Soil Assessment and Remedial Excavation

Davenport Substation
703 3rd Street
Davenport, Washington

for
Avista Utilities

January 4, 2024

GeoEngineers
Earth Science + Technology

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703 3rd Street
Davenport, Washington

File No. 2522-117-00

January 4, 2024

Prepared for:

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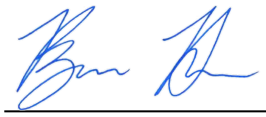

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BKH:SHL:atk

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1.0 INTRODUCTION

This report summarizes soil assessment and remedial excavation activities conducted at the former Davenport Substation located at 703 3rd Street in Davenport, Washington (the site) as shown in the Vicinity Map, Figure 1. The purpose of the soil assessment and remedial excavation were to evaluate shallow soil conditions near mineral oil-filled electrical equipment and remove identified contaminated soil at the site in preparation for planned substation decommissioning and infrastructure removal activities. The project site layout and exploration locations are shown in Figure 2, Site Plan.

This assessment report has been prepared by GeoEngineers for Avista Corporation (Avista) under Avista Master Contract No. R-42955, Work Authorization number 19. This report describes the field activities, observations and chemical analytical results associated with soil samples collected at the site.

2.0 SITE DESCRIPTION AND BACKGROUND

The project site consists of a fenced electrical substation located at 703 3rd Street in Davenport, Washington. The substation is generally flat to gradually west sloping and is bounded to the north and east by a commercial facility and gravel storage lot, Merriam Street to the south, and 3rd Street to the west. The substation is comprised of a secured gravel surfacing pad with substation infrastructure and mineral oil-filled electrical equipment, including one transformer and six voltage regulators on concrete foundations; mineral oil in the transformer reportedly contained polychlorinated biphenyls (PCBs) at one time. It is our understanding that Avista plans to fully decommission and remove substation infrastructure and electrical equipment from the substation located at 703 3rd Street.

In preparation for and prior to decommissioning the 703 3rd Street Substation, Avista constructed a new, higher capacity, substation at a nearby parcel to replace the existing facility. The new substation has been put into service and is located approximately 0.2 miles east at 39050 State Highway 2 East in Davenport, Washington.

3.0 SOIL ASSESSMENT FIELD ACTIVITIES

The following sections describe field activities, including advancing hand-augered borings and a discussion of observed subsurface conditions.

3.1. Soil Assessment

Nine shallow soil explorations (HA-1 through HA-9) were advanced by GeoEngineers personnel on November 7, 2023 (Figure 2). Boring locations were cleared of subsurface utilities by Utilities Plus, LLC., a private utility locator, and Avista representatives prior to subsurface exploration activities.

The borings were advanced with a hand auger and other hand tools, as necessary, to approximately 0.5 to 4 feet below ground surface (bgs). Soil samples were collected from each exploration in approximate 1-foot intervals for field screening and potential chemical analysis in accordance with the Work Plan (GeoEngineers 2023). Field screening consisted of visual observation and water sheen testing. Field screening indications of contamination were not observed except at exploration HA-3, which showed a moderate sheen and visual indications (slight oily aggregate coating) of potential mineral oil impacts. As a result, exploration HA-3 was advanced to a depth of 4 feet below ground surface (bgs) to characterize potential soil impacts.

Up to two soil samples were collected from each exploration for potential chemical analysis. Soil samples were collected and submitted for laboratory analysis in accordance with the Work Plan (GeoEngineers 2023).

GeoEngineers backfilled each boring with exploration spoils removed from each exploration location. Copies of each soil boring log are included in Appendix A, Boring Logs.

3.2. Subsurface Conditions

Soil conditions within the fenced substation consisted of 2 to 4 inches of ¾-inch-minus crushed surfacing base course (samples HA1 through HA8) underlain by brown silty fine to coarse gravel with sand and cobbles and/or silt with sand and occasional cobbles to final exploration depths.

Soil conditions at HA-9 represent background conditions along the south exterior perimeter of the substation. Soil conditions at HA-9 consisted of silt with sand and occasional gravel to approximately 6 inches below ground surface.

Groundwater was not encountered during subsurface exploration activities.

4.0 SOIL ASSESSMENT CHEMICAL ANALYTICAL RESULTS

The following sections describe soil chemical analytical results. The chemical analytical laboratory report is included in Appendix B.

4.1. Soil Chemical Analytical Results

Ten soil samples were submitted to Eurofins Environment Testing Northwest (Eurofins) for analysis of the following:

- Diesel-range petroleum hydrocarbons (DRPH), oil-range petroleum hydrocarbons (ORPH) and mineral-oil using Northwest Method NWTPH-Dx;
- PCBs by Environmental Protection Agency (EPA) Method 8082; and
- Metals, including Resource Conservation and Recovery Act (RCRA) 8 metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver) and copper, nickel and zinc EPA 6000/7000 series methods.

Soil chemical analytical results are summarized and compared to the Washington State Model Toxics Control Act (MTCA) Method A cleanup levels for unrestricted land use below and are presented in Summary of Soil Chemical Analytical Results, Table 1. The laboratory analytical report is included in Appendix B.

- Cadmium was detected in HA-2 from 0 to 1-foot bgs at a concentration (6.8 mg/kg) that exceeded the MTCA Method A cleanup level of 2.0 mg/kg.
- The other contaminants of concern (COC) were either not detected or detected at concentrations less than their respective MTCA Method A cleanup level for unrestricted land use.

For waste profiling purposes, one composite soil sample was submitted to Eurofins for leachable RCRA 8 metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver) using the toxicity characteristic leaching procedure and EPA 6000/7000 series methods. Leachable metals analysis indicated that the composite sample was non-hazardous.

4.2. Analytical Data Review and Summary

The laboratory maintains an internal quality assurance/quality control (QA/QC) program as documented in its laboratory quality assurance manual. The laboratory uses a combination of blanks, surrogate recoveries, duplicates, matrix spike recoveries, matrix spike duplicate recoveries, blank spike recoveries and blank spike duplicate recoveries to evaluate the analytical results. The laboratory also uses data quality goals for individual chemicals or groups of chemicals based on the long-term performance of the test methods. The data quality goals were included in the laboratory report dated November 27, 2023.

We reviewed the laboratory internal QA/QC in the context of project purpose. Based on our review, in our opinion, the quality of the analytical data is acceptable for the intended use.

5.0 REMEDIAL EXCAVATION

Avista removed approximately 1 cubic yard of cadmium contaminated soil from hand auger location HA-2 resulting in an approximate 3-foot by 3-foot by 3-foot by 3-foot-deep excavation. Avista environmental personnel collected a 5-point composite confirmation soil sample form the base and sidewalls of the remedial excavation for chemical analysis including DRPH and ORPH using Northwest Method NWTPH-Dx, PCBs by EPA Method 8082, and metals, including RCRA 8 and copper, nickel and zinc EPA 6000/7000 series methods. The composite soil sample consisted of equal and representative quantities of soil from four sidewalls and the base of the excavation thoroughly mixed into one soil sample using clean nitrile gloves and decontaminated hand tools. Remedial excavation photographs are presented in Appendix C. Site Photographs.

Chemical analytical results from the confirmation soil sample indicate cadmium concentrations were not detected above the laboratory reporting limit. The other COCs were either not detected or detected at concentrations less than the respective MTCA cleanup levels. Approximately 1 cubic yard of cadmium contaminated soil, generated by remedial excavation activities, was profiled, transported, and disposed at the Graham Road Landfill in Airway Heights, Washington by Avista; waste disposal tickets were not provided. A copy of the chemical analytical laboratory report is presented in Appendix B.

6.0 SUMMARY AND RECOMMENDATIONS

Nine soil explorations were advanced at the site on November 7, 2023. Soil samples collected from the borings were submitted for analysis of DRPH, ORPH, mineral oil, PCBs and metals. Cadmium was detected in the soil sample collected from HA-2 at a concentration greater than the MTCA Method A cleanup level. The other COCs analyzed were either not detected or were detected at concentrations less than the applicable cleanup levels.

Avista removed approximately 1 cubic yard of cadmium contaminated soil from hand auger location HA-2 and disposed of the contaminated soil at the Graham Road Landfill in Airway Heights, Washington. Confirmation soil sample results from the base and sidewalls of the remedial excavation indicate that cadmium contaminated soils have been sufficiently removed. GeoEngineers recommends no further assessment or remedial action be performed at the site at this time. A copy of this report will be submitted to the Washington Department of Ecology upon Avista approval.

7.0 LIMITATIONS

GeoEngineers has summarized remedial excavation efforts conducted by Avista under the supervision and guidance of Avista environmental staff. GeoEngineers was not on site during remedial excavation activities and did not provide guidance or oversight of remedial excavation activities conducted by Avista.

We have prepared this report for the exclusive use of Avista and their authorized agents.

Within the limitations of scope, schedule and budget, our services were executed in accordance with generally accepted environmental science practices in this area at the time this report was prepared. The conclusions and opinions presented in this report are based on our professional knowledge, judgment and experience. No warranty or other conditions, express or implied, should be understood.

Please refer to "Report Limitations and Guidelines for Use," Appendix C, for additional information pertaining to the use of this report.

8.0 REFERENCES

GeoEngineers, Inc., 2023. Work Plan, Soil Assessment. Davenport Substation. October 25, 2023. GEI File Number 2522-117-00

TABLES

GeoEngineers

Table 1

Summary of Soil Chemical Analytical Results[1]

Davenport Substation

Davenport, Washington

Sample Location	HA-1	HA-2	HA-3	HA-3	HA-4	HA-5	HA-6	HA-7	HA-8	HA-9	Remedial Ex.	
Sample Identification	HA-1(0-2)	HA-2(0-1)	HA-3(1-2)	HA-3(3-4)	HA-4(0-2)	HA-5(0-2)	HA-6(0-2)	HA-7(0-2)	HA-8(1-2)	HA-9(0-0.5)	HA-02-2	
Sample Date	11/7/2023	11/7/2023	11/7/2023	11/7/2023	11/7/2023	11/7/2023	11/7/2023	11/7/2023	11/7/2023	11/7/2023	12/1/2023	MTCA Cleanup Level[2] (mg/kg)
Exploration Depth (feet)	2	2	4	2	2	2	2	2	2	0.5	3	
Sample Depth (feet)	0 to 2	0 to 1	1 to 2	3 to 4	0 to 2	0 to 2	0 to 2	0 to 2	1 to 2	0 to 0.5	Composite	
Polychlorinated Biphenyls (PCBs) by EPA Method 8082 (mg/kg)												
PCB-1016	<0.012	<0.011	<0.010	<0.011	<0.012	<0.013	<0.012	<0.012	<0.011	<0.012	<0.013	NE
PCB-1221	<0.012	<0.011	<0.010	<0.011	<0.012	<0.013	<0.012	<0.012	<0.011	<0.012	<0.013	NE
PCB-1232	<0.012	<0.011	<0.010	<0.011	<0.012	<0.013	<0.012	<0.012	<0.011	<0.012	<0.013	NE
PCB-1242	<0.012	<0.011	<0.010	<0.011	<0.012	<0.013	<0.012	<0.012	<0.011	<0.012	<0.013	NE
PCB-1248	<0.012	<0.011	<0.010	<0.011	<0.012	<0.013	<0.012	<0.012	<0.011	<0.012	<0.013	NE
PCB-1254	<0.012	<0.011	<0.010	<0.011	<0.012	<0.013	<0.012	<0.012	<0.011	<0.012	<0.013	NE
PCB-1260	<0.012	**0.0089 J**	**0.022**	<0.011	<0.012	<0.013	<0.012	<0.012	<0.011	<0.012	<0.013	NE
PCB-1268	<0.012	<0.011	<0.010	<0.011	<0.012	<0.013	<0.012	<0.012	<0.011	<0.012	<0.013	NE
PCB-1262	<0.012	<0.011	<0.010	<0.011	<0.012	<0.013	<0.012	<0.012	<0.011	<0.012	<0.013	NE
Total PCBs	<0.012	**0.0089**	**0.022**	<0.011	<0.012	<0.013	<0.012	<0.012	<0.011	<0.012	<0.013	1
Metals by EPA 6000/7000 Series Methods (mg/kg)												
Arsenic	**3.2**	**2.5**	**2.6**	**2.6**	**4.2**	**3.3**	**3.3**	**3**	**2.2**	**5**	**4.2**	20
Barium	**170**	**110**	**95**	**140**	**190**	**170**	**170**	**170**	**130**	**160**	**140**	16,000[3]
Cadmium	**0.29 J**	**6.8**	**0.74**	<0.74	<0.96	<0.79	**0.37 J**	<0.78	<0.71	**0.085 J**	<0.83	2
Chromium (III)	**6.2**	**4.2**	**4.1**	**5**	**7.4**	**6.4**	**6.4**	**5.9**	**2.9**	**7.8**	**7.4**	2,000
Lead	**12**	**41**	**14**	**59**	**9.5**	**7.7**	**40**	**8.1**	**10**	**12**	**8.3**	250
Selenium	<4.7	<3.5	<3.0	<3.7	<4.8	<3.9	<4.4	<3.9	<3.5	<4.3	<4.2	400
Silver	<1.2	0.25 J	<0.17	<0.92	<1.2	<0.98	<1.1	<0.97	<0.89	<1.1	<1.0	400[3]
Mercury	**0.0088 J**	**0.016 J**	**0.0032 J**	**0.0071 J**	**0.011 J**	**0.0064 J**	**0.0075 J**	<0.042	**0.0082 J**	**0.030 J**	<0.054	2
Copper	**13**	**21**	**13**	**11**	**13**	**9.5**	**23**	**13**	**13**	**14**	**12**	3200[3]
Nickel	**6.3**	**4.9**	**4.8**	**6.6**	**7.7**	**6.3**	**6.1**	**6.6**	**5.0**	**8.3**	**7.8**	1600[3]
Zinc	**56**	**99**	**75**	**30**	**44**	**28**	**85**	**48**	**42**	**48**	**50**	24,000[3]
Total Petroleum Hydrocarbons by Northwest Method NWTPH-Dx (mg/kg)												
Diesel-range petroleum hydrocarbons	<12	**27**	**500**	**16**	<12	<13	**11 J**	<12	**10 J**	<12	<12	2,000
Oil-range petroleum hydrocarbons	<31	**20 J**	**63**	<28	<31	<33	**15 J**	<30	**12 J**	<30	<31	2,000
Mineral oil	<31	**24 J**	**140**	**3.6 J**	<31	<33	**16 J**	<30	**13 J**	<30	-	4,000

Notes:

[1] Chemical analytical testing by Eurofins Environment Testing Northwest of Spokane Valley, Washington.

[2] MTCA Method A cleanup level for unrestricted landuse.

[3]MTCA Method B cleanup level.

J = Result was less than the reporting limit but greater than or equal to the method detection limit and the listed concentration is an approximate value.

mg/kg = milligrams per kilogram, NE = not established, - = not analyzed

< indicates analyte was not detected; laboratory method detection limit is listed.

Bolding indicates analyte was detected ata concentration greater than the method detection limit.

Shading indicates analyte was detected at a concentraion greater than the MTCA Method A cleanup level.

FIGURES

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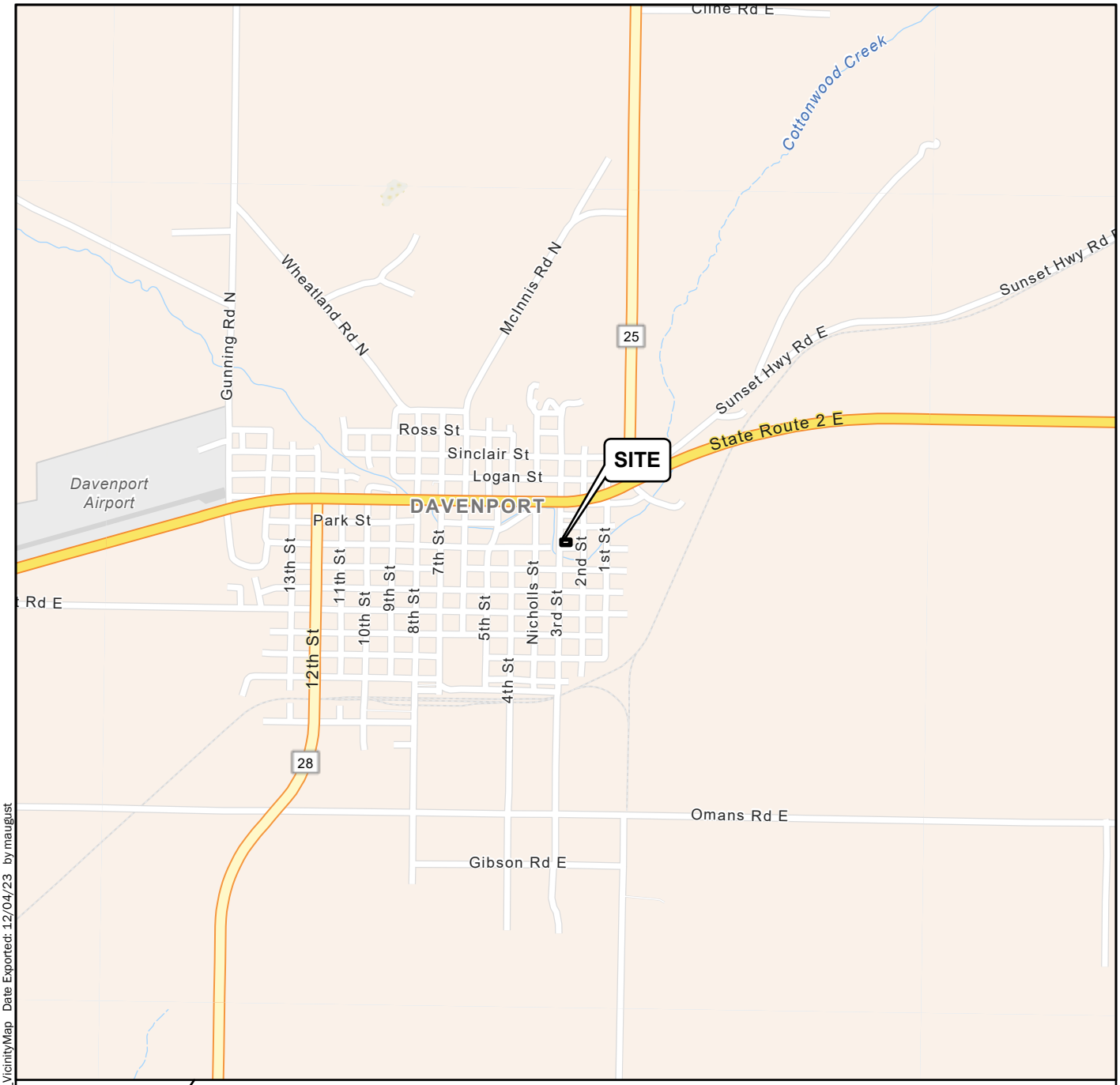

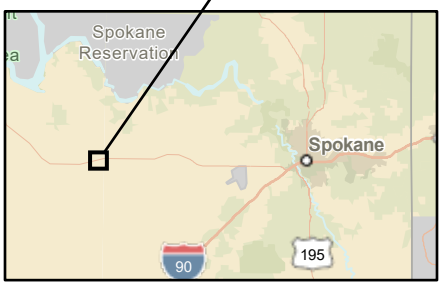

N

0 2,000

Feet

Source(s):
- ESRI

Coordinate System: NAD 1983 UTM Zone 11N

Disclaimer: This figure was created for a specific purpose and project. Any use of this figure for any other project or purpose shall be at the user's sole risk and without liability to GeoEngineers. The locations of features shown may be approximate. GeoEngineers makes no warranty or representation as to the accuracy, completeness, or suitability of the figure, or data contained therein. The file containing this figure is a copy of a master document, the original of which is retained by GeoEngineers and is the official document of record.

Vicinity Map

Davenport Substation
Davenport, Washington

GeoEngineers

Figure 1

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Source(s):
- Bing Imagery
- Lincoln County Parcel

Coordinate System: NAD 1983 UTM Zone 11N

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Legend

- Project Boundary
- Remedial Excavation Area
- Hand Auger; COCs concentrations less than the respective cleanup level.
- Confirmation Soil Sample and Former Hand Auger; COC concentrations less than the respective cleanup levels post remedial excavation.

N

0 20

Feet

Site Plan

Davenport Substation
Davenport, Washington

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Figure 2

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APPENDICES

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APPENDIX A
Boring Logs

SOIL CLASSIFICATION CHART

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

ADDITIONAL MATERIAL SYMBOLS

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

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

Approximate contact between soil strata

Material Description Contact

Contact between geologic units

Contact between soil of the same geologic unit

Sampler Symbol Descriptions

2.4-inch I.D. split barrel / Dames & Moore (D&M)

Standard Penetration Test (SPT)

Shelby tube

Piston

Direct-Push

Bulk or grab

Continuous Coring

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.

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

"WOH" indicates sampler pushed using the weight of the hammer.

Laboratory / Field Tests

%F	Percent fines
%G	Percent gravel
AL	Atterberg limits
CA	Chemical analysis
CP	Laboratory compaction test
CS	Consolidation test
DD	Dry density
DS	Direct shear
HA	Hydrometer analysis
MC	Moisture content
MD	Moisture content and dry density
Mohs	Mohs hardness scale
OC	Organic content
PM	Permeability or hydraulic conductivity
PI	Plasticity index
PL	Point load test
PP	Pocket penetrometer
SA	Sieve analysis
TX	Triaxial compression
UC	Unconfined compression
UU	Unconsolidated undrained triaxial compression
VS	Vane shear

Sheen Classification

NS	No Visible Sheen
SS	Slight Sheen
MS	Moderate Sheen
HS	Heavy Sheen

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

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Figure A-1

Drilled	Start 11/7/2023	End 11/7/2023	Total Depth (ft)	2	Logged By / Checked By	BKH	Driller	GeoEngineers	Drilling Method	Hand Tools
Surface Elevation (ft) / Vertical Datum	2390 NAVD88		Hammer Data	N/A (lbs) / (in) Drop			Drilling Equipment			
Easting (X) / Northing (Y)	2303001 249618		System Datum	WA State Plane North NAD83 (feet)			Groundwater not observed at time of exploration			

Notes:

Elevation (feet)	Depth (feet)	FIELD DATA: Interval Recovered (in)	FIELD DATA: Blows/foot	FIELD DATA: Collected Sample / Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0			HA-1 (0-2) CA		CR	Approximately 4 inches of 3/4-inch-minus crushed surfacing base coarse (CSBC)	NS		
						GM	Brown silty fine to coarse gravel with sand and cobbles (fill) (very dense, moist)			
						ML	Brown silt with sand and occasional gravel (medium stiff, moist to wet)			

Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on . Vertical approximated based on .

Log of Hand Auger HA-1

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Project: Avista Utilities - Davenport Substation
Project Location: Davenport, Washington
Project Number: 2522-117-00

Figure A-2
Sheet 1 of 1

Drilled	Start 11/7/2023	End 11/7/2023	Total Depth (ft) 2	Logged By BKH / Checked By	Driller GeoEngineers	Drilling Method Hand Tools
Surface Elevation (ft) / Vertical Datum	2391 NAVD88		Hammer Data	N/A (lbs) / (in) Drop	Drilling Equipment	
Easting (X) / Northing (Y)	2303009 249613		System Datum	WA State Plane North NAD83 (feet)	Groundwater not observed at time of exploration	

Notes:

Elevation (feet)	Depth (feet)	FIELD DATA: Interval Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0			HA-2 (0-1) CA		CR	Approximately 4 inches of 3/4-inch-minus crushed surfacing base coarse (CSBC)	SS		
						GM	Brown silty fine to coarse gravel with sand and cobbles (fill) (very dense, moist)			
2390				HA-2 (1-2)		ML	Brown silt with sand and occasional gravel (medium stiff, moist to wet)	NS		

Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on . Vertical approximated based on .

Log of Hand Auger HA-2

GeoEngineers

Project: Avista Utilities - Davenport Substation
Project Location: Davenport, Washington
Project Number: 2522-117-00

Figure A-3
Sheet 1 of 1

Drilled Start 11/7/2023 End 11/7/2023	Total Depth (ft) 4	Logged By BKH Checked By	Driller GeoEngineers	Drilling Method Hand Tools	
Surface Elevation (ft) 2392 Vertical Datum NAVD88		Hammer Data N/A (lbs) / (in) Drop		Drilling Equipment	
Easting (X) 2303026 Northing (Y) 249619		System Datum WA State Plane North NAD83 (feet)		Groundwater not observed at time of exploration	
Notes:					

Elevation (feet)	Depth (feet)	FIELD DATA: Interval Recovered (in)	FIELD DATA: Blows/foot	FIELD DATA: Collected Sample / Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0					CR	Approximately 4 inches of 3/4-inch-minus crushed surfacing base coarse (CSBC)			
						GP-GM	Gray to brown fine to coarse gravel with silt, sand and cobbles (dense, moist)			
				HA-3 (1-2) CA				MS		
2390										
				HA-3 (3-4) CA		ML	Brown silt with sand and occasional gravel (medium stiff, moist to wet)	NS		

Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on . Vertical approximated based on .

Log of Hand Auger HA-3

GeoEngineers

Project: Avista Utilities - Davenport Substation
Project Location: Davenport, Washington
Project Number: 2522-117-00

Figure A-4
Sheet 1 of 1

Drilled	Start 11/7/2023	End 11/7/2023	Total Depth (ft) 2	Logged By BKH / Checked By	Driller GeoEngineers	Drilling Method Hand Tools
Surface Elevation (ft) / Vertical Datum	2391 NAVD88		Hammer Data	N/A (lbs) / (in) Drop	Drilling Equipment	
Easting (X) / Northing (Y)	2303022 249605		System Datum	WA State Plane North NAD83 (feet)	Groundwater not observed at time of exploration	

Notes:

Elevation (feet)	Depth (feet)	FIELD DATA: Interval Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0			HA-4 (0-2) CA		CR	Approximately 4 inches of 3/4-inch-minus crushed surfacing base coarse (CSBC)	NS		
						GM	Brown silty fine to coarse gravel with sand and cobbles (fill) (very dense, moist)			
2390						ML	Brown silt with sand and occasional gravel (medium stiff, moist to wet)			

Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on . Vertical approximated based on .

Log of Hand Auger HA-4

GeoEngineers

Project: Avista Utilities - Davenport Substation
Project Location: Davenport, Washington
Project Number: 2522-117-00

Figure A-5
Sheet 1 of 1

Drilled	Start 11/7/2023	End 11/7/2023	Total Depth (ft)	2	Logged By / Checked By	BKH	Driller	GeoEngineers	Drilling Method	Hand Tools
Surface Elevation (ft) / Vertical Datum	2391 NAVD88				Hammer Data	N/A (lbs) / (in) Drop			Drilling Equipment	
Easting (X) / Northing (Y)	2303009 249624				System Datum	WA State Plane North NAD83 (feet)			Groundwater not observed at time of exploration	

Notes:

Elevation (feet)	Depth (feet)	FIELD DATA: Interval Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0			HA-5 (0-2) CA		CR	Approximately 4 inches of 3/4-inch-minus crushed surfacing base coarse (CSBC)	NS		
						MIL	Brown silt with sand and occasional gravel (medium stiff, moist to wet)			
2390										

Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on . Vertical approximated based on .

Log of Hand Auger HA-5

GeoEngineers

Project: Avista Utilities - Davenport Substation
Project Location: Davenport, Washington
Project Number: 2522-117-00

Figure A-6
Sheet 1 of 1

Drilled	Start 11/7/2023	End 11/7/2023	Total Depth (ft) 2	Logged By BKH / Checked By	Driller GeoEngineers	Drilling Method Hand Tools
Surface Elevation (ft) / Vertical Datum	2391 NAVD88		Hammer Data	N/A (lbs) / (in) Drop	Drilling Equipment	
Easting (X) / Northing (Y)	2303019 249628		System Datum	WA State Plane North NAD83 (feet)	Groundwater not observed at time of exploration	

Notes:

Elevation (feet)	Depth (feet)	FIELD DATA: Interval Recovered (in)	FIELD DATA: Blows/foot	FIELD DATA: Collected Sample / Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0			HA-6 (0-2) CA		CR	Approximately 4 inches of 3/4-inch-minus crushed surfacing base coarse (CSBC)	NS		
						ML	Brown silt with sand and occasional gravel (mediium stiff, moist to wet)			
2390						GM	Brown silty fine to coarse gravel with sand and cobbles (very dense, moist)			

Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on . Vertical approximated based on .

Log of Hand Auger HA-6

GeoEngineers

Project: Avista Utilities - Davenport Substation
Project Location: Davenport, Washington
Project Number: 2522-117-00

Figure A-7
Sheet 1 of 1

Drilled Start	End	Total Depth (ft)	Logged By / Checked By	Driller	Drilling Method
11/7/2023	11/7/2023	2	BKH	GeoEngineers	Hand Tools

Surface Elevation (ft) / Vertical Datum	2392 NAVD88	Hammer Data	N/A (lbs) / (in) Drop
Easting (X) / Northing (Y)	2303034 249631	System Datum	WA State Plane North NAD83 (feet)
Drilling Equipment		Groundwater not observed at time of exploration	

Notes:

Elevation (feet)	Depth (feet)	FIELD DATA: Interval Recovered (in)	Blows/foot	Collected Sample / Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0			HA-7 (0-2) CA		CR	Approximately 4 inches of 3/4-inch-minus crushed surfacing base coarse (CSBC)	NS		
						GM	Brown silty fine to coarse gravel with sand and cobbles (fill) (very dense, moist)			
						ML	Brown silt with sand and occasional gravel (medium stiff, moist to wet)			
2390						GM	Brown silty fine to coarse gravel with sand and cobbles (very dense, moist)			

Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on . Vertical approximated based on .

Log of Hand Auger HA-7

GeoEngineers

Project: Avista Utilities - Davenport Substation
Project Location: Davenport, Washington
Project Number: 2522-117-00

Figure A-8
Sheet 1 of 1

Drilled	Start 11/7/2023	End 11/7/2023	Total Depth (ft) 2	Logged By BKH / Checked By	Driller GeoEngineers	Drilling Method Hand Tools
Surface Elevation (ft) / Vertical Datum	2393 NAVD88		Hammer Data	N/A (lbs) / (in) Drop	Drilling Equipment	
Easting (X) / Northing (Y)	2303050 249633		System Datum	WA State Plane North NAD83 (feet)	Groundwater not observed at time of exploration	

Notes:

Elevation (feet)	Depth (feet)	FIELD DATA: Interval Recovered (in)	FIELD DATA: Blows/foot	FIELD DATA: Collected Sample / Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0			HA-8 (0-1)		CR	Approximately 4 inches of 3/4-inch-minus crushed surfacing base coarse (CSBC)	SS		
						GM	Brown silty fine to coarse gravel with sand and cobbles (fill) (very dense, moist)			
				HA-8 (1-2) CA				SS		

Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on . Vertical approximated based on .

Log of Hand Auger HA-8

GeoEngineers

Project: Avista Utilities - Davenport Substation
Project Location: Davenport, Washington
Project Number: 2522-117-00

Figure A-9
Sheet 1 of 1

Drilled	Start 11/7/2023	End 11/7/2023	Total Depth (ft)	0.5	Logged By / Checked By	BKH	Driller	GeoEngineers	Drilling Method	Hand Tools
Surface Elevation (ft) / Vertical Datum	2392 NAVD88		Hammer Data	N/A (lbs) / (in) Drop			Drilling Equipment			
Easting (X) / Northing (Y)	2303048 249590		System Datum	WA State Plane North NAD83 (feet)			Groundwater not observed at time of exploration			

Notes:

Elevation (feet)	Depth (feet)	FIELD DATA: Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
	0					HA-9 (0-0.5) CA		ML	Brown silt with sand and occasional gravel (medium stiff, moist to wet)	NS		

Note: See Figure A-1 for explanation of symbols.
Coordinates Data Source: Horizontal approximated based on . Vertical approximated based on .

Log of Hand Auger HA-9

GeoEngineers

Project: Avista Utilities - Davenport Substation
Project Location: Davenport, Washington
Project Number: 2522-117-00

Figure A-10
Sheet 1 of 1

APPENDIX B
Chemical Analytical Laboratory Report

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Bryce Hanson
GeoEngineers Inc
523 East Second Ave
Spokane, Washington 99202

Generated 11/27/2023 7:48:32 AM Revision 1

JOB DESCRIPTION

Avista Davenport Substation/2522-117-00

JOB NUMBER

590-22203-1

Eurofins Spokane
11922 East 1st Ave
Spokane WA 99206

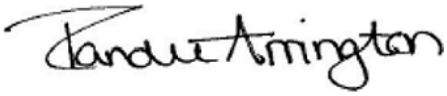
See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



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Revision 1

Authorized for release by
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Table of Contents

Client: GeoEngineers Inc
Job ID: 590-22203-1
Project/Site: Avista Davenport Substation/2522-117-00

Job ID: 590-22203-1

Laboratory: Eurofins Spokane

Narrative

Job Narrative
590-22203-1

REVISION

The report being provided is a revision of the original report sent on 11/22/2023. The report (revision 1) is being revised due to Added 6010D Copper, Nickel and Zinc data to the final report..

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 11/8/2023 8:32 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.5°C

GC Semi VOA
Method NWTPH_Dx: Detected hydrocarbons appear to be due to heavily weathered diesel and/or a light weight oil.

HA-2 (0-1) (590-22203-3), HA-3 (1-2) (590-22203-5), HA-3 (3-4) (590-22203-6), HA-6 (0-2) (590-22203-9) and HA-8 (1-2) (590-22203-11)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6010D: The method blank for preparation batch 590-44766 and 590-44767 and analytical batch 590-44778 contained Barium and Chromium above the method detection limit (MDL). Associated samples were not re-analyzed because the method blank results were less than the reporting limit (RL) OR practical quantitation limit (PQL).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: GeoEngineers Inc
Job ID: 590-22203-1
Project/Site: Avista Davenport Substation/2522-117-00

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-22203-1	Comp:110723	Solid	11/07/23 13:22	11/08/23 08:32
590-22203-2	HA-1 (0-2)	Solid	11/07/23 12:25	11/08/23 08:32
590-22203-3	HA-2 (0-1)	Solid	11/07/23 10:17	11/08/23 08:32
590-22203-5	HA-3 (1-2)	Solid	11/07/23 10:33	11/08/23 08:32
590-22203-6	HA-3 (3-4)	Solid	11/07/23 13:20	11/08/23 08:32
590-22203-7	HA-4 (0-2)	Solid	11/07/23 12:35	11/08/23 08:32
590-22203-8	HA-5 (0-2)	Solid	11/07/23 12:37	11/08/23 08:32
590-22203-9	HA-6 (0-2)	Solid	11/07/23 12:39	11/08/23 08:32
590-22203-10	HA-7 (0-2)	Solid	11/07/23 12:43	11/08/23 08:32
590-22203-11	HA-8 (1-2)	Solid	11/07/23 11:38	11/08/23 08:32
590-22203-13	HA-9 (0-0.5)	Solid	11/07/23 11:55	11/08/23 08:32

Definitions/Glossary

Client: GeoEngineers Inc
Job ID: 590-22203-1
Project/Site: Avista Davenport Substation/2522-117-00

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample ID: Comp:110723
Lab Sample ID: 590-22203-1
Date Collected: 11/07/23 13:22
Matrix: Solid
Date Received: 11/08/23 08:32

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.025	0.010	mg/L		11/21/23 09:46	11/21/23 15:29	1
Barium	**0.44**	**B**	0.025	0.0014	mg/L		11/21/23 09:46	11/21/23 15:29	1
Cadmium	ND		0.025	0.0012	mg/L		11/21/23 09:46	11/21/23 15:29	1
Chromium	**0.0017**	**J B**	0.025	0.0017	mg/L		11/21/23 09:46	11/21/23 15:29	1
Lead	ND		0.060	0.0051	mg/L		11/21/23 09:46	11/21/23 15:29	1
Selenium	ND		0.10	0.049	mg/L		11/21/23 09:46	11/21/23 15:29	1
Silver	ND		0.025	0.0025	mg/L		11/21/23 09:46	11/21/23 15:29	1

Method: SW846 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.20	0.090	ug/L		11/21/23 09:58	11/21/23 15:20	1

Client Sample ID: HA-1 (0-2)
Lab Sample ID: 590-22203-2
Date Collected: 11/07/23 12:25
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 80.1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 11:28	1
PCB-1221	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 11:28	1
PCB-1232	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 11:28	1
PCB-1242	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 11:28	1
PCB-1248	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 11:28	1
PCB-1254	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 11:28	1
PCB-1260	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 11:28	1
PCB-1268	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 11:28	1
PCB-1262	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 11:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*37 - 126*	*11/22/23 07:55*	*11/22/23 11:28*	*1*
DCB Decachlorobiphenyl (Surr)	*93*		*32 - 150*	*11/22/23 07:55*	*11/22/23 11:28*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		12	5.1	mg/Kg	☼	11/17/23 08:14	11/17/23 21:23	1
Residual Range Organics (RRO) (C25-C36)	ND		31	6.1	mg/Kg	☼	11/17/23 08:14	11/17/23 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*88*		*50 - 150*	*11/17/23 08:14*	*11/17/23 21:23*	*1*
n-Triacontane-d62	*83*		*50 - 150*	*11/17/23 08:14*	*11/17/23 21:23*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.2**		1.2	0.47	mg/Kg	☼	11/20/23 09:18	11/21/23 16:27	1
Barium	**170**		1.2	0.32	mg/Kg	☼	11/20/23 09:18	11/21/23 16:27	1
Cadmium	**0.29**	**J**	0.95	0.056	mg/Kg	☼	11/20/23 09:18	11/21/23 16:27	1
Chromium	**6.2**		1.2	0.17	mg/Kg	☼	11/20/23 09:18	11/21/23 16:27	1
Copper	**13**		3.8	0.72	mg/Kg	☼	11/20/23 09:18	11/21/23 16:27	1
Lead	**12**		2.8	1.4	mg/Kg	☼	11/20/23 09:18	11/21/23 16:27	1
Nickel	**6.3**		1.2	0.15	mg/Kg	☼	11/20/23 09:18	11/21/23 16:27	1

Client Sample ID: HA-1 (0-2)
Lab Sample ID: 590-22203-2
Date Collected: 11/07/23 12:25
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 80.1

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		4.7	2.8	mg/Kg	☼	11/20/23 09:18	11/21/23 16:27	1
Silver	ND		1.2	0.27	mg/Kg	☼	11/20/23 09:18	11/21/23 16:27	1
Zinc	**56**		4.7	0.75	mg/Kg	☼	11/20/23 09:18	11/21/23 16:27	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**8.8**	**J**	44	3.1	ug/Kg	☼	11/17/23 11:43	11/20/23 16:48	1

Client Sample ID: HA-2 (0-1)
Lab Sample ID: 590-22203-3
Date Collected: 11/07/23 10:17
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 88.7

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		11	2.5	ug/Kg	☼	11/22/23 07:55	11/22/23 11:49	1
PCB-1221	ND		11	2.5	ug/Kg	☼	11/22/23 07:55	11/22/23 11:49	1
PCB-1232	ND		11	2.5	ug/Kg	☼	11/22/23 07:55	11/22/23 11:49	1
PCB-1242	ND		11	2.5	ug/Kg	☼	11/22/23 07:55	11/22/23 11:49	1
PCB-1248	ND		11	2.5	ug/Kg	☼	11/22/23 07:55	11/22/23 11:49	1
PCB-1254	ND		11	2.5	ug/Kg	☼	11/22/23 07:55	11/22/23 11:49	1
PCB-1260	**8.9**	**J**	11	2.5	ug/Kg	☼	11/22/23 07:55	11/22/23 11:49	1
PCB-1268	ND		11	2.5	ug/Kg	☼	11/22/23 07:55	11/22/23 11:49	1
PCB-1262	ND		11	2.5	ug/Kg	☼	11/22/23 07:55	11/22/23 11:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*37 - 126*	*11/22/23 07:55*	*11/22/23 11:49*	*1*
DCB Decachlorobiphenyl (Surr)	*90*		*32 - 150*	*11/22/23 07:55*	*11/22/23 11:49*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**27**		11	4.7	mg/Kg	☼	11/17/23 08:14	11/17/23 22:05	1
Residual Range Organics (RRO) (C25-C36)	**20**	**J**	28	5.6	mg/Kg	☼	11/17/23 08:14	11/17/23 22:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*50 - 150*	*11/17/23 08:14*	*11/17/23 22:05*	*1*
n-Triacontane-d62	*89*		*50 - 150*	*11/17/23 08:14*	*11/17/23 22:05*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.5**		0.87	0.35	mg/Kg	☼	11/20/23 09:18	11/21/23 16:43	1
Barium	**110**		0.87	0.23	mg/Kg	☼	11/20/23 09:18	11/21/23 16:43	1
Cadmium	**6.8**		0.70	0.041	mg/Kg	☼	11/20/23 09:18	11/21/23 16:43	1
Chromium	**4.2**		0.87	0.12	mg/Kg	☼	11/20/23 09:18	11/21/23 16:43	1
Copper	**21**		2.8	0.53	mg/Kg	☼	11/20/23 09:18	11/21/23 16:43	1
Lead	**41**		2.1	1.0	mg/Kg	☼	11/20/23 09:18	11/21/23 16:43	1
Nickel	**4.9**		0.87	0.11	mg/Kg	☼	11/20/23 09:18	11/21/23 16:43	1
Selenium	ND		3.5	2.1	mg/Kg	☼	11/20/23 09:18	11/21/23 16:43	1
Silver	**0.25**	**J**	0.87	0.20	mg/Kg	☼	11/20/23 09:18	11/21/23 16:43	1
Zinc	**99**		3.5	0.55	mg/Kg	☼	11/20/23 09:18	11/21/23 16:43	1

Client Sample ID: HA-2 (0-1)
Lab Sample ID: 590-22203-3
Date Collected: 11/07/23 10:17
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 88.7

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**16**	**J**	46	3.3	ug/Kg	☼	11/17/23 11:43	11/20/23 16:51	1

Client Sample ID: HA-3 (1-2)
Lab Sample ID: 590-22203-5
Date Collected: 11/07/23 10:33
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 92.4

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10	2.3	ug/Kg	☼	11/22/23 07:55	11/22/23 12:53	1
PCB-1221	ND		10	2.3	ug/Kg	☼	11/22/23 07:55	11/22/23 12:53	1
PCB-1232	ND		10	2.3	ug/Kg	☼	11/22/23 07:55	11/22/23 12:53	1
PCB-1242	ND		10	2.3	ug/Kg	☼	11/22/23 07:55	11/22/23 12:53	1
PCB-1248	ND		10	2.3	ug/Kg	☼	11/22/23 07:55	11/22/23 12:53	1
PCB-1254	ND		10	2.3	ug/Kg	☼	11/22/23 07:55	11/22/23 12:53	1
PCB-1260	**22**		10	2.3	ug/Kg	☼	11/22/23 07:55	11/22/23 12:53	1
PCB-1268	ND		10	2.3	ug/Kg	☼	11/22/23 07:55	11/22/23 12:53	1
PCB-1262	ND		10	2.3	ug/Kg	☼	11/22/23 07:55	11/22/23 12:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*70*		*37 - 126*	*11/22/23 07:55*	*11/22/23 12:53*	*1*
DCB Decachlorobiphenyl (Surr)	*97*		*32 - 150*	*11/22/23 07:55*	*11/22/23 12:53*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**500**		11	4.4	mg/Kg	☼	11/17/23 08:14	11/17/23 22:26	1
Residual Range Organics (RRO) (C25-C36)	**63**		26	5.3	mg/Kg	☼	11/17/23 08:14	11/17/23 22:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*112*		*50 - 150*	*11/17/23 08:14*	*11/17/23 22:26*	*1*
n-Triacontane-d62	*89*		*50 - 150*	*11/17/23 08:14*	*11/17/23 22:26*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.6**		0.76	0.30	mg/Kg	☼	11/20/23 09:18	11/21/23 16:47	1
Barium	**95**		0.76	0.20	mg/Kg	☼	11/20/23 09:18	11/21/23 16:47	1
Cadmium	**0.74**		0.61	0.036	mg/Kg	☼	11/20/23 09:18	11/21/23 16:47	1
Chromium	**4.1**		0.76	0.11	mg/Kg	☼	11/20/23 09:18	11/21/23 16:47	1
Copper	**13**		2.4	0.46	mg/Kg	☼	11/20/23 09:18	11/21/23 16:47	1
Lead	**14**		1.8	0.89	mg/Kg	☼	11/20/23 09:18	11/21/23 16:47	1
Nickel	**4.8**		0.76	0.094	mg/Kg	☼	11/20/23 09:18	11/21/23 16:47	1
Selenium	ND		3.0	1.8	mg/Kg	☼	11/20/23 09:18	11/21/23 16:47	1
Silver	ND		0.76	0.17	mg/Kg	☼	11/20/23 09:18	11/21/23 16:47	1
Zinc	**75**		3.0	0.48	mg/Kg	☼	11/20/23 09:18	11/21/23 16:47	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**3.2**	**J**	40	2.8	ug/Kg	☼	11/17/23 11:43	11/20/23 16:58	1

Client Sample ID: HA-3 (3-4)
Lab Sample ID: 590-22203-6

Date Collected: 11/07/23 13:20
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 86.3

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		11	2.4	ug/Kg	☼	11/22/23 07:55	11/22/23 13:14	1
PCB-1221	ND		11	2.4	ug/Kg	☼	11/22/23 07:55	11/22/23 13:14	1
PCB-1232	ND		11	2.4	ug/Kg	☼	11/22/23 07:55	11/22/23 13:14	1
PCB-1242	ND		11	2.4	ug/Kg	☼	11/22/23 07:55	11/22/23 13:14	1
PCB-1248	ND		11	2.4	ug/Kg	☼	11/22/23 07:55	11/22/23 13:14	1
PCB-1254	ND		11	2.4	ug/Kg	☼	11/22/23 07:55	11/22/23 13:14	1
PCB-1260	ND		11	2.4	ug/Kg	☼	11/22/23 07:55	11/22/23 13:14	1
PCB-1268	ND		11	2.4	ug/Kg	☼	11/22/23 07:55	11/22/23 13:14	1
PCB-1262	ND		11	2.4	ug/Kg	☼	11/22/23 07:55	11/22/23 13:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*37 - 126*	*11/22/23 07:55*	*11/22/23 13:14*	*1*
DCB Decachlorobiphenyl (Surr)	*102*		*32 - 150*	*11/22/23 07:55*	*11/22/23 13:14*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**16**		11	4.7	mg/Kg	☼	11/17/23 08:14	11/17/23 22:47	1
Residual Range Organics (RRO) (C25-C36)	ND		28	5.6	mg/Kg	☼	11/17/23 08:14	11/17/23 22:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*86*		*50 - 150*	*11/17/23 08:14*	*11/17/23 22:47*	*1*
n-Triacontane-d62	*85*		*50 - 150*	*11/17/23 08:14*	*11/17/23 22:47*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.6**		0.92	0.37	mg/Kg	☼	11/20/23 09:18	11/21/23 16:51	1
Barium	**140**		0.92	0.25	mg/Kg	☼	11/20/23 09:18	11/21/23 16:51	1
Cadmium	ND		0.74	0.044	mg/Kg	☼	11/20/23 09:18	11/21/23 16:51	1
Chromium	**5.0**		0.92	0.13	mg/Kg	☼	11/20/23 09:18	11/21/23 16:51	1
Copper	**11**		3.0	0.56	mg/Kg	☼	11/20/23 09:18	11/21/23 16:51	1
Lead	**59**		2.2	1.1	mg/Kg	☼	11/20/23 09:18	11/21/23 16:51	1
Nickel	**6.6**		0.92	0.11	mg/Kg	☼	11/20/23 09:18	11/21/23 16:51	1
Selenium	ND		3.7	2.2	mg/Kg	☼	11/20/23 09:18	11/21/23 16:51	1
Silver	ND		0.92	0.21	mg/Kg	☼	11/20/23 09:18	11/21/23 16:51	1
Zinc	**30**		3.7	0.59	mg/Kg	☼	11/20/23 09:18	11/21/23 16:51	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**7.1**	**J**	40	2.8	ug/Kg	☼	11/17/23 11:43	11/20/23 17:01	1

Client Sample ID: HA-4 (0-2)
Lab Sample ID: 590-22203-7

Date Collected: 11/07/23 12:35
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 77.0

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 13:36	1
PCB-1221	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 13:36	1
PCB-1232	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 13:36	1
PCB-1242	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 13:36	1

Client Sample ID: HA-4 (0-2)
Lab Sample ID: 590-22203-7

Date Collected: 11/07/23 12:35
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 77.0

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 13:36	1
PCB-1254	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 13:36	1
PCB-1260	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 13:36	1
PCB-1268	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 13:36	1
PCB-1262	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 13:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*72*		*37 - 126*	*11/22/23 07:55*	*11/22/23 13:36*	*1*
DCB Decachlorobiphenyl (Surr)	*94*		*32 - 150*	*11/22/23 07:55*	*11/22/23 13:36*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		12	5.2	mg/Kg	☼	11/17/23 08:14	11/17/23 23:08	1
Residual Range Organics (RRO) (C25-C36)	ND		31	6.2	mg/Kg	☼	11/17/23 08:14	11/17/23 23:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*80*		*50 - 150*	*11/17/23 08:14*	*11/17/23 23:08*	*1*
n-Triacontane-d62	*82*		*50 - 150*	*11/17/23 08:14*	*11/17/23 23:08*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.2**		1.2	0.48	mg/Kg	☼	11/20/23 09:18	11/21/23 16:56	1
Barium	**190**		1.2	0.32	mg/Kg	☼	11/20/23 09:18	11/21/23 16:56	1
Cadmium	ND		0.96	0.057	mg/Kg	☼	11/20/23 09:18	11/21/23 16:56	1
Chromium	**7.4**		1.2	0.17	mg/Kg	☼	11/20/23 09:18	11/21/23 16:56	1
Copper	**13**		3.8	0.73	mg/Kg	☼	11/20/23 09:18	11/21/23 16:56	1
Lead	**9.5**		2.9	1.4	mg/Kg	☼	11/20/23 09:18	11/21/23 16:56	1
Nickel	**7.7**		1.2	0.15	mg/Kg	☼	11/20/23 09:18	11/21/23 16:56	1
Selenium	ND		4.8	2.9	mg/Kg	☼	11/20/23 09:18	11/21/23 16:56	1
Silver	ND		1.2	0.28	mg/Kg	☼	11/20/23 09:18	11/21/23 16:56	1
Zinc	**44**		4.8	0.76	mg/Kg	☼	11/20/23 09:18	11/21/23 16:56	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**11**	**J**	40	2.8	ug/Kg	☼	11/17/23 11:43	11/20/23 17:03	1

Client Sample ID: HA-5 (0-2)
Lab Sample ID: 590-22203-8

Date Collected: 11/07/23 12:37
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 75.7

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		13	2.8	ug/Kg	☼	11/22/23 07:55	11/22/23 13:57	1
PCB-1221	ND		13	2.8	ug/Kg	☼	11/22/23 07:55	11/22/23 13:57	1
PCB-1232	ND		13	2.8	ug/Kg	☼	11/22/23 07:55	11/22/23 13:57	1
PCB-1242	ND		13	2.8	ug/Kg	☼	11/22/23 07:55	11/22/23 13:57	1
PCB-1248	ND		13	2.8	ug/Kg	☼	11/22/23 07:55	11/22/23 13:57	1
PCB-1254	ND		13	2.8	ug/Kg	☼	11/22/23 07:55	11/22/23 13:57	1
PCB-1260	ND		13	2.8	ug/Kg	☼	11/22/23 07:55	11/22/23 13:57	1
PCB-1268	ND		13	2.8	ug/Kg	☼	11/22/23 07:55	11/22/23 13:57	1

Client Sample ID: HA-5 (0-2)
Lab Sample ID: 590-22203-8

Date Collected: 11/07/23 12:37
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 75.7

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1262	ND		13	2.8	ug/Kg	☼	11/22/23 07:55	11/22/23 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*37 - 126*	*11/22/23 07:55*	*11/22/23 13:57*	*1*
DCB Decachlorobiphenyl (Surr)	*101*		*32 - 150*	*11/22/23 07:55*	*11/22/23 13:57*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		13	5.5	mg/Kg	☼	11/17/23 08:14	11/17/23 23:28	1
Residual Range Organics (RRO) (C25-C36)	ND		33	6.6	mg/Kg	☼	11/17/23 08:14	11/17/23 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*90*		*50 - 150*	*11/17/23 08:14*	*11/17/23 23:28*	*1*
n-Triacontane-d62	*85*		*50 - 150*	*11/17/23 08:14*	*11/17/23 23:28*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.3**		0.98	0.39	mg/Kg	☼	11/20/23 09:18	11/21/23 17:00	1
Barium	**170**		0.98	0.26	mg/Kg	☼	11/20/23 09:18	11/21/23 17:00	1
Cadmium	ND		0.79	0.046	mg/Kg	☼	11/20/23 09:18	11/21/23 17:00	1
Chromium	**6.4**		0.98	0.14	mg/Kg	☼	11/20/23 09:18	11/21/23 17:00	1
Copper	**9.5**		3.1	0.60	mg/Kg	☼	11/20/23 09:18	11/21/23 17:00	1
Lead	**7.7**		2.4	1.2	mg/Kg	☼	11/20/23 09:18	11/21/23 17:00	1
Nickel	**6.3**		0.98	0.12	mg/Kg	☼	11/20/23 09:18	11/21/23 17:00	1
Selenium	ND		3.9	2.4	mg/Kg	☼	11/20/23 09:18	11/21/23 17:00	1
Silver	ND		0.98	0.22	mg/Kg	☼	11/20/23 09:18	11/21/23 17:00	1
Zinc	**28**		3.9	0.62	mg/Kg	☼	11/20/23 09:18	11/21/23 17:00	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**6.4**	**J**	40	2.8	ug/Kg	☼	11/17/23 11:43	11/20/23 17:06	1

Client Sample ID: HA-6 (0-2)
Lab Sample ID: 590-22203-9

Date Collected: 11/07/23 12:39
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 81.8

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 14:13	1
PCB-1221	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 14:13	1
PCB-1232	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 14:13	1
PCB-1242	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 14:13	1
PCB-1248	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 14:13	1
PCB-1254	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 14:13	1
PCB-1260	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 14:13	1
PCB-1268	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 14:13	1
PCB-1262	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*94*		*37 - 126*	*11/22/23 07:55*	*11/22/23 14:13*	*1*

Client Sample ID: HA-6 (0-2)
Lab Sample ID: 590-22203-9

Date Collected: 11/07/23 12:39
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 81.8

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*106*		*32 - 150*	*11/22/23 07:55*	*11/22/23 14:13*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**11**	**J**	12	5.1	mg/Kg	☼	11/17/23 08:14	11/17/23 23:49	1
Residual Range Organics (RRO) (C25-C36)	**15**	**J**	30	6.1	mg/Kg	☼	11/17/23 08:14	11/17/23 23:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*87*		*50 - 150*	*11/17/23 08:14*	*11/17/23 23:49*	*1*
n-Triacontane-d62	*92*		*50 - 150*	*11/17/23 08:14*	*11/17/23 23:49*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.3**		1.1	0.44	mg/Kg	☼	11/20/23 09:18	11/21/23 17:04	1
Barium	**170**		1.1	0.30	mg/Kg	☼	11/20/23 09:18	11/21/23 17:04	1
Cadmium	**0.37**	**J**	0.89	0.052	mg/Kg	☼	11/20/23 09:18	11/21/23 17:04	1
Chromium	**6.4**		1.1	0.16	mg/Kg	☼	11/20/23 09:18	11/21/23 17:04	1
Copper	**23**		3.5	0.67	mg/Kg	☼	11/20/23 09:18	11/21/23 17:04	1
Lead	**40**		2.7	1.3	mg/Kg	☼	11/20/23 09:18	11/21/23 17:04	1
Nickel	**6.1**		1.1	0.14	mg/Kg	☼	11/20/23 09:18	11/21/23 17:04	1
Selenium	ND		4.4	2.7	mg/Kg	☼	11/20/23 09:18	11/21/23 17:04	1
Silver	ND		1.1	0.25	mg/Kg	☼	11/20/23 09:18	11/21/23 17:04	1
Zinc	**85**		4.4	0.70	mg/Kg	☼	11/20/23 09:18	11/21/23 17:04	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**7.5**	**J**	37	2.7	ug/Kg	☼	11/17/23 11:43	11/20/23 17:08	1

Client Sample ID: HA-7 (0-2)
Lab Sample ID: 590-22203-10

Date Collected: 11/07/23 12:43
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 83.7

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		12	2.6	ug/Kg	☼	11/22/23 07:55	11/22/23 14:34	1
PCB-1221	ND		12	2.6	ug/Kg	☼	11/22/23 07:55	11/22/23 14:34	1
PCB-1232	ND		12	2.6	ug/Kg	☼	11/22/23 07:55	11/22/23 14:34	1
PCB-1242	ND		12	2.6	ug/Kg	☼	11/22/23 07:55	11/22/23 14:34	1
PCB-1248	ND		12	2.6	ug/Kg	☼	11/22/23 07:55	11/22/23 14:34	1
PCB-1254	ND		12	2.6	ug/Kg	☼	11/22/23 07:55	11/22/23 14:34	1
PCB-1260	ND		12	2.6	ug/Kg	☼	11/22/23 07:55	11/22/23 14:34	1
PCB-1268	ND		12	2.6	ug/Kg	☼	11/22/23 07:55	11/22/23 14:34	1
PCB-1262	ND		12	2.6	ug/Kg	☼	11/22/23 07:55	11/22/23 14:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*37 - 126*	*11/22/23 07:55*	*11/22/23 14:34*	*1*
DCB Decachlorobiphenyl (Surr)	*97*		*32 - 150*	*11/22/23 07:55*	*11/22/23 14:34*	*1*

Client Sample ID: HA-7 (0-2)
Lab Sample ID: 590-22203-10

Date Collected: 11/07/23 12:43
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 83.7

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		12	5.0	mg/Kg	☼	11/17/23 08:14	11/18/23 00:10	1
Residual Range Organics (RRO) (C25-C36)	ND		30	5.9	mg/Kg	☼	11/17/23 08:14	11/18/23 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*82*		*50 - 150*	*11/17/23 08:14*	*11/18/23 00:10*	*1*
n-Triacontane-d62	*80*		*50 - 150*	*11/17/23 08:14*	*11/18/23 00:10*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.0**		0.97	0.38	mg/Kg	☼	11/20/23 09:18	11/21/23 17:08	1
Barium	**170**		0.97	0.26	mg/Kg	☼	11/20/23 09:18	11/21/23 17:08	1
Cadmium	ND		0.78	0.046	mg/Kg	☼	11/20/23 09:18	11/21/23 17:08	1
Chromium	**5.9**		0.97	0.14	mg/Kg	☼	11/20/23 09:18	11/21/23 17:08	1
Copper	**13**		3.1	0.59	mg/Kg	☼	11/20/23 09:18	11/21/23 17:08	1
Lead	**8.1**		2.3	1.1	mg/Kg	☼	11/20/23 09:18	11/21/23 17:08	1
Nickel	**6.6**		0.97	0.12	mg/Kg	☼	11/20/23 09:18	11/21/23 17:08	1
Selenium	ND		3.9	2.3	mg/Kg	☼	11/20/23 09:18	11/21/23 17:08	1
Silver	ND		0.97	0.22	mg/Kg	☼	11/20/23 09:18	11/21/23 17:08	1
Zinc	**48**		3.9	0.62	mg/Kg	☼	11/20/23 09:18	11/21/23 17:08	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		42	3.0	ug/Kg	☼	11/17/23 11:43	11/20/23 17:11	1

Client Sample ID: HA-8 (1-2)
Lab Sample ID: 590-22203-11

Date Collected: 11/07/23 11:38
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 89.3

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		11	2.4	ug/Kg	☼	11/22/23 07:55	11/22/23 14:51	1
PCB-1221	ND		11	2.4	ug/Kg	☼	11/22/23 07:55	11/22/23 14:51	1
PCB-1232	ND		11	2.4	ug/Kg	☼	11/22/23 07:55	11/22/23 14:51	1
PCB-1242	ND		11	2.4	ug/Kg	☼	11/22/23 07:55	11/22/23 14:51	1
PCB-1248	ND		11	2.4	ug/Kg	☼	11/22/23 07:55	11/22/23 14:51	1
PCB-1254	ND		11	2.4	ug/Kg	☼	11/22/23 07:55	11/22/23 14:51	1
PCB-1260	ND		11	2.4	ug/Kg	☼	11/22/23 07:55	11/22/23 14:51	1
PCB-1268	ND		11	2.4	ug/Kg	☼	11/22/23 07:55	11/22/23 14:51	1
PCB-1262	ND		11	2.4	ug/Kg	☼	11/22/23 07:55	11/22/23 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*37 - 126*	*11/22/23 07:55*	*11/22/23 14:51*	*1*
DCB Decachlorobiphenyl (Surr)	*82*		*32 - 150*	*11/22/23 07:55*	*11/22/23 14:51*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**10**	**J**	11	4.6	mg/Kg	☼	11/17/23 08:14	11/18/23 00:31	1
Residual Range Organics (RRO) (C25-C36)	**12**	**J**	28	5.5	mg/Kg	☼	11/17/23 08:14	11/18/23 00:31	1

Client Sample ID: HA-8 (1-2)
Lab Sample ID: 590-22203-11
Date Collected: 11/07/23 11:38
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 89.3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*93*		*50 - 150*	*11/17/23 08:14*	*11/18/23 00:31*	*1*
n-Triacontane-d62	*88*		*50 - 150*	*11/17/23 08:14*	*11/18/23 00:31*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.2**		0.89	0.35	mg/Kg	☼	11/20/23 09:18	11/21/23 17:12	1
Barium	**130**		0.89	0.24	mg/Kg	☼	11/20/23 09:18	11/21/23 17:12	1
Cadmium	ND		0.71	0.042	mg/Kg	☼	11/20/23 09:18	11/21/23 17:12	1
Chromium	**2.9**		0.89	0.13	mg/Kg	☼	11/20/23 09:18	11/21/23 17:12	1
Copper	**13**		2.8	0.54	mg/Kg	☼	11/20/23 09:18	11/21/23 17:12	1
Lead	**10**		2.1	1.0	mg/Kg	☼	11/20/23 09:18	11/21/23 17:12	1
Nickel	**5.0**		0.89	0.11	mg/Kg	☼	11/20/23 09:18	11/21/23 17:12	1
Selenium	ND		3.5	2.1	mg/Kg	☼	11/20/23 09:18	11/21/23 17:12	1
Silver	ND		0.89	0.20	mg/Kg	☼	11/20/23 09:18	11/21/23 17:12	1
Zinc	**42**		3.5	0.56	mg/Kg	☼	11/20/23 09:18	11/21/23 17:12	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	**8.2**	**J**	41	2.9	ug/Kg	☼	11/17/23 11:43	11/20/23 17:13	1

Client Sample ID: HA-9 (0-0.5)
Lab Sample ID: 590-22203-13
Date Collected: 11/07/23 11:55
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 82.0

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 15:12	1
PCB-1221	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 15:12	1
PCB-1232	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 15:12	1
PCB-1242	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 15:12	1
PCB-1248	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 15:12	1
PCB-1254	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 15:12	1
PCB-1260	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 15:12	1
PCB-1268	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 15:12	1
PCB-1262	ND		12	2.7	ug/Kg	☼	11/22/23 07:55	11/22/23 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*37 - 126*	*11/22/23 07:55*	*11/22/23 15:12*	*1*
DCB Decachlorobiphenyl (Surr)	*86*		*32 - 150*	*11/22/23 07:55*	*11/22/23 15:12*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		12	5.1	mg/Kg	☼	11/17/23 08:14	11/18/23 00:51	1
Residual Range Organics (RRO) (C25-C36)	ND		30	6.1	mg/Kg	☼	11/17/23 08:14	11/18/23 00:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*94*		*50 - 150*	*11/17/23 08:14*	*11/18/23 00:51*	*1*
n-Triacontane-d62	*89*		*50 - 150*	*11/17/23 08:14*	*11/18/23 00:51*	*1*

Client: GeoEngineers Inc
Job ID: 590-22203-1
Project/Site: Avista Davenport Substation/2522-117-00

Client Sample ID: HA-9 (0-0.5)
Lab Sample ID: 590-22203-13
Date Collected: 11/07/23 11:55
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 82.0

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.0		1.1	0.43	mg/Kg	☼	11/20/23 09:18	11/21/23 17:16	1
Barium	160		1.1	0.29	mg/Kg	☼	11/20/23 09:18	11/21/23 17:16	1
Cadmium	0.085	J	0.86	0.051	mg/Kg	☼	11/20/23 09:18	11/21/23 17:16	1
Chromium	7.8		1.1	0.15	mg/Kg	☼	11/20/23 09:18	11/21/23 17:16	1
Copper	14		3.4	0.65	mg/Kg	☼	11/20/23 09:18	11/21/23 17:16	1
Lead	12		2.6	1.3	mg/Kg	☼	11/20/23 09:18	11/21/23 17:16	1
Nickel	8.3		1.1	0.13	mg/Kg	☼	11/20/23 09:18	11/21/23 17:16	1
Selenium	ND		4.3	2.6	mg/Kg	☼	11/20/23 09:18	11/21/23 17:16	1
Silver	ND		1.1	0.25	mg/Kg	☼	11/20/23 09:18	11/21/23 17:16	1
Zinc	48		4.3	0.68	mg/Kg	☼	11/20/23 09:18	11/21/23 17:16	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	30	J	48	3.5	ug/Kg	☼	11/17/23 11:43	11/20/23 17:16	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 590-44779/1-A
Matrix: Solid
Analysis Batch: 44782

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44779

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10	2.2	ug/Kg		11/22/23 07:55	11/22/23 10:11	1
PCB-1221	ND		10	2.2	ug/Kg		11/22/23 07:55	11/22/23 10:11	1
PCB-1232	ND		10	2.2	ug/Kg		11/22/23 07:55	11/22/23 10:11	1
PCB-1242	ND		10	2.2	ug/Kg		11/22/23 07:55	11/22/23 10:11	1
PCB-1248	ND		10	2.2	ug/Kg		11/22/23 07:55	11/22/23 10:11	1
PCB-1254	ND		10	2.2	ug/Kg		11/22/23 07:55	11/22/23 10:11	1
PCB-1260	ND		10	2.2	ug/Kg		11/22/23 07:55	11/22/23 10:11	1
PCB-1268	ND		10	2.2	ug/Kg		11/22/23 07:55	11/22/23 10:11	1
PCB-1262	ND		10	2.2	ug/Kg		11/22/23 07:55	11/22/23 10:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*37 - 126*	*11/22/23 07:55*	*11/22/23 10:11*	*1*
DCB Decachlorobiphenyl (Surr)	*104*		*32 - 150*	*11/22/23 07:55*	*11/22/23 10:11*	*1*

Lab Sample ID: LCS 590-44779/2-A
Matrix: Solid
Analysis Batch: 44782

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44779

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			66.7	51.6		ug/Kg		77	67 - 120		
PCB-1260			66.7	55.3		ug/Kg		83	58 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*80*		*37 - 126*
DCB Decachlorobiphenyl (Surr)	*95*		*32 - 150*

Lab Sample ID: 590-22203-3 MS
Matrix: Solid
Analysis Batch: 44782

Client Sample ID: HA-2 (0-1)
Prep Type: Total/NA
Prep Batch: 44779

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016	ND		74.0	57.5		ug/Kg	☼	78	67 - 120		
PCB-1260	8.9	J	74.0	63.8		ug/Kg	☼	74	58 - 133		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*78*		*37 - 126*
DCB Decachlorobiphenyl (Surr)	*83*		*32 - 150*

Lab Sample ID: 590-22203-3 MSD
Matrix: Solid
Analysis Batch: 44782

Client Sample ID: HA-2 (0-1)
Prep Type: Total/NA
Prep Batch: 44779

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND		72.4	55.0		ug/Kg	☼	76	67 - 120	5	13
PCB-1260	8.9	J	72.4	61.6		ug/Kg	☼	73	58 - 133	4	13

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 590-22203-3 MSD
Matrix: Solid
Analysis Batch: 44782

Client Sample ID: HA-2 (0-1)
Prep Type: Total/NA
Prep Batch: 44779

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*74*		*37 - 126*
DCB Decachlorobiphenyl (Surr)	*75*		*32 - 150*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 590-44699/1-A
Matrix: Solid
Analysis Batch: 44717

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44699

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		10	4.2	mg/Kg		11/17/23 08:14	11/17/23 19:18	1
Residual Range Organics (RRO) (C25-C36)	ND		25	5.0	mg/Kg		11/17/23 08:14	11/17/23 19:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*93*		*50 - 150*	*11/17/23 08:14*	*11/17/23 19:18*	*1*
n-Triacontane-d62	*86*		*50 - 150*	*11/17/23 08:14*	*11/17/23 19:18*	*1*

Lab Sample ID: LCS 590-44699/2-A
Matrix: Solid
Analysis Batch: 44717

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44699

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics (DRO) (C10-C25)	66.7	67.2		mg/Kg		101	50 - 150
Residual Range Organics (RRO) (C25-C36)	66.7	68.2		mg/Kg		102	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*100*		*50 - 150*
n-Triacontane-d62	*100*		*50 - 150*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 590-44738/2-A
Matrix: Solid
Analysis Batch: 44780

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44738

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.3	0.50	mg/Kg		11/20/23 09:18	11/21/23 15:54	1
Barium	ND		1.3	0.34	mg/Kg		11/20/23 09:18	11/21/23 15:54	1
Cadmium	ND		1.0	0.059	mg/Kg		11/20/23 09:18	11/21/23 15:54	1
Chromium	ND		1.3	0.18	mg/Kg		11/20/23 09:18	11/21/23 15:54	1
Copper	ND		4.0	0.76	mg/Kg		11/20/23 09:18	11/21/23 15:54	1
Lead	ND		3.0	1.5	mg/Kg		11/20/23 09:18	11/21/23 15:54	1
Nickel	ND		1.3	0.15	mg/Kg		11/20/23 09:18	11/21/23 15:54	1
Selenium	ND		5.0	3.0	mg/Kg		11/20/23 09:18	11/21/23 15:54	1
Silver	ND		1.3	0.29	mg/Kg		11/20/23 09:18	11/21/23 15:54	1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: MB 590-44738/2-A
Matrix: Solid
Analysis Batch: 44780

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44738

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		5.0	0.79	mg/Kg		11/20/23 09:18	11/21/23 15:54	1

Lab Sample ID: LCS 590-44738/1-A
Matrix: Solid
Analysis Batch: 44780

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44738

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	100	98.0		mg/Kg		98	80 - 120
Barium	100	91.6		mg/Kg		92	80 - 120
Cadmium	50.0	49.8		mg/Kg		100	80 - 120
Chromium	50.0	50.3		mg/Kg		101	80 - 120
Copper	50.0	50.6		mg/Kg		101	80 - 120
Lead	50.0	51.7		mg/Kg		103	80 - 120
Nickel	50.0	49.2		mg/Kg		98	80 - 120
Selenium	100	96.8		mg/Kg		97	80 - 120
Silver	5.00	4.28		mg/Kg		86	80 - 120
Zinc	50.0	48.3		mg/Kg		97	80 - 120

Lab Sample ID: LCS 590-44767/1-A
Matrix: Solid
Analysis Batch: 44778

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44767

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	2.00	2.06		mg/L		103	80 - 120
Barium	2.00	1.93		mg/L		97	80 - 120
Cadmium	1.00	1.05		mg/L		105	80 - 120
Chromium	1.00	1.04		mg/L		104	80 - 120
Lead	1.00	1.09		mg/L		109	80 - 120
Selenium	2.00	2.06		mg/L		103	80 - 120
Silver	0.100	0.0903		mg/L		90	80 - 120

Lab Sample ID: LB 590-44766/1-B
Matrix: Solid
Analysis Batch: 44778

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 44767

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.025	0.010	mg/L		11/21/23 09:46	11/21/23 14:47	1
Barium	0.00506	J	0.025	0.0014	mg/L		11/21/23 09:46	11/21/23 14:47	1
Cadmium	ND		0.025	0.0012	mg/L		11/21/23 09:46	11/21/23 14:47	1
Chromium	0.00244	J	0.025	0.0017	mg/L		11/21/23 09:46	11/21/23 14:47	1
Lead	ND		0.060	0.0051	mg/L		11/21/23 09:46	11/21/23 14:47	1
Selenium	ND		0.10	0.049	mg/L		11/21/23 09:46	11/21/23 14:47	1
Silver	ND		0.025	0.0025	mg/L		11/21/23 09:46	11/21/23 14:47	1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: LCS 590-44768/8-A
Matrix: Solid
Analysis Batch: 44776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44768

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Hg			2.00	1.83		ug/L		92	80 - 120		

Lab Sample ID: LB 590-44766/1-C
Matrix: Solid
Analysis Batch: 44776

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 44768

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		0.20	0.090	ug/L		11/21/23 09:58	11/21/23 15:08	1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 590-44716/9-A
Matrix: Solid
Analysis Batch: 44760

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44716

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	ND		50	3.6	ug/Kg		11/17/23 11:42	11/20/23 16:17	1

Lab Sample ID: LCS 590-44716/8-A
Matrix: Solid
Analysis Batch: 44760

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44716

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Hg			200	195		ug/Kg		98	80 - 120		

Lab Chronicle

Client: GeoEngineers Inc
Job ID: 590-22203-1
Project/Site: Avista Davenport Substation/2522-117-00

Client Sample ID: Comp:110723
Lab Sample ID: 590-22203-1
Date Collected: 11/07/23 13:22
Matrix: Solid
Date Received: 11/08/23 08:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			100.22 g	2000.74 mL	44766	11/20/23 16:43	AMB	EET SPK
TCLP	Prep	3010A			50 mL	50 mL	44767	11/21/23 09:46	AMB	EET SPK
TCLP	Analysis	6010D		1			44778	11/21/23 15:29	AMB	EET SPK
TCLP	Leach	1311			100.22 g	2000.74 mL	44766	11/20/23 16:43	AMB	EET SPK
TCLP	Prep	7470A			50 mL	50 mL	44768	11/21/23 09:58	AMB	EET SPK
TCLP	Analysis	7470A		1			44776	11/21/23 15:20	AMB	EET SPK

Client Sample ID: HA-1 (0-2)
Lab Sample ID: 590-22203-2
Date Collected: 11/07/23 12:25
Matrix: Solid
Date Received: 11/08/23 08:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			44578	11/13/23 09:11	NMI	EET SPK

Client Sample ID: HA-1 (0-2)
Lab Sample ID: 590-22203-2
Date Collected: 11/07/23 12:25
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.21 g	5 mL	44779	11/22/23 07:55	MRV	EET SPK
Total/NA	Analysis	8082A		1	1 mL	1 mL	44782	11/22/23 11:28	NMI	EET SPK
Total/NA	Prep	3550C			15.24 g	5 mL	44699	11/17/23 08:14	MRV	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	44717	11/17/23 21:23	NMI	EET SPK
Total/NA	Prep	3050B			1.32 g	50 mL	44738	11/20/23 09:18	AMB	EET SPK
Total/NA	Analysis	6010D		1			44780	11/21/23 16:27	AMB	EET SPK
Total/NA	Prep	7471B			0.71 g	50 mL	44716	11/17/23 11:43	AMB	EET SPK
Total/NA	Analysis	7471B		1			44760	11/20/23 16:48	AMB	EET SPK

Client Sample ID: HA-2 (0-1)
Lab Sample ID: 590-22203-3
Date Collected: 11/07/23 10:17
Matrix: Solid
Date Received: 11/08/23 08:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			44578	11/13/23 09:11	NMI	EET SPK

Client Sample ID: HA-2 (0-1)
Lab Sample ID: 590-22203-3
Date Collected: 11/07/23 10:17
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.19 g	5 mL	44779	11/22/23 07:55	MRV	EET SPK
Total/NA	Analysis	8082A		1	1 mL	1 mL	44782	11/22/23 11:49	NMI	EET SPK
Total/NA	Prep	3550C			15.17 g	5 mL	44699	11/17/23 08:14	MRV	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	44717	11/17/23 22:05	NMI	EET SPK
Total/NA	Prep	3050B			1.62 g	50 mL	44738	11/20/23 09:18	AMB	EET SPK
Total/NA	Analysis	6010D		1			44780	11/21/23 16:43	AMB	EET SPK

Lab Chronicle

Client: GeoEngineers Inc
Job ID: 590-22203-1
Project/Site: Avista Davenport Substation/2522-117-00

Client Sample ID: HA-2 (0-1)
Lab Sample ID: 590-22203-3
Date Collected: 11/07/23 10:17
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			0.61 g	50 mL	44716	11/17/23 11:43	AMB	EET SPK
Total/NA	Analysis	7471B		1			44760	11/20/23 16:51	AMB	EET SPK

Client Sample ID: HA-3 (1-2)
Lab Sample ID: 590-22203-5
Date Collected: 11/07/23 10:33
Matrix: Solid
Date Received: 11/08/23 08:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			44578	11/13/23 09:11	NMI	EET SPK

Client Sample ID: HA-3 (1-2)
Lab Sample ID: 590-22203-5
Date Collected: 11/07/23 10:33
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.55 g	5 mL	44779	11/22/23 07:55	MRV	EET SPK
Total/NA	Analysis	8082A		1	1 mL	1 mL	44782	11/22/23 12:53	NMI	EET SPK
Total/NA	Prep	3550C			15.37 g	5 mL	44699	11/17/23 08:14	MRV	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	44717	11/17/23 22:26	NMI	EET SPK
Total/NA	Prep	3050B			1.78 g	50 mL	44738	11/20/23 09:18	AMB	EET SPK
Total/NA	Analysis	6010D		1			44780	11/21/23 16:47	AMB	EET SPK
Total/NA	Prep	7471B			0.68 g	50 mL	44716	11/17/23 11:43	AMB	EET SPK
Total/NA	Analysis	7471B		1			44760	11/20/23 16:58	AMB	EET SPK

Client Sample ID: HA-3 (3-4)
Lab Sample ID: 590-22203-6
Date Collected: 11/07/23 13:20
Matrix: Solid
Date Received: 11/08/23 08:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			44578	11/13/23 09:11	NMI	EET SPK

Client Sample ID: HA-3 (3-4)
Lab Sample ID: 590-22203-6
Date Collected: 11/07/23 13:20
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.80 g	5 mL	44779	11/22/23 07:55	MRV	EET SPK
Total/NA	Analysis	8082A		1	1 mL	1 mL	44782	11/22/23 13:14	NMI	EET SPK
Total/NA	Prep	3550C			15.48 g	5 mL	44699	11/17/23 08:14	MRV	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	44717	11/17/23 22:47	NMI	EET SPK
Total/NA	Prep	3050B			1.57 g	50 mL	44738	11/20/23 09:18	AMB	EET SPK
Total/NA	Analysis	6010D		1			44780	11/21/23 16:51	AMB	EET SPK
Total/NA	Prep	7471B			0.73 g	50 mL	44716	11/17/23 11:43	AMB	EET SPK
Total/NA	Analysis	7471B		1			44760	11/20/23 17:01	AMB	EET SPK

Lab Chronicle

Client: GeoEngineers Inc
Job ID: 590-22203-1
Project/Site: Avista Davenport Substation/2522-117-00

Client Sample ID: HA-4 (0-2)
Lab Sample ID: 590-22203-7
Date Collected: 11/07/23 12:35
Matrix: Solid
Date Received: 11/08/23 08:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			44578	11/13/23 09:11	NMI	EET SPK

Client Sample ID: HA-4 (0-2)
Lab Sample ID: 590-22203-7
Date Collected: 11/07/23 12:35
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 77.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.69 g	5 mL	44779	11/22/23 07:55	MRV	EET SPK
Total/NA	Analysis	8082A		1	1 mL	1 mL	44782	11/22/23 13:36	NMI	EET SPK
Total/NA	Prep	3550C			15.66 g	5 mL	44699	11/17/23 08:14	MRV	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	44717	11/17/23 23:08	NMI	EET SPK
Total/NA	Prep	3050B			1.35 g	50 mL	44738	11/20/23 09:18	AMB	EET SPK
Total/NA	Analysis	6010D		1			44780	11/21/23 16:56	AMB	EET SPK
Total/NA	Prep	7471B			0.82 g	50 mL	44716	11/17/23 11:43	AMB	EET SPK
Total/NA	Analysis	7471B		1			44760	11/20/23 17:03	AMB	EET SPK

Client Sample ID: HA-5 (0-2)
Lab Sample ID: 590-22203-8
Date Collected: 11/07/23 12:37
Matrix: Solid
Date Received: 11/08/23 08:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			44578	11/13/23 09:11	NMI	EET SPK

Client Sample ID: HA-5 (0-2)
Lab Sample ID: 590-22203-8
Date Collected: 11/07/23 12:37
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 75.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.54 g	5 mL	44779	11/22/23 07:55	MRV	EET SPK
Total/NA	Analysis	8082A		1	1 mL	1 mL	44782	11/22/23 13:57	NMI	EET SPK
Total/NA	Prep	3550C			15.04 g	5 mL	44699	11/17/23 08:14	MRV	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	44717	11/17/23 23:28	NMI	EET SPK
Total/NA	Prep	3050B			1.68 g	50 mL	44738	11/20/23 09:18	AMB	EET SPK
Total/NA	Analysis	6010D		1			44780	11/21/23 17:00	AMB	EET SPK
Total/NA	Prep	7471B			0.83 g	50 mL	44716	11/17/23 11:43	AMB	EET SPK
Total/NA	Analysis	7471B		1			44760	11/20/23 17:06	AMB	EET SPK

Client Sample ID: HA-6 (0-2)
Lab Sample ID: 590-22203-9
Date Collected: 11/07/23 12:39
Matrix: Solid
Date Received: 11/08/23 08:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			44578	11/13/23 09:11	NMI	EET SPK

Lab Chronicle

Client: GeoEngineers Inc
Job ID: 590-22203-1
Project/Site: Avista Davenport Substation/2522-117-00

Client Sample ID: HA-6 (0-2)
Lab Sample ID: 590-22203-9
Date Collected: 11/07/23 12:39
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.04 g	5 mL	44779	11/22/23 07:55	MRV	EET SPK
Total/NA	Analysis	8082A		1	1 mL	1 mL	44782	11/22/23 14:13	NMI	EET SPK
Total/NA	Prep	3550C			15.04 g	5 mL	44699	11/17/23 08:14	MRV	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	44717	11/17/23 23:49	NMI	EET SPK
Total/NA	Prep	3050B			1.38 g	50 mL	44738	11/20/23 09:18	AMB	EET SPK
Total/NA	Analysis	6010D		1			44780	11/21/23 17:04	AMB	EET SPK
Total/NA	Prep	7471B			0.82 g	50 mL	44716	11/17/23 11:43	AMB	EET SPK
Total/NA	Analysis	7471B		1			44760	11/20/23 17:08	AMB	EET SPK

Client Sample ID: HA-7 (0-2)
Lab Sample ID: 590-22203-10
Date Collected: 11/07/23 12:43
Matrix: Solid
Date Received: 11/08/23 08:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			44578	11/13/23 09:11	NMI	EET SPK

Client Sample ID: HA-7 (0-2)
Lab Sample ID: 590-22203-10
Date Collected: 11/07/23 12:43
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 83.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.06 g	5 mL	44779	11/22/23 07:55	MRV	EET SPK
Total/NA	Analysis	8082A		1	1 mL	1 mL	44782	11/22/23 14:34	NMI	EET SPK
Total/NA	Prep	3550C			15.16 g	5 mL	44699	11/17/23 08:14	MRV	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	44717	11/18/23 00:10	NMI	EET SPK
Total/NA	Prep	3050B			1.54 g	50 mL	44738	11/20/23 09:18	AMB	EET SPK
Total/NA	Analysis	6010D		1			44780	11/21/23 17:08	AMB	EET SPK
Total/NA	Prep	7471B			0.71 g	50 mL	44716	11/17/23 11:43	AMB	EET SPK
Total/NA	Analysis	7471B		1			44760	11/20/23 17:11	AMB	EET SPK

Client Sample ID: HA-8 (1-2)
Lab Sample ID: 590-22203-11
Date Collected: 11/07/23 11:38
Matrix: Solid
Date Received: 11/08/23 08:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			44578	11/13/23 09:11	NMI	EET SPK

Client Sample ID: HA-8 (1-2)
Lab Sample ID: 590-22203-11
Date Collected: 11/07/23 11:38
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.65 g	5 mL	44779	11/22/23 07:55	MRV	EET SPK
Total/NA	Analysis	8082A		1	1 mL	1 mL	44782	11/22/23 14:51	NMI	EET SPK
Total/NA	Prep	3550C			15.14 g	5 mL	44699	11/17/23 08:14	MRV	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	44717	11/18/23 00:31	NMI	EET SPK

Lab Chronicle

Client: GeoEngineers Inc
Job ID: 590-22203-1
Project/Site: Avista Davenport Substation/2522-117-00

Client Sample ID: HA-8 (1-2)
Lab Sample ID: 590-22203-11
Date Collected: 11/07/23 11:38
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.58 g	50 mL	44738	11/20/23 09:18	AMB	EET SPK
Total/NA	Analysis	6010D		1			44780	11/21/23 17:12	AMB	EET SPK
Total/NA	Prep	7471B			0.68 g	50 mL	44716	11/17/23 11:43	AMB	EET SPK
Total/NA	Analysis	7471B		1			44760	11/20/23 17:13	AMB	EET SPK

Client Sample ID: HA-9 (0-0.5)
Lab Sample ID: 590-22203-13
Date Collected: 11/07/23 11:55
Matrix: Solid
Date Received: 11/08/23 08:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			44578	11/13/23 09:11	NMI	EET SPK

Client Sample ID: HA-9 (0-0.5)
Lab Sample ID: 590-22203-13
Date Collected: 11/07/23 11:55
Matrix: Solid
Date Received: 11/08/23 08:32
Percent Solids: 82.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.03 g	5 mL	44779	11/22/23 07:55	MRV	EET SPK
Total/NA	Analysis	8082A		1	1 mL	1 mL	44782	11/22/23 15:12	NMI	EET SPK
Total/NA	Prep	3550C			15.07 g	5 mL	44699	11/17/23 08:14	MRV	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	44717	11/18/23 00:51	NMI	EET SPK
Total/NA	Prep	3050B			1.42 g	50 mL	44738	11/20/23 09:18	AMB	EET SPK
Total/NA	Analysis	6010D		1			44780	11/21/23 17:16	AMB	EET SPK
Total/NA	Prep	7471B			0.63 g	50 mL	44716	11/17/23 11:43	AMB	EET SPK
Total/NA	Analysis	7471B		1			44760	11/20/23 17:16	AMB	EET SPK

Laboratory References:
EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Accreditation/Certification Summary

Client: GeoEngineers Inc
Job ID: 590-22203-1
Project/Site: Avista Davenport Substation/2522-117-00

Laboratory: Eurofins Spokane

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Washington	State	C569	01-07-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8082A	3550C	Solid	PCB-1262
8082A	3550C	Solid	PCB-1268
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: GeoEngineers Inc
Job ID: 590-22203-1
Project/Site: Avista Davenport Substation/2522-117-00

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET SPK
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	EET SPK
6010D	Metals (ICP)	SW846	EET SPK
7470A	Mercury (CVAA)	SW846	EET SPK
7471B	Mercury (CVAA)	SW846	EET SPK
Moisture	Percent Moisture	EPA	EET SPK
1311	TCLP Extraction	SW846	EET SPK
3010A	Preparation, Total Metals	SW846	EET SPK
3050B	Preparation, Metals	SW846	EET SPK
3550C	Ultrasonic Extraction	SW846	EET SPK
3665A	Sulfuric Acid/Permanganate Cleanup	SW846	EET SPK
7470A	Preparation, Mercury	SW846	EET SPK
7471B	Preparation, Mercury	SW846	EET SPK

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Eurofins Spokane
11922 East 1st Ave
Spokane, WA 99206
Phone (509) 924-9200 Phone (509) 924-9290

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Bryce Hanson	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-9066-2599.1
Client Contact: Bryce Hanson	Phone: 360-269 3237	E-Mail: Randee.Arrington@et.eurofinsus.com	State of Origin: WA	Page: Page 1 of 2
Company: GeoEngineers Inc	PWSID:			Job #:
Address: 523 East Second Ave	Due Date Requested:			
City: Spokane	TAT Requested (days): STD			
State, Zip: WA, 99202	Compliance Project: Δ Yes Δ No			
Phone: 360-269-3237(Tel)	PO #: 2522-117-00			
Email: bhanson@geoengineers.com	WO #: 2522-117-00			
Project Name: Avista Davenport Substation/2522-117-00	Project #: 59002678			
Site:	SSOW#:			

Analysis Requested

Preservation Codes
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010D, 7471B RCRA 8 Metals	8082A PCBs	NWTPH-Dx	TCLP RCRA 8 metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N			
Comp 110723	11/7/23	1322	Comp	Solid						X		
HA-1(0-2)		1025	C	Solid			X	X	X			
HA-2(0-1)		1017	G	Solid			X	X	X			
HA-2(1-2)		1023	G	Solid								Hold
HA-3(1-2)		1033	G	Solid			X	X	X			
HA-3(3-4)		1320	G	Solid			X	X	X			
HA-4(0-2)		1235	C	Solid			X	X	X			
HA-5(0-2)		1237	C	Solid			X	X	X			
HA-6(0-2)		1239	C	Solid			X	X	X			
HA-7(0-2)		1243	C	Solid			X	X	X			
HA-8(1-2)		1138	G	Solid			X	X	X			

590-22203 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II, III, IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/8/23 8:31	GEI		11/8/23 8:32	EET SPO
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact. Δ Yes Δ No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks: 4.4, 4.5 corr IR gun

Eurofins Spokane
11922 East 1st Ave
Spokane, WA 99206
Phone (509) 924-9200 Phone (509) 924-9290

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-9066-2599.2
Client Contact: Bryce Hanson	Phone:	E-Mail: Randee.Arrington@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: GeoEngineers Inc	PWSID:			Job #:
Address: 523 East Second Ave	Due Date Requested:			
City: Spokane	TAT Requested (days):			
State, Zip: WA, 99202	Compliance Project: Δ Yes Δ No			
Phone: 360-269-3237(Tel)	PO #: 2522-117-00			
Email: bhanson@geoengineers.com	WO #: 2522-117-00			
Project Name: Avista Davenport Substation/2522-117-00	Project #: 59002678			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010D, 7471B RCRA 8 Metals	8082A PCBs	NWTPH-Dx	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
HA 8(0-1)	11/7/23	1134	G	Solid							Hold
HA 9(0.05)	1	1155	G	Solid			X	X	X		
				Solid							
				Solid							
				Solid							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/8/23 831	GEI		11/8/23 832	ET SOO
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 4.4, 4.5 corr IR005

Login Sample Receipt Checklist

Client: GeoEngineers Inc

Job Number: 590-22203-1

Login Number: 22203
List Number: 1
Creator: Morris, Mackenzie 1

List Source: Eurofins Spokane

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Cami O'Toole
Avista Utilities
PO BOX 3727
Spokane, Washington 99220

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JOB DESCRIPTION

Old DVP Sub

JOB NUMBER

590-22387-1

Eurofins Spokane
11922 East 1st Ave
Spokane WA 99206

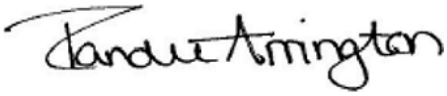
See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



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Revision 1

Authorized for release by
Randee Arrington, Business Unit Manager
Randee.Arrington@et.eurofinsus.com
(509)924-9200

Table of Contents

Case Narrative

Client: Avista Utilities
Project/Site: Old DVP Sub

Job ID: 590-22387-1

Job ID: 590-22387-1

Laboratory: Eurofins Spokane

Narrative

Job Narrative
590-22387-1

REVISION

The report being provided is a revision of the original report sent on 12/11/2023. The report (revision 1) is being revised due to the addition of 6010D Copper, Nickel and Zinc data to final report.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 12/4/2023 9:56 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.7°C

GC Semi VOA
Method NWTPH_Dx: Detected hydrocarbons in the diesel range appear to be due to heavily weathered diesel and/or a light weight oil.

DVP 01 WP (590-22387-2)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs
Method 8082A: Surrogate recovery for the following samples were outside control limits: HA-02-2 (590-22387-1), DVP 01 WP (590-22387-2) and (590-22367-A-7-F). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Avista Utilities
Project/Site: Old DVP Sub

Job ID: 590-22387-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-22387-1	HA-02-2	Solid	12/01/23 10:00	12/04/23 09:56
590-22387-2	DVP 01 WP	Solid	12/04/23 07:30	12/04/23 09:56

Definitions/Glossary

Client: Avista Utilities
Project/Site: Old DVP Sub

Job ID: 590-22387-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample ID: HA-02-2

Date Collected: 12/01/23 10:00
Date Received: 12/04/23 09:56

Lab Sample ID: 590-22387-1
Matrix: Solid
Percent Solids: 78.3

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		13		ug/Kg	☼	12/08/23 10:36	12/08/23 14:35	1
PCB-1221	ND		13		ug/Kg	☼	12/08/23 10:36	12/08/23 14:35	1
PCB-1232	ND		13		ug/Kg	☼	12/08/23 10:36	12/08/23 14:35	1
PCB-1242	ND		13		ug/Kg	☼	12/08/23 10:36	12/08/23 14:35	1
PCB-1248	ND		13		ug/Kg	☼	12/08/23 10:36	12/08/23 14:35	1
PCB-1254	ND		13		ug/Kg	☼	12/08/23 10:36	12/08/23 14:35	1
PCB-1260	ND		13		ug/Kg	☼	12/08/23 10:36	12/08/23 14:35	1
PCB-1268	ND		13		ug/Kg	☼	12/08/23 10:36	12/08/23 14:35	1
PCB-1262	ND		13		ug/Kg	☼	12/08/23 10:36	12/08/23 14:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*27*	*S1-*	*37 - 126*	*12/08/23 10:36*	*12/08/23 14:35*	*1*
DCB Decachlorobiphenyl (Surr)	*99*		*32 - 150*	*12/08/23 10:36*	*12/08/23 14:35*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		12		mg/Kg	☼	12/05/23 08:42	12/05/23 13:24	1
Residual Range Organics (RRO) (C25-C36)	ND		31		mg/Kg	☼	12/05/23 08:42	12/05/23 13:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*96*		*50 - 150*	*12/05/23 08:42*	*12/05/23 13:24*	*1*
n-Triacontane-d62	*91*		*50 - 150*	*12/05/23 08:42*	*12/05/23 13:24*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.2**		1.0		mg/Kg	☼	12/04/23 10:05	12/04/23 18:39	1
Barium	**140**		1.0		mg/Kg	☼	12/04/23 10:05	12/04/23 18:39	1
Cadmium	ND		0.83		mg/Kg	☼	12/04/23 10:05	12/04/23 18:39	1
Chromium	**7.4**		1.0		mg/Kg	☼	12/04/23 10:05	12/04/23 18:39	1
Copper	**12**		3.3		mg/Kg	☼	12/04/23 10:05	12/04/23 18:39	1
Lead	**8.3**		2.5		mg/Kg	☼	12/04/23 10:05	12/04/23 18:39	1
Nickel	**7.8**		1.0		mg/Kg	☼	12/04/23 10:05	12/04/23 18:39	1
Selenium	ND		4.2		mg/Kg	☼	12/04/23 10:05	12/04/23 18:39	1
Silver	ND		1.0		mg/Kg	☼	12/04/23 10:05	12/05/23 14:39	1
Zinc	**50**		4.2		mg/Kg	☼	12/04/23 10:05	12/05/23 14:39	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		54		ug/Kg	☼	12/04/23 11:23	12/04/23 17:34	1

Client Sample ID: DVP 01 WP

Date Collected: 12/04/23 07:30
Date Received: 12/04/23 09:56

Lab Sample ID: 590-22387-2
Matrix: Solid
Percent Solids: 83.1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		12		ug/Kg	☼	12/08/23 10:36	12/08/23 14:56	1
PCB-1221	ND		12		ug/Kg	☼	12/08/23 10:36	12/08/23 14:56	1
PCB-1232	ND		12		ug/Kg	☼	12/08/23 10:36	12/08/23 14:56	1
PCB-1242	ND		12		ug/Kg	☼	12/08/23 10:36	12/08/23 14:56	1

Client: Avista Utilities
Project/Site: Old DVP Sub

Job ID: 590-22387-1

Client Sample ID: DVP 01 WP

Date Collected: 12/04/23 07:30
Date Received: 12/04/23 09:56

Lab Sample ID: 590-22387-2

Matrix: Solid
Percent Solids: 83.1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	ND		12		ug/Kg	☼	12/08/23 10:36	12/08/23 14:56	1
PCB-1254	ND		12		ug/Kg	☼	12/08/23 10:36	12/08/23 14:56	1
PCB-1260	ND		12		ug/Kg	☼	12/08/23 10:36	12/08/23 14:56	1
PCB-1268	ND		12		ug/Kg	☼	12/08/23 10:36	12/08/23 14:56	1
PCB-1262	ND		12		ug/Kg	☼	12/08/23 10:36	12/08/23 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*35*	*S1-*	*37 - 126*	*12/08/23 10:36*	*12/08/23 14:56*	*1*
DCB Decachlorobiphenyl (Surr)	*80*		*32 - 150*	*12/08/23 10:36*	*12/08/23 14:56*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	**20**		12		mg/Kg	☼	12/05/23 08:42	12/05/23 13:45	1
Residual Range Organics (RRO) (C25-C36)	ND		29		mg/Kg	☼	12/05/23 08:42	12/05/23 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*88*		*50 - 150*	*12/05/23 08:42*	*12/05/23 13:45*	*1*
n-Triacontane-d62	*83*		*50 - 150*	*12/05/23 08:42*	*12/05/23 13:45*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.2**		1.1		mg/Kg	☼	12/04/23 10:05	12/04/23 18:43	1
Barium	**140**		1.1		mg/Kg	☼	12/04/23 10:05	12/04/23 18:43	1
Cadmium	ND		0.84		mg/Kg	☼	12/04/23 10:05	12/04/23 18:43	1
Chromium	**7.5**		1.1		mg/Kg	☼	12/04/23 10:05	12/04/23 18:43	1
Copper	**14**		3.4		mg/Kg	☼	12/04/23 10:05	12/04/23 18:43	1
Lead	**9.5**		2.5		mg/Kg	☼	12/04/23 10:05	12/04/23 18:43	1
Nickel	**7.7**		1.1		mg/Kg	☼	12/04/23 10:05	12/04/23 18:43	1
Selenium	ND		4.2		mg/Kg	☼	12/04/23 10:05	12/04/23 18:43	1
Silver	ND		1.1		mg/Kg	☼	12/04/23 10:05	12/05/23 14:43	1
Zinc	**56**		4.2		mg/Kg	☼	12/04/23 10:05	12/05/23 14:43	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		54		ug/Kg	☼	12/04/23 11:23	12/04/23 17:37	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 590-44997/1-A
Matrix: Solid
Analysis Batch: 45009

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44997

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		10		ug/Kg		12/08/23 10:36	12/08/23 13:52	1
PCB-1221	ND		10		ug/Kg		12/08/23 10:36	12/08/23 13:52	1
PCB-1232	ND		10		ug/Kg		12/08/23 10:36	12/08/23 13:52	1
PCB-1242	ND		10		ug/Kg		12/08/23 10:36	12/08/23 13:52	1
PCB-1248	ND		10		ug/Kg		12/08/23 10:36	12/08/23 13:52	1
PCB-1254	ND		10		ug/Kg		12/08/23 10:36	12/08/23 13:52	1
PCB-1260	ND		10		ug/Kg		12/08/23 10:36	12/08/23 13:52	1
PCB-1268	ND		10		ug/Kg		12/08/23 10:36	12/08/23 13:52	1
PCB-1262	ND		10		ug/Kg		12/08/23 10:36	12/08/23 13:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*37 - 126*	*12/08/23 10:36*	*12/08/23 13:52*	*1*
DCB Decachlorobiphenyl (Surr)	*99*		*32 - 150*	*12/08/23 10:36*	*12/08/23 13:52*	*1*

Lab Sample ID: LCS 590-44997/2-A
Matrix: Solid
Analysis Batch: 45009

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44997

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			66.7	53.1		ug/Kg		80	67 - 120		
PCB-1260			66.7	59.4		ug/Kg		89	58 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*81*		*37 - 126*
DCB Decachlorobiphenyl (Surr)	*104*		*32 - 150*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 590-44926/1-A
Matrix: Solid
Analysis Batch: 44930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44926

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		10		mg/Kg		12/05/23 08:42	12/05/23 11:41	1
Residual Range Organics (RRO) (C25-C36)	ND		25		mg/Kg		12/05/23 08:42	12/05/23 11:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*92*		*50 - 150*	*12/05/23 08:42*	*12/05/23 11:41*	*1*
n-Triacontane-d62	*81*		*50 - 150*	*12/05/23 08:42*	*12/05/23 11:41*	*1*

Lab Sample ID: LCS 590-44926/2-A
Matrix: Solid
Analysis Batch: 44930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44926

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics (DRO) (C10-C25)			66.7	65.4		mg/Kg		98	50 - 150		

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 590-44926/2-A
Matrix: Solid
Analysis Batch: 44930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44926

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Residual Range Organics (RRO) (C25-C36)	66.7	70.1		mg/Kg		105	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*102*		*50 - 150*
n-Triacontane-d62	*101*		*50 - 150*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 590-44913/2-A
Matrix: Solid
Analysis Batch: 44929

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44913

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.3		mg/Kg		12/04/23 10:05	12/04/23 16:48	1
Barium	ND		1.3		mg/Kg		12/04/23 10:05	12/04/23 16:48	1
Cadmium	ND		1.0		mg/Kg		12/04/23 10:05	12/04/23 16:48	1
Chromium	ND		1.3		mg/Kg		12/04/23 10:05	12/04/23 16:48	1
Copper	ND		4.0		mg/Kg		12/04/23 10:05	12/04/23 16:48	1
Lead	ND		3.0		mg/Kg		12/04/23 10:05	12/04/23 16:48	1
Nickel	ND		1.3		mg/Kg		12/04/23 10:05	12/04/23 16:48	1
Selenium	ND		5.0		mg/Kg		12/04/23 10:05	12/04/23 16:48	1

Lab Sample ID: MB 590-44913/2-A
Matrix: Solid
Analysis Batch: 44942

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44913

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.3		mg/Kg		12/04/23 10:05	12/05/23 12:23	1
Zinc	ND		5.0		mg/Kg		12/04/23 10:05	12/05/23 12:23	1

Lab Sample ID: LCS 590-44913/1-A
Matrix: Solid
Analysis Batch: 44929

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44913

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	100	88.1		mg/Kg		88	80 - 120
Barium	100	83.6		mg/Kg		84	80 - 120
Cadmium	50.0	45.5		mg/Kg		91	80 - 120
Chromium	50.0	45.7		mg/Kg		91	80 - 120
Copper	50.0	45.9		mg/Kg		92	80 - 120
Lead	50.0	46.8		mg/Kg		94	80 - 120
Nickel	50.0	46.2		mg/Kg		92	80 - 120
Selenium	100	87.6		mg/Kg		88	80 - 120

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: LCS 590-44913/1-A
Matrix: Solid
Analysis Batch: 44942

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44913

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	5.00	5.05		mg/Kg		101	80 - 120
Zinc	50.0	53.6		mg/Kg		107	80 - 120

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 590-44919/9-A
Matrix: Solid
Analysis Batch: 44935

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 44919

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		50		ug/Kg		12/04/23 11:23	12/04/23 17:06	1

Lab Sample ID: LCS 590-44919/8-A
Matrix: Solid
Analysis Batch: 44943

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 44919

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	200	188		ug/Kg		94	80 - 120

Lab Chronicle

Client: Avista Utilities
Project/Site: Old DVP Sub

Job ID: 590-22387-1

Client Sample ID: HA-02-2
Date Collected: 12/01/23 10:00
Date Received: 12/04/23 09:56

Lab Sample ID: 590-22387-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			44927	12/05/23 09:29	MRV	EET SPK

Client Sample ID: HA-02-2
Date Collected: 12/01/23 10:00
Date Received: 12/04/23 09:56

Lab Sample ID: 590-22387-1
Matrix: Solid
Percent Solids: 78.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.04 g	5 mL	44997	12/08/23 10:36	MRV	EET SPK
Total/NA	Analysis	8082A		1	1 mL	1 mL	45009	12/08/23 14:35	NMI	EET SPK
Total/NA	Prep	3550C			15.51 g	5 mL	44926	12/05/23 08:42	MRV	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	44930	12/05/23 13:24	NMI	EET SPK
Total/NA	Prep	3050B			1.53 g	50 mL	44913	12/04/23 10:05	AMB	EET SPK
Total/NA	Analysis	6010D		1			44929	12/04/23 18:39	AMB	EET SPK
Total/NA	Prep	3050B			1.53 g	50 mL	44913	12/04/23 10:05	AMB	EET SPK
Total/NA	Analysis	6010D		1			44944	12/05/23 14:39	AMB	EET SPK
Total/NA	Prep	7471B			0.59 g	50 mL	44919	12/04/23 11:23	AMB	EET SPK
Total/NA	Analysis	7471B		1			44935	12/04/23 17:34	AMB	EET SPK

Client Sample ID: DVP 01 WP
Date Collected: 12/04/23 07:30
Date Received: 12/04/23 09:56

Lab Sample ID: 590-22387-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			44927	12/05/23 09:29	MRV	EET SPK

Client Sample ID: DVP 01 WP
Date Collected: 12/04/23 07:30
Date Received: 12/04/23 09:56

Lab Sample ID: 590-22387-2
Matrix: Solid
Percent Solids: 83.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			15.04 g	5 mL	44997	12/08/23 10:36	MRV	EET SPK
Total/NA	Analysis	8082A		1	1 mL	1 mL	45009	12/08/23 14:56	NMI	EET SPK
Total/NA	Prep	3550C			15.39 g	5 mL	44926	12/05/23 08:42	MRV	EET SPK
Total/NA	Analysis	NWTPH-Dx		1	1 mL	1 mL	44930	12/05/23 13:45	NMI	EET SPK
Total/NA	Prep	3050B			1.43 g	50 mL	44913	12/04/23 10:05	AMB	EET SPK
Total/NA	Analysis	6010D		1			44929	12/04/23 18:43	AMB	EET SPK
Total/NA	Prep	3050B			1.43 g	50 mL	44913	12/04/23 10:05	AMB	EET SPK
Total/NA	Analysis	6010D		1			44944	12/05/23 14:43	AMB	EET SPK
Total/NA	Prep	7471B			0.56 g	50 mL	44919	12/04/23 11:23	AMB	EET SPK
Total/NA	Analysis	7471B		1			44935	12/04/23 17:37	AMB	EET SPK

Laboratory References:
EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Accreditation/Certification Summary

Client: Avista Utilities
Project/Site: Old DVP Sub

Job ID: 590-22387-1

Laboratory: Eurofins Spokane

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Washington	State	C569	01-07-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8082A	3550C	Solid	PCB-1262
8082A	3550C	Solid	PCB-1268
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Avista Utilities
Project/Site: Old DVP Sub

Job ID: 590-22387-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET SPK
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	EET SPK
6010D	Metals (ICP)	SW846	EET SPK
7471B	Mercury (CVAA)	SW846	EET SPK
Moisture	Percent Moisture	EPA	EET SPK
3050B	Preparation, Metals	SW846	EET SPK
3550C	Ultrasonic Extraction	SW846	EET SPK
3665A	Sulfuric Acid/Permanganate Cleanup	SW846	EET SPK
7471B	Preparation, Mercury	SW846	EET SPK

Protocol References:

EPA = US Environmental Protection Agency

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Eurofins Spokane
11922 E 1st Avenue

Spokane, WA 99206-5302
phone 509.924.9200 fax 509.924.9290

Chain of Custody Record

eurofins | Environment Testing America

Regulatory Program. ☐ DW ☐ NPDES ☑ RCRA ☐ Other

Eurofins Environment Testing America

Client Contact	**Project Manager:** Bryec Robbert	**Site Contact:** B. Robbert	**Date.** 12/4/23	**COC No:** 1 of 1 COCs
Avista Corporation	**Tel/Fax:** 509-495-4086	**Lab Contact:**	**Carrier:** Hand	**TALS Project #:**
1411 East Mission Avenue, MSC-21	**Analysis Turnaround Time** ☑ CALENDAR DAYS ☐ WORKING DAYS			**Sampler:** Heath Petersen
Spokane, WA 99206-5302	TAT if different from Below ☐ 2 weeks ☑ 1 week ☐ 2 days ☐ 1 day			**For Lab Use Only:** Walk-in Client: Lab Sampling:
509-495=4086 Phone				
(xxx) xxx-xxxx FAX				
Project Name: Old DVP Sub				Job / SDG No.
Site: DVP				
P O #				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA 8082A	EPA 6010A RCRA Metals	NWTPH-Dx	Sample Specific Notes.
HA-02-2	12/1/2023	10AM	Grab	Soil	2 4oz			X	X	X	SEDD, use mineral oil standard
DVP 01 WP	12/4/23	730AM	Grab	Soil	2 4oz			X	X	X	SEDD, use mineral oil standard
~~Duplicate~~	~~11/29/23~~	~~8am~~	~~Grab~~	~~Soil~~				X	X	X	
~~Davenport Sub Power Transformer~~ 12											

590-22387 Chain of Custody

Preservation Used: 1= Ice, 2= HCl, 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other

Possible Hazard Identification.
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments

0.6 0.7

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.		Cooler Temp. (°C): Obs'd: ~~17.9~~ Corr'd: ~~18.0~~		Therm ID No.: R006	
Relinquished by:	Company: Avista	Date/Time: 12/4/23 8:51	Received by:	Company: EET	Date/Time: 12/4/23	9:56
Relinquished by:	Company:	Date/Time:	Received by:	Company	Date/Time:	
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:	

Login Sample Receipt Checklist

Client: Avista Utilities

Job Number: 590-22387-1

Login Number: 22387
List Number: 1
Creator: Morris, Mackenzie 1

List Source: Eurofins Spokane

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX C
Site Photographs

Photograph 1. Old Avista Davenport Substation prior to demolition on November 7, 2023.

Photograph 2. Hand auger HA-2 prior to exploration and remedial excavation on November 7, 2023.

Site Photographs	
Avista Davenport Davenport, Washington	
GeoEngineers	Figure C-1

18458-001-18 Date Exported: 11/30/23

Photograph 3. Remedial excavation at hand auger location HA-2 located along the south side of the former substation transformer on December 1, 2023.

Site Photographs

Avista Davenport
Davenport, Washington

GeoEngineers

Figure C-2

APPENDIX D
Report Limitations and Guidelines for Use

APPENDIX D
REPORT LIMITATIONS AND GUIDELINES FOR USE[1]

This appendix provides information to help you manage your risks with respect to the use of this report.

Environmental Services Are Performed for Specific Purposes, Persons and Projects

This report has been prepared for the exclusive use of Avista Utilities (Avista). This report is not intended for use by others, and the information contained herein is not applicable to other sites.

GeoEngineers structures our services to meet the specific needs of our clients. For example, an environmental site assessment 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 project site. No one except Avista should rely on this environmental report without first conferring with GeoEngineers. This report should not be applied for any purpose or project except the one originally contemplated.

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

This report has been prepared for the Davenport Substation site located at 703 3rd Street in Davenport, Washington. GeoEngineers considered unique, project-specific factors when establishing the scope of services for this project and report. Unless GeoEngineers specifically indicates otherwise, do not 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 important project changes were made.

If important changes are made after the date of this report, GeoEngineers should be given the opportunity to review our interpretations and recommendations and provide written modifications or confirmation, as appropriate.

Reliance Conditions for Third Parties

Our report was prepared for the exclusive use of Avista. No other party may rely on the product of our services unless we agree in advance to such reliance in writing. This is to provide our firm and Avista with reasonable protection against open-ended liability claims by third parties with whom there would otherwise be no contractual limits to their actions. Within the limitations of scope, schedule and budget, our services have been executed in accordance with our Agreement with Avista and generally accepted environmental practices in this area at the time this report was prepared.

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

Environmental Regulations are Always Evolving.

Some substances may be present in the site vicinity in quantities or under conditions that may have led, or may lead, to contamination of the subject site, 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 substance, change or if more stringent environmental standards are developed in the future.

Uncertainty May Remain Even After This Phase II ESA is Completed

No ESA can wholly eliminate uncertainty regarding the potential for contamination in connection with a property. 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 manmade events such as construction on or adjacent to the site, by new releases of hazardous substances, or by natural events such as floods, earthquakes, slope instability or groundwater fluctuations. Always contact GeoEngineers before applying this report to determine if it is still applicable.

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 site. 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 our professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ – sometimes 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 drawings. Only photographic or electronic reproductions are acceptable but recognize that separating logs from the report can elevate risk.

Read These Provisions Closely

Some clients, design professionals and contractors may not recognize that the geoscience practices (geotechnical engineering, geology and environmental science) are far less exact than other engineering and natural science disciplines. This lack of understanding can create unrealistic expectations that could lead to disappointments, claims and disputes. GeoEngineers includes these explanatory “limitations” provisions in our reports to help reduce such risks. Please confer with GeoEngineers if you are unclear how these “Report Limitations and Guidelines for Use” apply to your project or site.

Geotechnical, Geologic and Geoenvironmental Reports Should Not be Interchanged.

The equipment, techniques and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually relate any environmental findings, conclusions or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding a specific project.

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.

If Avista desires these specialized services, they should be obtained from a consultant who offers services in this specialized field.

GeoEngineers