoranthene	0.490	0.451	0.500	0.500	98	90	43 - 125	8	39	
Benzo[a]pyrene	0.495	0.459	0.500	0.500	99	92	44 - 129	8	37	
Indeno(1,2,3-c,d)pyrene	0.513	0.457	0.500	0.500	103	91	40 - 124	12	42	
Dibenz[a,h]anthracene	0.517	0.459	0.500	0.500	103	92	35 - 122	12	44	
Benzo[g,h,i]perylene	0.491	0.455	0.500	0.500	98	91	37 - 122	8	45	
<i>Surrogate:</i>										
2-Fluorobiphenyl					80	76	40 - 107			
Pyrene-d10					91	85	41 - 106			
Terphenyl-d14					111	106	44 - 124			

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

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

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0207S1					
Naphthalene	ND	0.0067	EPA 8270D/SIM	2-7-13	2-7-13	
2-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	2-7-13	2-7-13	
1-Methylnaphthalene	ND	0.0067	EPA 8270D/SIM	2-7-13	2-7-13	
Acenaphthylene	ND	0.0067	EPA 8270D/SIM	2-7-13	2-7-13	
Acenaphthene	ND	0.0067	EPA 8270D/SIM	2-7-13	2-7-13	
Fluorene	ND	0.0067	EPA 8270D/SIM	2-7-13	2-7-13	
Phenanthrene	ND	0.0067	EPA 8270D/SIM	2-7-13	2-7-13	
Anthracene	ND	0.0067	EPA 8270D/SIM	2-7-13	2-7-13	
Fluoranthene	ND	0.0067	EPA 8270D/SIM	2-7-13	2-7-13	
Pyrene	ND	0.0067	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[a]anthracene	ND	0.0067	EPA 8270D/SIM	2-7-13	2-7-13	
Chrysene	ND	0.0067	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[a]pyrene	ND	0.0067	EPA 8270D/SIM	2-7-13	2-7-13	
Indeno(1,2,3-c,d)pyrene	ND	0.0067	EPA 8270D/SIM	2-7-13	2-7-13	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270D/SIM	2-7-13	2-7-13	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270D/SIM	2-7-13	2-7-13	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>2-Fluorobiphenyl</i>	<i>68</i>	<i>43 - 116</i>				
<i>Pyrene-d10</i>	<i>81</i>	<i>33 - 124</i>				
<i>Terphenyl-d14</i>	<i>94</i>	<i>38 - 125</i>				

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

**PAHs by EPA 8270D/SIM
 MS/MSD QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source	Percent		Recovery	RPD	RPD	Flags
					Result	Recovery	Limits	RPD	Limit		
MATRIX SPIKES											
Laboratory ID:	01-226-03										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	0.0612	0.0663	0.0833	0.0833	ND	73	80	47 - 99	8	30	
Acenaphthylene	0.0582	0.0585	0.0833	0.0833	ND	70	70	41 - 118	1	26	
Acenaphthene	0.0593	0.0618	0.0833	0.0833	ND	71	74	43 - 112	4	28	
Fluorene	0.0746	0.0776	0.0833	0.0833	ND	90	93	41 - 119	4	25	
Phenanthrene	0.0801	0.0859	0.0833	0.0833	0.0107	83	90	40 - 115	7	24	
Anthracene	0.0783	0.0781	0.0833	0.0833	ND	94	94	41 - 117	0	25	
Fluoranthene	0.0687	0.0693	0.0833	0.0833	ND	82	83	36 - 128	1	26	
Pyrene	0.0703	0.0717	0.0833	0.0833	ND	84	86	36 - 123	2	24	
Benzo[a]anthracene	0.0691	0.0693	0.0833	0.0833	ND	83	83	33 - 126	0	26	
Chrysene	0.0784	0.0797	0.0833	0.0833	ND	94	96	35 - 123	2	25	
Benzo[b]fluoranthene	0.0702	0.0744	0.0833	0.0833	ND	84	89	30 - 125	6	28	
Benzo(j,k)fluoranthene	0.0726	0.0706	0.0833	0.0833	ND	87	85	31 - 122	3	30	
Benzo[a]pyrene	0.0743	0.0754	0.0833	0.0833	ND	89	91	29 - 125	1	28	
Indeno(1,2,3-c,d)pyrene	0.0787	0.0763	0.0833	0.0833	ND	94	92	28 - 125	3	27	
Dibenz[a,h]anthracene	0.0786	0.0796	0.0833	0.0833	ND	94	96	32 - 124	1	27	
Benzo[g,h,i]perylene	0.0795	0.0815	0.0833	0.0833	ND	95	98	30 - 120	2	26	
<i>Surrogate:</i>											
2-Fluorobiphenyl						64	65	43 - 116			
Pyrene-d10						77	77	33 - 124			
Terphenyl-d14						84	83	38 - 125			

Date of Report: February 15, 2013
Samples Submitted: January 31, 2013
Laboratory Reference: 1301-226
Project: 20894-001-01

**DISSOLVED METALS
EPA 200.8/7470A
METHOD BLANK QUALITY CONTROL**

Date Filtered: 1-31-13
Date Analyzed: 2-7-13

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0131F1

Analyte	Method	Result	PQL
Arsenic	200.8	ND	3.0
Barium	200.8	ND	25
Cadmium	200.8	ND	4.0
Chromium	200.8	ND	10
Lead	200.8	ND	1.0
Mercury	7470A	ND	0.50
Selenium	200.8	ND	5.0
Silver	200.8	ND	10

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

**DISSOLVED METALS
 EPA 200.8/7470A
 DUPLICATE QUALITY CONTROL**

Date Filtered: 1-31-13

Date Analyzed: 2-7-13

Matrix: Water

Units: ug/L (ppb)

Lab ID: 01-226-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	ND	ND	NA	3.0	
Barium	ND	ND	NA	25	
Cadmium	ND	ND	NA	4.0	
Chromium	ND	ND	NA	10	
Lead	ND	ND	NA	1.0	
Mercury	ND	ND	NA	0.50	
Selenium	ND	ND	NA	5.0	
Silver	ND	ND	NA	10	

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

**DISSOLVED METALS
 EPA 200.8/7470A
 MS/MSD QUALITY CONTROL**

Date Filtered: 1-31-13

Date Analyzed: 2-7-13

Matrix: Water

Units: ug/L (ppb)

Lab ID: 01-226-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	200	200	100	191	96	4	
Barium	200	196	98	197	99	1	
Cadmium	200	195	97	194	97	0	
Chromium	200	192	96	193	96	1	
Lead	200	196	98	193	97	1	
Mercury	12.5	13.5	108	13.7	109	2	
Selenium	200	197	98	193	96	2	
Silver	200	190	95	191	96	1	

Date of Report: February 15, 2013
Samples Submitted: January 31, 2013
Laboratory Reference: 1301-226
Project: 20894-001-01

**TOTAL METALS
EPA 6010C
METHOD BLANK QUALITY CONTROL**

Date Extracted: 2-1-13
Date Analyzed: 2-1-13

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0201SM1

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: February 15, 2013
Samples Submitted: January 31, 2013
Laboratory Reference: 1301-226
Project: 20894-001-01

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

Date Extracted: 2-1-13
Date Analyzed: 2-1-13

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0201S1

Analyte	Method	Result	PQL
Mercury	7471B	ND	0.25

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

**TOTAL METALS
 EPA 6010C
 DUPLICATE QUALITY CONTROL**

Date Extracted: 2-1-13

Date Analyzed: 2-1-13

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 01-216-04

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Arsenic	ND	ND	NA	10	
Barium	60.9	54.9	10	2.5	
Cadmium	ND	ND	NA	0.50	
Chromium	45.8	43.9	4	0.50	
Lead	ND	ND	NA	5.0	
Selenium	ND	ND	NA	10	
Silver	ND	ND	NA	1.0	

Date of Report: February 15, 2013
Samples Submitted: January 31, 2013
Laboratory Reference: 1301-226
Project: 20894-001-01

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

Date Extracted: 2-1-13

Date Analyzed: 2-1-13

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 01-212-04

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

Date of Report: February 15, 2013
 Samples Submitted: January 31, 2013
 Laboratory Reference: 1301-226
 Project: 20894-001-01

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

Date Extracted: 2-1-13

Date Analyzed: 2-1-13

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 01-216-04

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Arsenic	100	91.2	91	91.5	91	0	
Barium	100	148	87	152	91	3	
Cadmium	50.0	48.1	96	48.1	96	0	
Chromium	100	133	88	147	101	10	
Lead	250	238	95	238	95	0	
Selenium	100	89.7	90	89.8	90	0	
Silver	25.0	22.5	90	22.2	89	1	

Date of Report: February 15, 2013
Samples Submitted: January 31, 2013
Laboratory Reference: 1301-226
Project: 20894-001-01

TOTAL MERCURY
EPA 7471B
MS/MSD QUALITY CONTROL

Date Extracted: 2-1-13

Date Analyzed: 2-1-13

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 01-212-04

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Mercury	0.500	0.467	93	0.469	94	0	

Date of Report: February 15, 2013
Samples Submitted: January 31, 2013
Laboratory Reference: 1301-226
Project: 20894-001-01

**SOLUBLE HEXAVALENT CHROMIUM
WATER EXTRACTION
EPA 7196A
METHOD BLANK QUALITY CONTROL**

Date Extracted: 2-14-13
Date Analyzed: 2-14-13

Matrix: Solid
Units: mg/kg (ppm)

Lab ID: MB0214S1

Analyte	Method	Result	PQL
Hexavalent Chromium	7196A mod	ND	1.0

Date of Report: February 15, 2013
Samples Submitted: January 31, 2013
Laboratory Reference: 1301-226
Project: 20894-001-01

**SOLUBLE HEXAVALENT CHROMIUM
WATER EXTRACTION
EPA 7196A
DUPLICATE QUALITY CONTROL**

Date Extracted: 2-14-13
Date Analyzed: 2-14-13

Matrix: Solid
Units: mg/kg (ppm)

Lab ID: 01-226-10

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Hexavalent Chromium	ND	ND	NA	1.0	

Date of Report: February 15, 2013
Samples Submitted: January 31, 2013
Laboratory Reference: 1301-226
Project: 20894-001-01

**SOLUBLE HEXAVALENT CHROMIUM
WATER EXTRACTION
EPA 7196A
MS/MSD QUALITY CONTROL**

Date Extracted: 2-14-13
Date Analyzed: 2-14-13

Matrix: Solid
Units: mg/kg (ppm)

Lab ID: 01-226-10

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Hexavalent Chromium	5.00	4.85	97	5.16	103	6	

Date of Report: February 15, 2013
Samples Submitted: January 31, 2013
Laboratory Reference: 1301-226
Project: 20894-001-01

% MOISTURE

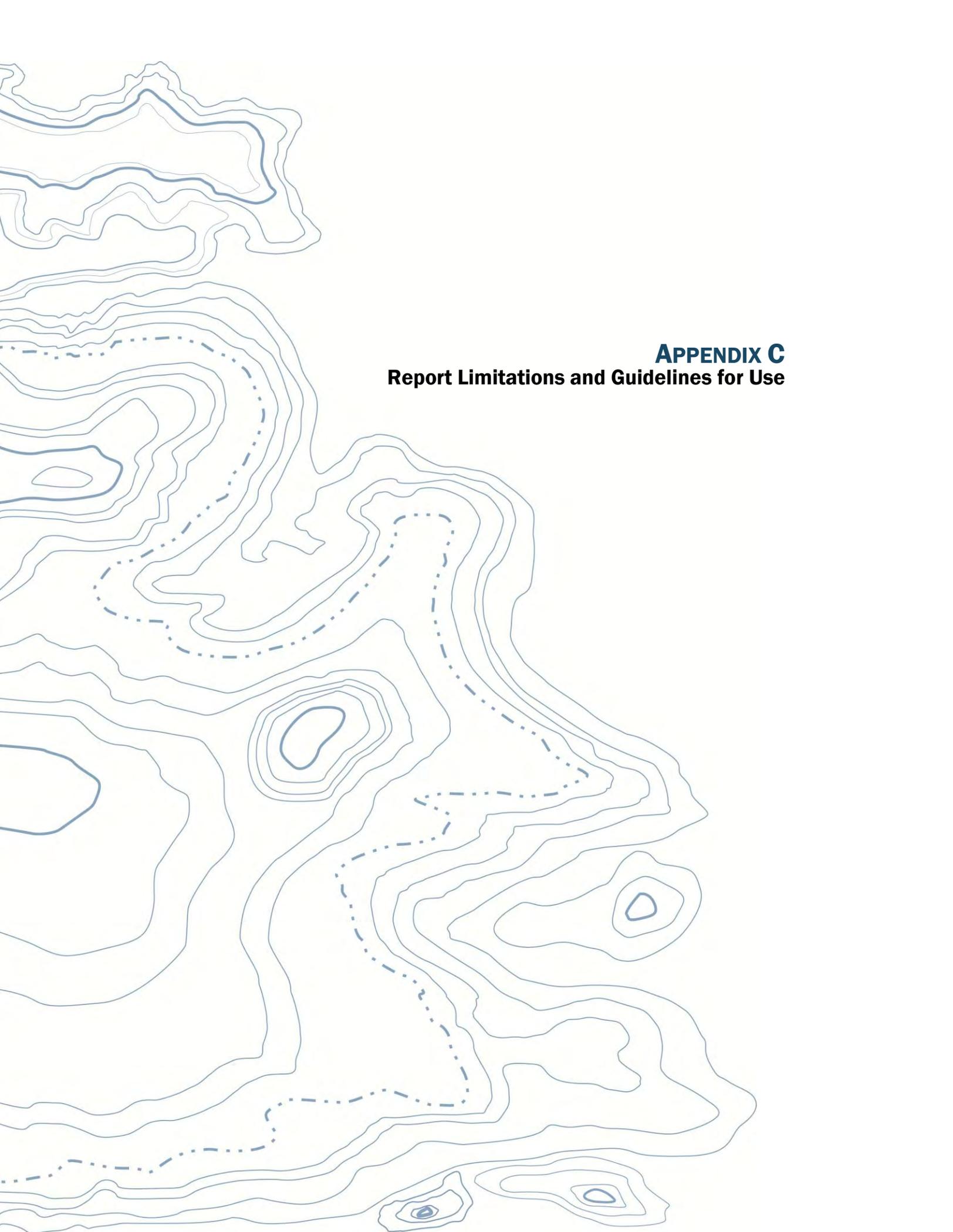
Date Analyzed: 2-1-13

Client ID	Lab ID	% Moisture
DP01-10-130130	01-226-03	10
HA01-130130	01-226-05	11
DP02-4-130130	01-226-06	21
DP03-6-130130	01-226-08	25
DP04-8-130130	01-226-10	20
DP04-10-130130	01-226-11	24
DP04-15-130130	01-226-12	13



Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
 - B - The analyte indicated was also found in the blank sample.
 - C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
 - E - The value reported exceeds the quantitation range and is an estimate.
 - F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
 - H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
 - I - Compound recovery is outside of the control limits.
 - J - The value reported was below the practical quantitation limit. The value is an estimate.
 - K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
 - L - The RPD is outside of the control limits.
 - M - Hydrocarbons in the gasoline range are impacting the diesel range result.
 - M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
 - N - Hydrocarbons in the lube oil range are impacting the diesel range result.
 - N1 - Hydrocarbons in diesel range are impacting lube oil range results.
 - O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
 - P - The RPD of the detected concentrations between the two columns is greater than 40.
 - Q - Surrogate recovery is outside of the control limits.
 - S - Surrogate recovery data is not available due to the necessary dilution of the sample.
 - T - The sample chromatogram is not similar to a typical _____.
 - U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
 - U1 - The practical quantitation limit is elevated due to interferences present in the sample.
 - V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
 - W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
 - X - Sample extract treated with a mercury cleanup procedure.
 - 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



APPENDIX C
Report Limitations and Guidelines for Use

APPENDIX C REPORT LIMITATIONS AND GUIDELINES FOR USE²

This appendix provides information to help you manage your risks with respect to the use of this report. Please confer with GeoEngineers if you need to know more about how these “Report Limitations and Guidelines for Use” apply to your project or property.

Read These Provisions Closely

It is important to recognize that environmental engineering and geoscience practices (geotechnical engineering, geology and environmental science) are less exact than other engineering and natural science disciplines. GeoEngineers includes these explanatory “limitations” provisions in our reports to help reduce the risk of misunderstandings or unrealistic expectations that lead to disappointments, claims and disputes.

Environmental Services Are Performed for Specific Purposes, Persons and Projects

GeoEngineers has performed this Phase II ESA of the Hamilton Property (Pierce County Parcel No. 0416231052) in general accordance with the scope and limitations of our proposal, dated December 6, 2012. This report has been prepared for the exclusive use of Nisqually Land Trust. This report is not intended for use by others, and the information contained herein is not applicable to other properties.

GeoEngineers structures its services to meet the specific needs of its clients. For example, an ESA study conducted for a property owner may not fulfill the needs of a prospective purchaser of the same property. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and property. Use of this report is not recommended for any purpose or project other than as expressly stated in this report.

This Environmental Report is Based on a Unique Set of Project-Specific Factors

This report has been prepared for Hamilton Property (Pierce County Parcel No. 0416231052) located along the Mashel River south of 433 Center Street East in Eatonville, Washington. GeoEngineers considered a number of unique, project-specific factors when establishing the scope of services for this Project. Unless GeoEngineers specifically indicates otherwise, it is important not to rely on this report if it was:

- not prepared for you,
- not prepared for your Project,
- not prepared for the specific site explored, or
- completed before Project changes were made.

² Developed based on material provided by ASFE, Professional Firms Practicing in the Geosciences; www.asfe.org.

If changes to the Project or property occur after the date of this report, GeoEngineers cannot be responsible for any consequences of such changes in relation to this report unless we have been given the opportunity to review our interpretations and recommendations in the context of such changes. Based on that review, we can provide written modifications or confirmation, as appropriate.

Reliance Conditions for Third Parties

This report was prepared for the exclusive use of the party(ies) to whom this report is addressed. No other party may rely on the product of our services unless we agree to such reliance in advance and in writing. Within the limitations of the agreed Project scope, schedule and budget, our services have been executed in accordance with our Agreement with the Client and generally accepted environmental practices in this area at the time this report was prepared.

Environmental Regulations Change and Evolve

Some substances may be present in the vicinity of the subject property in quantities or under conditions that may have led, or may lead, to contamination of the subject property, but are not included in current local, state or federal regulatory definitions of hazardous substances or do not otherwise present current potential liability. GeoEngineers cannot be responsible if the standards for appropriate inquiry, or regulatory definitions of hazardous substances, change or if more stringent environmental standards are developed in the future.

Uncertainty May Remain Even After This Phase II ESA is Completed

Performance of a Phase II ESA is intended to reduce uncertainty regarding the potential for contamination in connection with a property, but no ESA can wholly eliminate that uncertainty. Our interpretation of subsurface conditions in this study is based on field observations and chemical analytical data from widely spaced sampling locations. It is always possible that contamination exists in areas that were not explored, sampled or analyzed.

Subsurface Conditions Can Change

This environmental report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by man-made events such as construction on or adjacent to the subject property, by new releases of hazardous substances, new information or technology that become available subsequent to the report date, or by natural events such as floods, earthquakes, slope instability or groundwater fluctuations. Please contact GeoEngineers before applying this report for its intended purpose so that GeoEngineers may evaluate whether changed conditions affect the continued applicability of the report.

Soil and Groundwater End Use

The cleanup levels referenced in this report are site- and situation-specific. The cleanup levels may not be applicable for other properties or for other on-site uses of the affected soil and/or groundwater. Note that hazardous substances may be present in some of the on-site soil and/or groundwater at detectable concentrations that are less than the referenced cleanup levels. GeoEngineers should be contacted prior to the export of soil or groundwater from the subject

property or reuse of the affected soil or groundwater on-site to evaluate the potential for associated environmental liabilities. GeoEngineers will not assume responsibility for potential environmental liability arising out of the transfer of soil and/or groundwater from the subject property to another location, or the reuse of such soil and/or groundwater on-site in any instances that we did not recommend, know of, or control.

Most Environmental Findings Are Professional Opinions

Our interpretations of subsurface conditions are based on field observations and chemical analytical data from widely spaced sampling locations at the subject property. Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. GeoEngineers reviewed field and laboratory data and then applied its professional judgment to render an informed opinion about subsurface conditions throughout the property. Actual subsurface conditions may differ significantly from those indicated in this report. Our report, conclusions and interpretations should not be construed as a warranty of the subsurface conditions.

Do Not Redraw the Exploration Logs

Environmental scientists prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in an environmental report should never be redrawn for inclusion in other design documents. Only photographic or electronic reproduction that preserves the entire original boring log is acceptable, but separating logs from the report can create increase the risk of potential misinterpretation.

Biological Pollutants

GeoEngineers' Scope of Work specifically excludes the investigation, detection, prevention or assessment of the presence of Biological Pollutants. Accordingly, this report does not include any interpretations, recommendations, findings or conclusions regarding the detecting, assessing, preventing or abating of Biological Pollutants, and no conclusions or inferences should be drawn regarding Biological Pollutants as they may relate to this Project. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria and viruses, and/or any of their byproducts.

A Client that desires these specialized services is advised to obtain them from a consultant who offers services in this specialized field.