QUARTERLY GROUNDWATER MONITORING REPORT- February 2021

Avista Service Center Garage
East 1411 Mission Avenue
Spokane, Washington 99220

Prepared for
Avista Corporation
East 1411 Mission Avenue
Spokane, Washington 99220

SES PROJECT NO. 0200-017

Spokane Environmental Solutions

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PROJECT INFORMATION

Site Name/Location:	Avista Service Center East 1411 Mission Avenue, Spokane, Washington 99220
Sampling Date:	February 1, 2021
Document Contents:	Summary of February 2021 Quarterly Groundwater Sampling
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SES Project No.:	0200-017

INTRODUCTION

This report summarizes the results of quarterly groundwater sampling at the Avista Corporation's (Avista) Service Center site in Spokane, Washington (Mission Campus). The site is located on the northwest corner of East Mission Avenue and Upriver Drive adjacent to the Spokane River near downtown Spokane, Washington as shown on the Location Map, Figure 1. Groundwater monitoring is being conducted as an independent action under the Washington Department of Ecology (Ecology) Model Toxics Control Act[1] (MTCA).

The Service Center Garage building was located on the Avista Spokane campus which resides on an approximate 20 acre parcel in Spokane, Washington. The site is shown in Groundwater Elevation and Interpreted Flow Direction, February 1, 2021, Figure 2.

The Spokane River is located approximately 400 feet east of the former Service Center Garage building. Groundwater flows from southeast to northwest, away from the Spokane River, based on groundwater monitoring events conducted at the site. The Service Center Garage building was used from 1955 to July 2018 to service fleet vehicles. The Service Center Garage building contained sub-slab hydraulic lifts for servicing line trucks in Bay 1, Bay 2, Bay 5 and Bay 7. The high bay area contained portable hydraulic lifts that were not located beneath the floor slab. Avista demolished the Service Center Garage building in August 2018 and moved to a new facility located in the northern area of the campus.

Two groundwater monitoring wells (MW-1A and MW-5B) were installed at the site on July 26, 2019 as replacements for wells damaged or destroyed during construction of a parking structure in 2018-2019.

Currently, there are five monitoring wells on the site. SES measured top of casing elevations of monitoring wells MW-1A, MW-2, MW-3, MW-4 and MW-5B on February 1, 2021. Groundwater elevations are calculated from these general well elevations. Monitoring well locations are shown on Figure 2.

GROUNDWATER ELEVATION AND GRADIENT

The monitoring well elevations are used to identify the general groundwater gradient across the site. After removal of the caps and measuring the headspace in each well, groundwater was allowed to equilibrate to current atmospheric conditions prior to recording the depth to water. The depth to groundwater was measured in each monitoring well before it was sampled. Groundwater levels were measured from the monitoring well top of casing (TOC) using an electronic water level meter. The depth to groundwater ranged from 17.51 feet below TOC at MW-3 to 37.52 feet below

[1] Washington State Department of Ecology Toxics Cleanup Program. 2007. Model Toxics Control Act Cleanup Regulation Chapter 173-340 WAC. Publication No 94-06.

TOC at MW-1A. Groundwater elevations across the site ranged from 1,869.44 feet in MW-1A to 1,870.06 feet in MW-3. The February 2021 groundwater flow is west-northwesterly, which is consistent with previous groundwater monitoring events. Groundwater gradient as measured was approximately 0.0009ft/ft across the site. Groundwater gradient was determined based on the maximum difference in groundwater elevation over the 660 foot distance from MW-1A to MW-3. The depth to groundwater and groundwater elevations are summarized in Summary of Groundwater Level Measurements, Table 1 and are shown on Figure 2.

GROUNDWATER SAMPLING PROCEDURES

Groundwater samples were collected on February 1, 2021 from site groundwater monitoring wells MW-1A, MW-2, MW-3, MW-4 and MW-5B. Prior to sampling, groundwater monitoring wells were purged and sampled in accordance with U.S. Environmental Protection Agency (EPA) guidance for low-flow sampling. During purging, water levels were monitored and drawdown minimized. Wells were purged until field parameters (temperature, conductivity, pH, dissolved oxygen, and turbidity) were stable within ten percent for three consecutive measurements. Groundwater quality parameters are summarized in Summary of Groundwater Quality Measurements, Table 2.

SES typically measures headspace in each well as part of field screen parameters. However, this was not completed during the February 1, 2021 monitoring event due to a shipping delay for the rental photoionization detector. It is our opinion that this data is not critical to regulatory compliance and we sampled the wells as scheduled.

GROUNDWATER ANALYTICAL TESTING

Groundwater samples were placed into laboratory prepared containers and placed on ice upon collection pending same-day delivery to Eurofin's TestAmerica laboratory in Spokane, Washington. Samples were transported under chain-of-custody protocol.

Groundwater samples we analyzed for diesel- and lube oil-range petroleum hydrocarbons by Northwest Method NWTPH-Dx, for polychlorinated biphenyls (PCBs) by EPA Method 8082A and for poly-cyclic aromatic hydrocarbons (PAHs) by EPA Method 8270E. Groundwater samples were analyzed on a standard turn-around time of 10-business days.

One duplicate sample (Dup) was collected from monitoring well MW-1A for quality assurance purposes. The sample was analyzed for NWTPH-Dx. Analytical results for each sample are in accordance with quality control standards as SES's review of the analytical report did not find discrepancies in analytical data or in laboratory quality control samples. Therefore, it is SES's opinion that the analytical data is suitable for its intended purpose.

GROUNDWATER SAMPLING RESULTS

Monitoring well samples were analyzed for diesel- and lube oil-range petroleum, polychlorinated biphenyls (PCBs) and for poly-cyclic aromatic hydrocarbons (PAHs). Samples were transported to TestAmerica Analytical Laboratory, located in Spokane, Washington for analysis. Groundwater sampling results for this monitoring event is summarized below. Analytical results are also presented in Summary of Chemical Analytical Results, Table 3. Laboratory analytical reports are included in Appendix A.

- Diesel- and Lube Oil- Range petroleum hydrocarbons were not detected in samples at concentrations exceeding Method reporting limits in any sample.
- PCBs were not detected at a concentration exceeding Method reporting limits in any sample.
- PAHs were not detected at concentrations exceeding Method reporting levels in any sample.

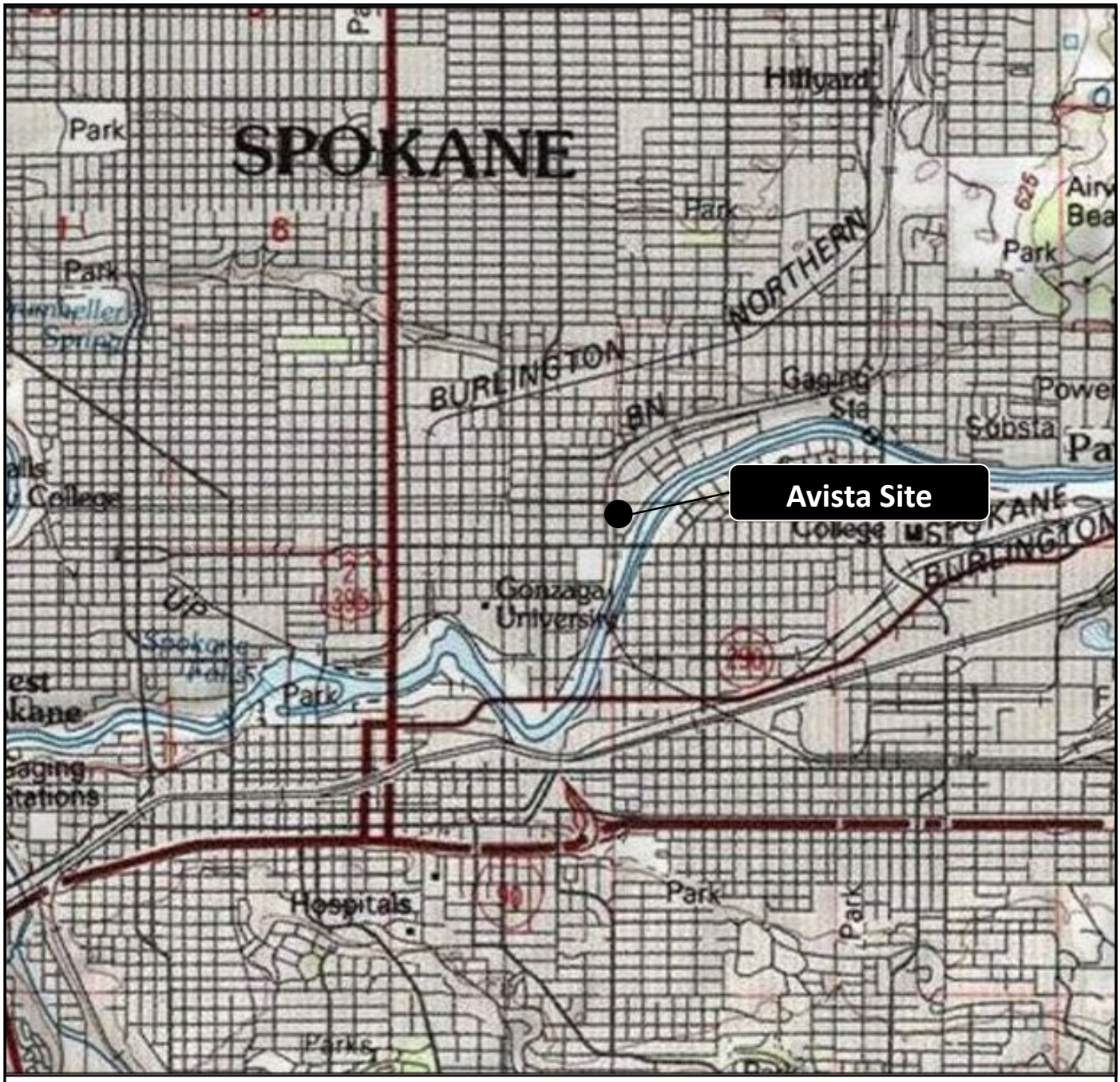
SUMMARY

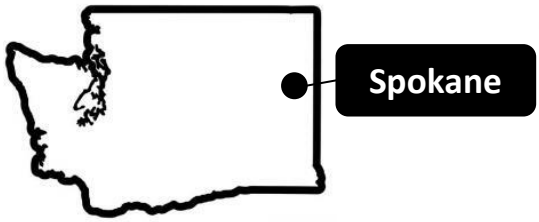
Concentrations of contaminants of concern were not detected at concentrations exceeding Method reporting limits in samples collected from site monitoring wells during the February 1, 2021 sampling event. Method reporting limits are below applicable MTCA Method A cleanup criterion for unrestricted use.

RECOMMENDATIONS

SES recommends that this site be considered for permanent closure as regular seasonal groundwater sampling since 12/20/2019 has consistently shown measured concentrations below laboratory method detection limits and MTCA Method A cleanup criterion for analytes of concern. Therefore, we respectfully request that Ecology review the existing data and provide the site with a no further action opinion in accordance with applicable Ecology guidelines.

FIGURES





Notes:

1. Location of all features on map are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. Spokane Environmental Solutions, LLC cannot guarantee the accuracy and content of electronic files. The master file is stored by Spokane Environmental Solutions, LLC and will serve as the official record of this communication.

Data Source: Image from ESRI Online

Date Created: 2/11/2021

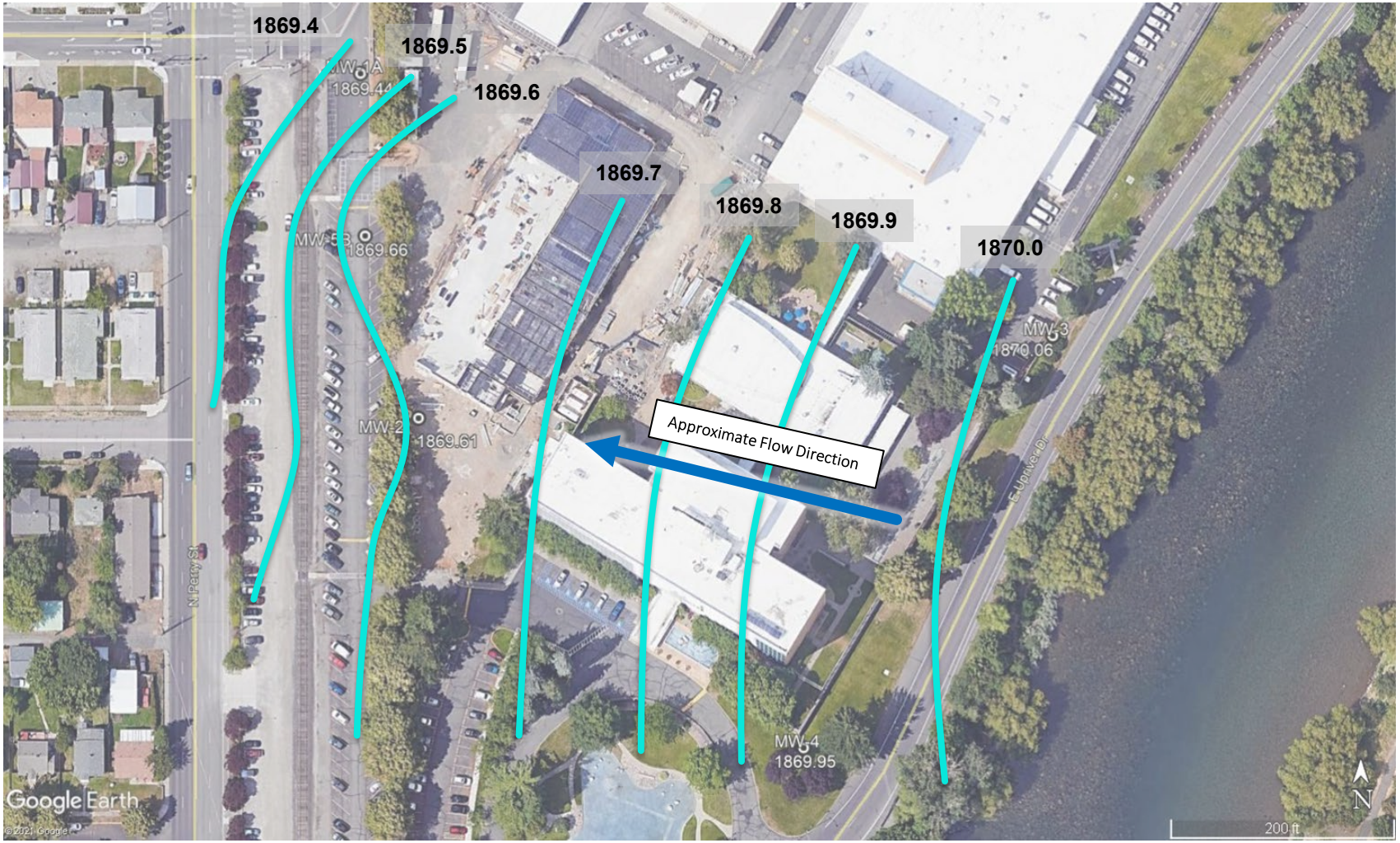
Location Map

Avista – Service Center Garage Groundwater Monitoring Report	Spokane, WA

Spokane Environmental Solutions

Figure 1

0200-017 Date Exported: 11/11/2020



Legend

- Monitoring Well
- Approximate Ground Water Elevation Contour (0.1 ft)

N W E S

Notes:

1. Location of all features on map are approximate.
2. This drawing is for information purposes. It is intended to support descriptions of features discussed in an associated document. Spokane Environmental Solutions, LLC cannot guarantee the accuracy and content of electronic files. The master file is stored by Spokane Environmental Solutions, LLC and will serve as the official record of this communication.
3. Groundwater contours interpreted from elevations measured 2/1/2020

Data Source: Image from Google Earth

Date Created: 2/11/2021

Groundwater Elevation and Interpreted Flow Direction – February 1, 2021

Avista – Service Center Garage Groundwater Monitoring Report	Spokane, WA

Spokane Environmental Solutions

Figure 2

0200-017 Date Exported: 2/19/2021

TABLES

Spokane Environmental Solutions

Table 1

Summary of Groundwater Level Measurements

Avista - Spokane Service Center

Spokane, Washington

Well Number	Top of Casing Elevation[1] (feet)	Screen Elevation[1] (feet)	Date Measured	Monitoring Well Headspace[2] (ppm)	Depth to Groundwater[3] (feet)	Groundwater Elevation[1] (feet)	Change in Groundwater Elevation[4] (feet)
MW-1A	1,906.96	1,872.0 to 1,862.0	12/20/19	0.4	39.09	1,867.87	NA
			01/03/20	0.0	39.16	1,867.80	-0.07
			01/16/20	0.0	38.76	1,868.20	0.40
			07/21/20	0.1	39.13	1,867.83	-0.37
			10/14/20	0.1	40.13	1,866.83	-1.00
			02/01/21	NA	37.52	1,869.44	2.61
MW-2	1,897.60	1,872.57 to 1,862.57	12/20/19	0.1	29.55	1,868.05	NA
			01/03/20	0.0	29.60	1,868.00	-0.05
			01/16/20	1.1	29.21	1,868.39	0.39
			07/21/20	0.1	29.57	1,868.03	-0.36
			10/14/20	0.1	30.59	1,867.01	-1.02
			02/01/21	NA	27.99	1,869.61	2.60
MW-3	1,887.57	1,872.44 to 1,862.44	12/20/19	0.0	19.10	1,868.47	NA
			01/03/20	0.1	19.15	1,868.42	-0.05
			01/16/20	0.0	18.72	1,868.85	0.43
			07/21/20	0.4	19.13	1,868.44	-0.41
			10/14/20	0.2	20.13	1,867.44	-1.00
			02/01/21	NA	17.51	1,870.06	2.62
MW-4	1,888.10	1,873.10 to 1,863.10	12/20/19	0.0	19.74	1,868.36	NA
			01/03/20	0.0	19.79	1,868.31	-0.05
			01/16/20	0.2	19.38	1,868.72	0.41
			07/21/20	0.0	19.79	1,868.31	-0.41
			10/14/20	0.0	20.78	1,867.32	-0.99
			02/01/21	NA	18.15	1,869.95	2.63
MW-5B	1901.72	1868.97 to 1858.97	12/20/19	0.7	33.65	1,868.07	NA
			01/03/20	0.0	33.71	1,868.01	-0.06
			01/16/20	2.9	33.32	1,868.40	0.39
			07/21/20	0.2	33.68	1,868.04	-0.36
			10/14/20	0.1	34.71	1,867.01	-1.03
			02/01/21	NA	32.06	1,869.66	2.65

Notes:

[1]Elevations are referenced to the National Geodetic Vertical Datum of 1988 (NAVD88).

[2]Well headspace measurements were obtained using a photoionization detector immediately upon removal of the well's compression cap.

[3]Depth to water measurements obtained from the north side of the top of PVC well casing.

[4]Represents change in groundwater elevation from previous event, as measured in monitoring wells.

[5]Well screen length is unknown.

[6]Groundwater elevation is lower than the screened interval and might not represent actual groundwater elevation.

[7]Spokane River Stage provided by United States Geological Survey (USGS) gauge at Greene Street. Measured in feet.

NA = Not Applicable; NM = Not Measured

Spokane Environmental Solutions

Table 2

Summary of Groundwater Quality Measurements

Avista - Spokane Service Center

Spokane, Washington

Well Number	Date Measured	pH (pH units)	Specific Conductivity (µS/cm)	Redox Potential (mv)	Dissolved Oxygen (mg/L)	Turbidity[1] (NTU)	Temperature (degrees C)
MW-1A	12/20/19	6.99	267.4	91.4	8.91	18.6	10.80
	01/03/20	10.93	76.5	78.9	8.88	3.0	9.10
	01/16/20	7.16	189.0	144.6	8.43	0.0	8.50
	07/21/20	7.39	161.0	113.0	5.77	61.2	22.59
	10/14/20	7.57	207.0	88.7	10.78	27.5	12.60
	02/01/21	6.23	227.0	77.0	10.75	0.0	12.43
MW-2	12/20/19	7.33	240.8	99.9	7.51	4.9	10.80
	01/03/20	11.91	65.9	113.5	7.68	2.2	10.20
	01/16/20	7.32	197.0	113.4	7.53	2.2	10.40
	07/21/20	6.89	203.0	134.0	5.29	51.4	22.73
	10/14/20	7.60	196.0	91.7	10.82	0.0	12.70
	02/01/21	7.22	197.0	45.0	10.38	215.0	10.89
MW-3	12/20/19	6.41	158.2	97.7	4.67	6.9	8.00
	01/03/20	11.53	44.3	107.0	4.99	2.2	7.20
	01/16/20	6.69	91.0	144.7	8.58	0.0	7.00
	07/21/20	6.20	152.0	50.0	1.43	0.0	18.99
	10/14/20	6.65	154.0	104.6	2.85	0.0	13.50
	02/01/21	7.07	105.0	192.0	9.51	0.0	5.63
MW-4	12/20/19	6.73	240.4	96.8	5.67	6.7	10.00
	01/03/20	12.00	72.8	108.6	5.73	5.2	9.70
	01/16/20	6.81	185.0	130.8	6.10	0.3	9.10
	07/21/20	6.17	162.0	152.0	2.00	0.0	17.23
	10/14/20	6.57	179.0	112.7	2.75	0.0	13.90
	02/01/21	6.98	200.0	207.0	10.48	2.0	9.22
MW-5B	12/20/19	7.42	248.8	64.0	8.52	31.2	10.40
	01/03/20	10.72	71.1	92.6	8.55	23.5	10.10
	01/07/00	197.00	117.5	8.4	38.21	11.1	11.10
	07/21/20	7.58	220.0	118.0	7.13	46.5	18.14
	10/14/20	7.89	262.0	72.9	9.82	74.3	12.40
	02/01/21	7.23	247.0	43.0	10.49	0.0	11.53

Notes:

[1]Turbidity is not a natural attenuation parameter but was measured in the field to evaluate groundwater stabilization

[2]MW-1 went dry before sampling on 8/17/18. The water quality parameters reflect measurements taken immediately prior to the water level dropping below the level of the pump.

µS/cm = micro-Siemens per centimeter; mV = millivolts; mg/L = milligrams per liter;

NTU = nephelometric turbidity unit; C = Celsius

Table 3

Summary of Chemical Analytical Results - Petroleum Hydrocarbons, PCBs and PAHs[1] - Groundwater

Avista - Spokane Service Center
Spokane, Washington

			Location ID	MW-1A												MW-2											
			Sample ID	MW-1A:122019		MW-1A:010320		MW-1A:011620		MW-1A		MW-1A		MW-1A		MW-2:122019		MW-2:010320		MW-2:011620		MW-2		MW-2		MW-2	
			Sample Date	12/20/2019		1/3/2020		1/16/2020		7/21/2020		10/14/2020		2/1/2021		12/20/2019		1/3/2020		1/16/2020		7/21/2020		10/14/2020		2/1/2021	
Method	**Analyte**	**Cleanup Level[2]**	**Units**																								
NWTPH-DX[3]	Diesel-range hydrocarbons	0.5	mg/L	**0.13**[7]	J	**0.12**[7]	J	0.114	U	0.092	U	0.22	U	.22	U	0.23	U	0.11[4]	U	0.114	U	0.24	U	0.23	U	0.23	U
	Lube Oil-range Hydrocarbons	0.5	mg/L	**0.18**[7]	J	0.12[4]	U	0.124	U	0.092	U	0.37	U	.37	U	0.38	U	0.12[4]	U	0.124	U	0.40	U	0.38	U	.38	U
PCB-Aroclors[5]	PCB-Aroclor 1016	0.1	µg/L	0.095	U	0.94	U	0.097	U	0.092	U	0.095	U	0.093	U	0.097	U	0.096	U	0.097	U	0.010	U	0.093	U	0.092	U
	PCB-Aroclor 1221		µg/L	0.095	U	0.94	U	0.097	U	0.092	U	0.095	U	0.093	U	0.097	U	0.096	U	0.097	U	0.010	U	0.093	U	0.092	U
	PCB-Aroclor 1232		µg/L	0.095	U	0.94	U	0.097	U	0.092	U	0.095	U	0.093	U	0.097	U	0.096	U	0.097	U	0.010	U	0.093	U	0.092	U
	PCB-Aroclor 1242		µg/L	0.095	U	0.94	U	0.097	U	0.092	U	0.095	U	0.093	U	0.097	U	0.096	U	0.097	U	0.010	U	0.093	U	0.092	U
	PCB-Aroclor 1248		µg/L	0.095	U	0.94	U	0.097	U	0.092	U	0.095	U	0.093	U	0.097	U	0.096	U	0.097	U	0.010	U	0.093	U	0.092	U
	PCB-Aroclor 1254		µg/L	0.095	U	0.94	U	0.097	U	0.092	U	0.095	U	0.093	U	0.097	U	0.096	U	0.097	U	0.010	U	0.093	U	0.092	U
	PCB-Aroclor 1260		µg/L	0.095	U	0.94	U	0.097	U	0.092	U	0.095	U	0.093	U	0.097	U	0.096	U	0.097	U	0.010	U	0.093	U	0.092	U
	PCB-Aroclor 1262		µg/L	0.095	U	0.94	U	0.097	U	0.092	U	0.095	U	0.093	U	0.097	U	0.096	U	0.097	U	0.010	U	0.093	U	0.092	U
	PCB-Aroclor 1268		µg/L	0.095	U	0.94	U	0.097	U	0.092	U	0.095	U	0.093	U	0.097	U	0.096	U	0.097	U	0.010	U	0.093	U	0.092	U
PAHs[6]	1-Methylnaphthalene	NE	µg/L	0.084	U	0.090	U	0.085	U	0.083	U	0.088	U	0.083	U	0.088	U	0.087	U	0.088	U	0.083	U	0.087	U	0.083	U
	2-Methylnaphthalene	NE	µg/L	0.084	U	0.090	U	0.085	U	0.083	U	0.088	U	0.083	U	0.088	U	0.087	U	0.088	U	0.083	U	0.087	U	0.083	U
	Acenaphthene	NE	µg/L	0.084	U	0.090	U	0.085	U	0.083	U	0.088	U	0.083	U	0.088	U	0.087	U	0.088	U	0.083	U	0.087	U	0.083	U
	Acenaphthylene	NE	µg/L	0.084	U	0.090	U	0.085	U	0.083	U	0.088	U	0.083	U	0.088	U	0.087	U	0.088	U	0.083	U	0.087	U	0.083	U
	Anthracene	NE	µg/L	0.084	U	0.090	U	0.085	U	0.083	U	0.088	U	0.083	U	0.088	U	0.087	U	0.088	U	0.083	U	0.087	U	0.083	U
	Benzo(a)anthracene	NE	µg/L	0.084	J	0.090	U	0.085	U	0.083	U	0.088	U	0.083	U	0.088	U	0.087	U	0.088	U	0.083	U	0.087	U	0.083	U
	Benzo(a)pyrene	0.1	µg/L	0.084	J	0.090	U	0.085	U	0.083	U	0.088	U	0.083	U	0.088	U	0.087	U	0.088	U	0.083	U	0.087	U	0.083	U
	Benzo(b)fluoranthene	NE	µg/L	0.084	U	0.090	U	0.085	U	0.083	U	0.088	U	0.083	U	0.088	U	0.087	U	0.088	U	0.083	U	0.087	U	0.083	U
	Benzo(g,h,i)perylene	NE	µg/L	0.084	U	0.090	U	0.085	U	0.083	U	0.088	U	0.083	U	0.088	U	0.087	U	0.088	U	0.083	U	0.087	U	0.083	U
	Benzo(k)fluoranthene	NE	µg/L	0.084	U	0.090	U	0.085	U	0.083	U	0.088	U	0.083	U	0.088	U	0.087	U	0.088	U	0.083	U	0.087	U	0.083	U
	Chrysene	NE	µg/L	0.084	J	0.090	U	0.085	U	0.083	U	0.088	U	0.083	U	0.088	U	0.087	U	0.088	U	0.083	U	0.087	U	0.083	U
	Dibenzo(a,h)anthracene	NE	µg/L	0.084	U	0.090	U	0.085	U	0.083	U	0.088	U	0.083	U	0.088	U	0.087	U	0.088	U	0.083	U	0.087	U	0.083	U
	Fluoranthene	NE	µg/L	0.084	J	0.090	U	0.085	U	0.083	U	0.088	U	0.083	U	0.088	U	0.087	U	0.088	U	0.083	U	0.087	U	0.083	U
	Fluorene	NE	µg/L	0.084	U	0.090	U	0.085	U	0.083	U	0.088	U	0.083	U	0.088	U	0.087	U	0.088	U	0.083	U	0.087	U	0.083	U
	Indeno(1,2,3-c,d)pyrene	NE	µg/L	0.084	U	0.090	U	0.085	U	0.083	U	0.088	U	0.083	U	0.088	U	0.087	U	0.088	U	0.083	U	0.087	U	0.083	U
	Naphthalene	160	µg/L	0.084	U	0.090	U	0.085	U	0.083	U	0.088	U	0.083	U	0.088	U	0.087	U	0.088	U	0.083	U	0.087	U	0.083	U
	Phenanthrene	NE	µg/L	0.084	U	0.090	U	0.085	U	0.083	U	0.088	U	0.083	U	0.088	U	0.087	U	0.088	U	0.083	U	0.087	U	0.083	U
	Pyrene	NE	µg/L	0.084	J	0.090	U	0.085	U	0.083	U	0.088	U	0.083	U	0.088	U	0.087	U	0.088	U	0.083	U	0.087	U	0.083	U
	Total cPAH TEQ (ND=0.5RL)	0.1	µg/L	0.063	U	0.068	U	0.064175	U	0.062665	U	0.066	U	0.063	U	0.066	U	0.066	U	0.06644	U	0.06267	U	0.066	U	0.063	U

			Location ID	MW-3												MW-4											
			Sample ID	MW-3:122019		MW-3:010320		MW-3:011620		MW-3		MW-3		MW-3		MW-4:122019		MW-4:010320		MW-4:011620		MW-4		MW-4		MW-4	
			Sample Date	12/20/2019		1/3/2020		1/16/2020		7/21/2020		10/14/2020		2/1/2021		12/20/2019		1/3/2020		1/16/2020		7/21/2020		10/14/2020		2/1/2021	
Method	**Analyte**	**Cleanup Level[2]**	**Units**																								
NWTPH-DX[3]	Diesel-range hydrocarbons	0.5	mg/L	0.10[4]	U	0.11[4]	U	0.114	U	0.23	U	0.22	U	.1	U	0.11[4]	U	0.10[4]	U	0.114	U	0.23	U	0.23	U	.22	U
	Lube Oil-range Hydrocarbons	0.5	mg/L	0.11[4]	U	0.12[4]	U	0.124	U	0.38	U	0.37	U	.11	U	0.12[4]	U	0.11[4]	U	0.124	U	0.38	U	0.38	U	.37	U
PCB-Aroclors[5]	PCB-Aroclor 1016	0.1	µg/L	0.097	U	0.096	U	0.095	U	0.092	U	0.094	U	0.092	U	0.097	U	0.095	U	0.10	U	0.094	U	0.095	U	0.093	U
	PCB-Aroclor 1221		µg/L	0.097	U	0.096	U	0.095	U	0.092	U	0.094	U	0.092	U	0.097	U	0.095	U	0.10	U	0.094	U	0.095	U	0.093	U
	PCB-Aroclor 1232		µg/L	0.097	U	0.096	U	0.095	U	0.092	U	0.094	U	0.092	U	0.097	U	0.095	U	0.10	U	0.094	U	0.095	U	0.093	U
	PCB-Aroclor 1242		µg/L	0.097	U	0.096	U	0.095	U	0.092	U	0.094	U	0.092	U	0.097	U	0.095	U	0.10	U	0.094	U	0.095	U	0.093	U
	PCB-Aroclor 1248		µg/L	0.097	U	0.096	U	0.095	U	0.092	U	0.094	U	0.092	U	0.097	U	0.095	U	0.10	U	0.094	U	0.095	U	0.093	U
	PCB-Aroclor 1254		µg/L	0.097	U	0.096	U	0.095	U	0.092	U	0.094	U	0.092	U	0.097	U	0.095	U	0.10	U	0.094	U	0.095	U	0.093	U
	PCB-Aroclor 1260		µg/L	0.097	U	0.096	U	0.095	U	0.092	U	0.094	U	0.092	U	0.097	U	0.095	U	0.10	U	0.094	U	0.095	U	0.093	U
	PCB-Aroclor 1262		µg/L	0.097	U	0.096	U	0.095	U	0.092	U	0.094	U	0.092	U	0.097	U	0.095	U	0.10	U	0.094	U	0.095	U	0.093	U
	PCB-Aroclor 1268		µg/L	0.097	U	0.096	U	0.095	U	0.092	U	0.094	U	0.092	U	0.097	U	0.095	U	0.10	U	0.094	U	0.095	U	0.093	U
PAHs[6]	1-Methylnaphthalene	NE	µg/L	0.086	U	0.088	U	0.086	U	0.082	U	0.085	U	0.083	U	0.087	U	0.086	U	0.088	U	0.085	U	0.086	U	0.083	U
	2-Methylnaphthalene	NE	µg/L	0.086	U	0.088	U	0.086	U	0.082	U	0.085	U	0.083	U	0.087	U	0.086	U	0.088	U	0.085	U	0.086	U	0.083	U
	Acenaphthene	NE	µg/L	0.086	U	0.088	U	0.086	U	0.082	U	0.085	U	0.083	U	0.087	U	0.086	U	0.088	U	0.085	U	0.086	U	0.083	U
	Acenaphthylene	NE	µg/L	0.086	U	0.088	U	0.086	U	0.082	U	0.085	U	0.083	U	0.087	U	0.086	U	0.088	U	0.085	U	0.086	U	0.083	U
	Anthracene	NE	µg/L	0.086	U	0.088	U	0.086	U	0.082	U	0.085	U	0.083	U	0.087	U	0.086	U	0.088	U	0.085	U	0.086	U	0.083	U
	Benzo(a)anthracene	NE	µg/L	0.086	U	0.088	U	0.086	U	0.082	U	0.085	U	0.083	U	0.087	U	0.086	U	0.088	U	0.085	U	0.086	U	0.083	U
	Benzo(a)pyrene	0.1	µg/L	0.086	U	0.088	U	0.086	U	0.082	U	0.085	U	0.083	U	0.087	U	0.086	U	0.088	U	0.085	U	0.086	U	0.083	U
	Benzo(b)fluoranthene	NE	µg/L	0.086	U	0.088	U	0.086	U	0.082	U	0.085	U	0.083	U	0.087	U	0.086	U	0.088	U	0.085	U	0.086	U	0.083	U
	Benzo(g,h,i)perylene	NE	µg/L	0.086	U	0.088	U	0.086	U	0.082	U	0.085	U	0.083	U	0.087	U	0.086	U	0.088	U	0.085	U	0.086	U	0.083	U
	Benzo(k)fluoranthene	NE	µg/L	0.086	U	0.088	U	0.086	U	0.082	U	0.085	U	0.083	U	0.087	U	0.086	U	0.088	U	0.085	U	0.086	U	0.083	U
	Chrysene	NE	µg/L	0.086	U	0.088	U	0.086	U	0.082	U	0.085	U	0.083	U	0.087	U	0.086	U	0.088	U	0.085	U	0.086	U	0.083	U
	Dibenzo(a,h)anthracene	NE	µg/L	0.086	U	0.088	U	0.086	U	0.082	U	0.085	U	0.083	U	0.087	U	0.086	U	0.088	U	0.085	U	0.086	U	0.083	U
	Fluoranthene	NE	µg/L	0.086	U	0.088	U	0.086	U	0.082	U	0.085	U	0.083	U	0.087	U	0.086	U	0.088	U	0.085	U	0.086	U	0.083	U
	Fluorene	NE	µg/L	0.086	U	0.088	U	0.086	U	0.082	U	0.085	U	0.083	U	0.087	U	0.086	U	0.088	U	0.085	U	0.086	U	0.083	U
	Indeno(1,2,3-c,d)pyrene	NE	µg/L	0.086	U	0.088	U	0.086	U	0.082	U	0.085	U	0.083	U	0.087	U	0.086	U	0.088	U	0.085	U	0.086	U	0.083	U
	Naphthalene	160	µg/L	0.086	U	0.088	U	0.086	U	0.082	U	0.085	U	0.083	U	0.087	U	0.086	U	0.088	U	0.085	U	0.086	U	0.083	U
	Phenanthrene	NE	µg/L	0.086	U	0.088	U	0.086	U	0.082	U	0.085	U	0.083	U	0.087	U	0.086	U	0.088	U	0.085	U	0.086	U	0.083	U
	Pyrene	NE	µg/L	0.086	U	0.088	U	0.086	U	0.082	U	0.085	U	0.083	U	0.087	U	0.086	U	0.088	U	0.085	U	0.086	U	0.083	U
	Total cPAH TEQ (ND=0.5RL)	0.1	µg/L	0.065	U	0.066	U	0.06493	U	0.06191	U	0.064	U	0.063	U	0.066	U	0.065	U	0.06644	U	0.064175	U	0.065	U	0.063	U

			Location ID	MW-5B											
			Sample ID	MW-5B:122019		MW-5B:010320		MW-5B:011620		MW-5B		MW-5B		MW-5B	
			Sample Date	12/20/2019		1/3/2020		1/16/2020		7/21/2020		10/14/2020		2/1/2021	
Method	**Analyte**	**Cleanup Level[2]**	**Units**												
NWTPH-DX[3]	Diesel-range hydrocarbons	0.5	mg/L	0.10[4]	U	0.10[4]	U	0.114	U	0.23	U	0.23	U	.22	U
	Lube Oil-range Hydrocarbons	0.5	mg/L	0.11[4]	U	0.11[4]	U	0.124	U	0.38	U	0.38	U	.37	U
PCB-Aroclors[5]	PCB-Aroclor 1016	0.1	µg/L	0.098	U	0.094	U	0.10	U	0.092	U	0.092	U	0.091	U
	PCB-Aroclor 1221		µg/L	0.098	U	0.094	U	0.10	U	0.092	U	0.092	U	0.091	U
	PCB-Aroclor 1232		µg/L	0.098	U	0.094	U	0.10	U	0.092	U	0.092	U	0.091	U
	PCB-Aroclor 1242		µg/L	0.098	U	0.094	U	0.10	U	0.092	U	0.092	U	0.091	U
	PCB-Aroclor 1248		µg/L	0.098	U	0.094	U	0.10	U	0.092	U	0.092	U	0.091	U
	PCB-Aroclor 1254		µg/L	0.098	U	0.094	U	0.10	U	0.092	U	0.092	U	0.091	U
	PCB-Aroclor 1260		µg/L	0.098	U	0.094	U	0.10	U	0.092	U	0.092	U	0.091	U
	PCB-Aroclor 1262		µg/L	0.098	U	0.094	U	0.10	U	0.092	U	0.092	U	0.091	U
	PCB-Aroclor 1268		µg/L	0.098	U	0.094	U	0.10	U	0.092	U	0.092	U	0.091	U
PAHs[6]	1-Methylnaphthalene	NE	µg/L	0.084	U	0.084	U	0.089	U	0.083	U	0.083	U	0.083	U
	2-Methylnaphthalene	NE	µg/L	0.084	U	0.084	U	0.089	U	0.083	U	0.083	U	0.083	U
	Acenaphthene	NE	µg/L	0.084	U	0.084	U	0.089	U	0.083	U	0.083	U	0.083	U
	Acenaphthylene	NE	µg/L	0.084	U	0.084	U	0.089	U	0.083	U	0.083	U	0.083	U
	Anthracene	NE	µg/L	0.084	U	0.084	U	0.089	U	0.083	U	0.083	U	0.083	U
	Benzo(a)anthracene	NE	µg/L	0.084	U	0.084	U	0.089	U	0.083	U	0.083	U	0.083	U
	Benzo(a)pyrene	0.1	µg/L	0.084	U	0.084	U	0.089	U	0.083	U	0.083	U	0.083	U
	Benzo(b)fluoranthene	NE	µg/L	0.084	U	0.084	U	0.089	U	0.083	U	0.083	U	0.083	U
	Benzo(g,h,i)perylene	NE	µg/L	0.084	U	0.084	U	0.089	U	0.083	U	0.083	U	0.083	U
	Benzo(k)fluoranthene	NE	µg/L	0.084	U	0.084	U	0.089	U	0.083	U	0.083	U	0.083	U
	Chrysene	NE	µg/L	0.084	U	0.084	U	0.089	U	0.083	U	0.083	U	0.083	U
	Dibenzo(a,h)anthracene	NE	µg/L	0.084	U	0.084	U	0.089	U	0.083	U	0.083	U	0.083	U
	Fluoranthene	NE	µg/L	0.084	U	0.084	U	0.089	U	0.083	U	0.083	U	0.083	U
	Fluorene	NE	µg/L	0.084	U	0.084	U	0.089	U	0.083	U	0.083	U	0.083	U
	Indeno(1,2,3-c,d)pyrene	NE	µg/L	0.084	U	0.084	U	0.089	U	0.083	U	0.083	U	0.083	U
	Naphthalene	160	µg/L	0.084	U	0.084	U	0.089	U	0.083	U	0.083	U	0.083	U
	Phenanthrene	NE	µg/L	0.084	U	0.084	U	0.089	U	0.083	U	0.083	U	0.083	U
	Pyrene	NE	µg/L	0.084	U	0.084	U	0.089	U	0.083	U	0.083	U	0.083	U
	Total cPAH TEQ (ND=0.5RL)	0.1	µg/L	0.063	U	0.063	U	0.067195	U	0.062665	U	0.063	U	0.063	U

Notes:

[1]Laboratory testing provided by TestAmerica Laboratories, Inc. in Spokane Valley, Washington.

[2]Cleanup level refers to Model Toxics Control Act (MTCA) Method A Cleanup Level for Unrestricted Land Use

[3]Diesel- and Oil-range Petroleum Hydrocarbons (DRPH and ORPH) analyzed using Northwest Method NWTPH-Dx.

[4]Result is reported to the method detection limit (MDL).

[5]Polychlorinated biphenyls (PCBs) analyzed using Environmental Protection Agency (EPA) Method 8082A.

[6]Polycyclic aromatic hydrocarbons (PAHs) analyzed using EPA Method 8270D.

[7]Detection is J flagged as estimated result and reported to the MDL.

µg/L = micrograms per Liter; mg/L = milligrams per Liter; U = analyte was not detected at concentrations greater than the laboratory reporting limit; J = estimated result; "--" = not analyzed

Bold = indicates the analyte was detected above the laboratory reporting limit.

Bold Red= indicates the analyte was detected above the respective cleanup level.

APPENDIX A

LABORATORY REPORT

eurofins | Environment Testing America

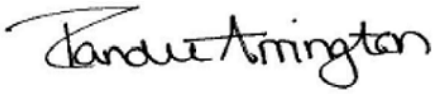
ANALYTICAL REPORT

Eurofins TestAmerica, Spokane
11922 East 1st Ave
Spokane, WA 99206
Tel: (509)924-9200

Laboratory Job ID: 590-14590-1
Client Project/Site: Avista GW Monitoring

For:
Spokane Environmental Solutions LLC
3810 E. Boone Avenue
Suite #101
Spokane, Washington 99202

Attn: Gary Panther



Authorized for release by:
2/10/2021 3:50:47 PM

Randee Arrington, Project Manager II
(509)924-9200
Randee.Arrington@Eurofinset.com

Table of Contents

Case Narrative

Client: Spokane Environmental Solutions LLC
Project/Site: Avista GW Monitoring

Job ID: 590-14590-1

Job ID: 590-14590-1

Laboratory: Eurofins TestAmerica, Spokane

Narrative

Receipt
The samples were received on 2/1/2021 2:09 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 11.3º C.

Receipt Exceptions
The following samples were received at the laboratory outside the required temperature criteria: MW-1A (590-14590-1), MW-2 (590-14590-2), MW-3 (590-14590-3), MW-4 (590-14590-4), MW-5B (590-14590-5) and MW-DUP (590-14590-6). The samples ARE considered acceptable since they were collected and submitted to the laboratory on the same day and there is evidence that the chilling process has begun.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

Sample Summary

Client: Spokane Environmental Solutions LLC
Project/Site: Avista GW Monitoring

Job ID: 590-14590-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
590-14590-1	MW-1A	Water	02/01/21 10:00	02/01/21 14:09	
590-14590-2	MW-2	Water	02/01/21 11:40	02/01/21 14:09	
590-14590-3	MW-3	Water	02/01/21 12:45	02/01/21 14:09	
590-14590-4	MW-4	Water	02/01/21 13:30	02/01/21 14:09	
590-14590-5	MW-5B	Water	02/01/21 11:00	02/01/21 14:09	
590-14590-6	MW-DUP	Water	02/01/21 10:00	02/01/21 14:09	

Definitions/Glossary

Client: Spokane Environmental Solutions LLC
Job ID: 590-14590-1
Project/Site: Avista GW Monitoring

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: Spokane Environmental Solutions LLC
Project/Site: Avista GW Monitoring

Job ID: 590-14590-1

Client Sample ID: MW-1A

Date Collected: 02/01/21 10:00
Date Received: 02/01/21 14:09

Lab Sample ID: 590-14590-1

Matrix: Water

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 15:52	1
2-Methylnaphthalene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 15:52	1
1-Methylnaphthalene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 15:52	1
Acenaphthylene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 15:52	1
Acenaphthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 15:52	1
Fluorene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 15:52	1
Phenanthrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 15:52	1
Anthracene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 15:52	1
Fluoranthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 15:52	1
Pyrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 15:52	1
Benzo[a]anthracene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 15:52	1
Chrysene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 15:52	1
Benzo[b]fluoranthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 15:52	1
Benzo[k]fluoranthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 15:52	1
Benzo[a]pyrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 15:52	1
Indeno[1,2,3-cd]pyrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 15:52	1
Dibenz(a,h)anthracene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 15:52	1
Benzo[g,h,i]perylene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*63*		*29 - 121*	*02/03/21 13:24*	*02/03/21 15:52*	*1*
2-Fluorobiphenyl (Surr)	*66*		*36 - 120*	*02/03/21 13:24*	*02/03/21 15:52*	*1*
p-Terphenyl-d14	*70*		*51 - 121*	*02/03/21 13:24*	*02/03/21 15:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.093		ug/L		02/09/21 11:05	02/09/21 14:30	1
PCB-1221	ND		0.093		ug/L		02/09/21 11:05	02/09/21 14:30	1
PCB-1232	ND		0.093		ug/L		02/09/21 11:05	02/09/21 14:30	1
PCB-1242	ND		0.093		ug/L		02/09/21 11:05	02/09/21 14:30	1
PCB-1248	ND		0.093		ug/L		02/09/21 11:05	02/09/21 14:30	1
PCB-1254	ND		0.093		ug/L		02/09/21 11:05	02/09/21 14:30	1
PCB-1260	ND		0.093		ug/L		02/09/21 11:05	02/09/21 14:30	1
PCB-1268	ND		0.093		ug/L		02/09/21 11:05	02/09/21 14:30	1
PCB-1262	ND		0.093		ug/L		02/09/21 11:05	02/09/21 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*52*		*20 - 120*	*02/09/21 11:05*	*02/09/21 14:30*	*1*
DCB Decachlorobiphenyl (Surr)	*82*		*39 - 120*	*02/09/21 11:05*	*02/09/21 14:30*	*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		0.22		mg/L		02/09/21 14:58	02/09/21 20:50	1
Residual Range Organics (RRO) (C25-C36)	ND		0.37		mg/L		02/09/21 14:58	02/09/21 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*82*		*50 - 150*	*02/09/21 14:58*	*02/09/21 20:50*	*1*
n-Triacontane-d62	*83*		*50 - 150*	*02/09/21 14:58*	*02/09/21 20:50*	*1*

Client: Spokane Environmental Solutions LLC
Project/Site: Avista GW Monitoring

Job ID: 590-14590-1

Client Sample ID: MW-2

Date Collected: 02/01/21 11:40
Date Received: 02/01/21 14:09

Lab Sample ID: 590-14590-2

Matrix: Water

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:16	1
2-Methylnaphthalene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:16	1
1-Methylnaphthalene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:16	1
Acenaphthylene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:16	1
Acenaphthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:16	1
Fluorene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:16	1
Phenanthrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:16	1
Anthracene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:16	1
Fluoranthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:16	1
Pyrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:16	1
Benzo[a]anthracene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:16	1
Chrysene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:16	1
Benzo[b]fluoranthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:16	1
Benzo[k]fluoranthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:16	1
Benzo[a]pyrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:16	1
Indeno[1,2,3-cd]pyrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:16	1
Dibenz(a,h)anthracene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:16	1
Benzo[g,h,i]perylene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*75*		*29 - 121*	*02/03/21 13:24*	*02/03/21 16:16*	*1*
2-Fluorobiphenyl (Surr)	*73*		*36 - 120*	*02/03/21 13:24*	*02/03/21 16:16*	*1*
p-Terphenyl-d14	*71*		*51 - 121*	*02/03/21 13:24*	*02/03/21 16:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.092		ug/L		02/09/21 11:05	02/09/21 14:51	1
PCB-1221	ND		0.092		ug/L		02/09/21 11:05	02/09/21 14:51	1
PCB-1232	ND		0.092		ug/L		02/09/21 11:05	02/09/21 14:51	1
PCB-1242	ND		0.092		ug/L		02/09/21 11:05	02/09/21 14:51	1
PCB-1248	ND		0.092		ug/L		02/09/21 11:05	02/09/21 14:51	1
PCB-1254	ND		0.092		ug/L		02/09/21 11:05	02/09/21 14:51	1
PCB-1260	ND		0.092		ug/L		02/09/21 11:05	02/09/21 14:51	1
PCB-1268	ND		0.092		ug/L		02/09/21 11:05	02/09/21 14:51	1
PCB-1262	ND		0.092		ug/L		02/09/21 11:05	02/09/21 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*52*		*20 - 120*	*02/09/21 11:05*	*02/09/21 14:51*	*1*
DCB Decachlorobiphenyl (Surr)	*76*		*39 - 120*	*02/09/21 11:05*	*02/09/21 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)	ND		0.23		mg/L		02/09/21 14:58	02/09/21 21:10	1
Residual Range Organics (RRO) (C25-C36)	ND		0.38		mg/L		02/09/21 14:58	02/09/21 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*83*		*50 - 150*	*02/09/21 14:58*	*02/09/21 21:10*	*1*
n-Triacontane-d62	*83*		*50 - 150*	*02/09/21 14:58*	*02/09/21 21:10*	*1*

Client: Spokane Environmental Solutions LLC
Project/Site: Avista GW Monitoring

Job ID: 590-14590-1

Client Sample ID: MW-3

Date Collected: 02/01/21 12:45
Date Received: 02/01/21 14:09

Lab Sample ID: 590-14590-3

Matrix: Water

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:39	1
2-Methylnaphthalene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:39	1
1-Methylnaphthalene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:39	1
Acenaphthylene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:39	1
Acenaphthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:39	1
Fluorene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:39	1
Phenanthrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:39	1
Anthracene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:39	1
Fluoranthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:39	1
Pyrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:39	1
Benzo[a]anthracene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:39	1
Chrysene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:39	1
Benzo[b]fluoranthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:39	1
Benzo[k]fluoranthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:39	1
Benzo[a]pyrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:39	1
Indeno[1,2,3-cd]pyrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:39	1
Dibenz(a,h)anthracene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:39	1
Benzo[g,h,i]perylene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*72*		*29 - 121*	*02/03/21 13:24*	*02/03/21 16:39*	*1*
2-Fluorobiphenyl (Surr)	*70*		*36 - 120*	*02/03/21 13:24*	*02/03/21 16:39*	*1*
p-Terphenyl-d14	*73*		*51 - 121*	*02/03/21 13:24*	*02/03/21 16:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.092		ug/L		02/09/21 11:05	02/09/21 15:12	1
PCB-1221	ND		0.092		ug/L		02/09/21 11:05	02/09/21 15:12	1
PCB-1232	ND		0.092		ug/L		02/09/21 11:05	02/09/21 15:12	1
PCB-1242	ND		0.092		ug/L		02/09/21 11:05	02/09/21 15:12	1
PCB-1248	ND		0.092		ug/L		02/09/21 11:05	02/09/21 15:12	1
PCB-1254	ND		0.092		ug/L		02/09/21 11:05	02/09/21 15:12	1
PCB-1260	ND		0.092		ug/L		02/09/21 11:05	02/09/21 15:12	1
PCB-1268	ND		0.092		ug/L		02/09/21 11:05	02/09/21 15:12	1
PCB-1262	ND		0.092		ug/L		02/09/21 11:05	02/09/21 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*48*		*20 - 120*	*02/09/21 11:05*	*02/09/21 15:12*	*1*
DCB Decachlorobiphenyl (Surr)	*76*		*39 - 120*	*02/09/21 11:05*	*02/09/21 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		0.22		mg/L		02/09/21 14:58	02/09/21 21:30	1
Residual Range Organics (RRO) (C25-C36)	ND		0.37		mg/L		02/09/21 14:58	02/09/21 21:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*91*		*50 - 150*	*02/09/21 14:58*	*02/09/21 21:30*	*1*
n-Triacontane-d62	*91*		*50 - 150*	*02/09/21 14:58*	*02/09/21 21:30*	*1*

Client: Spokane Environmental Solutions LLC
Project/Site: Avista GW Monitoring

Job ID: 590-14590-1

Client Sample ID: MW-4

Date Collected: 02/01/21 13:30
Date Received: 02/01/21 14:09

Lab Sample ID: 590-14590-4

Matrix: Water

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:02	1
2-Methylnaphthalene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:02	1
1-Methylnaphthalene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:02	1
Acenaphthylene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:02	1
Acenaphthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:02	1
Fluorene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:02	1
Phenanthrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:02	1
Anthracene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:02	1
Fluoranthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:02	1
Pyrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:02	1
Benzo[a]anthracene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:02	1
Chrysene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:02	1
Benzo[b]fluoranthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:02	1
Benzo[k]fluoranthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:02	1
Benzo[a]pyrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:02	1
Indeno[1,2,3-cd]pyrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:02	1
Dibenz(a,h)anthracene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:02	1
Benzo[g,h,i]perylene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*73*		*29 - 121*	*02/03/21 13:24*	*02/03/21 17:02*	*1*
2-Fluorobiphenyl (Surr)	*72*		*36 - 120*	*02/03/21 13:24*	*02/03/21 17:02*	*1*
p-Terphenyl-d14	*75*		*51 - 121*	*02/03/21 13:24*	*02/03/21 17:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.093		ug/L		02/09/21 11:05	02/09/21 15:33	1
PCB-1221	ND		0.093		ug/L		02/09/21 11:05	02/09/21 15:33	1
PCB-1232	ND		0.093		ug/L		02/09/21 11:05	02/09/21 15:33	1
PCB-1242	ND		0.093		ug/L		02/09/21 11:05	02/09/21 15:33	1
PCB-1248	ND		0.093		ug/L		02/09/21 11:05	02/09/21 15:33	1
PCB-1254	ND		0.093		ug/L		02/09/21 11:05	02/09/21 15:33	1
PCB-1260	ND		0.093		ug/L		02/09/21 11:05	02/09/21 15:33	1
PCB-1268	ND		0.093		ug/L		02/09/21 11:05	02/09/21 15:33	1
PCB-1262	ND		0.093		ug/L		02/09/21 11:05	02/09/21 15:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*51*		*20 - 120*	*02/09/21 11:05*	*02/09/21 15:33*	*1*
DCB Decachlorobiphenyl (Surr)	*75*		*39 - 120*	*02/09/21 11:05*	*02/09/21 15:33*	*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		0.22		mg/L		02/09/21 14:58	02/09/21 21:50	1
Residual Range Organics (RRO) (C25-C36)	ND		0.37		mg/L		02/09/21 14:58	02/09/21 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*85*		*50 - 150*	*02/09/21 14:58*	*02/09/21 21:50*	*1*
n-Triacontane-d62	*82*		*50 - 150*	*02/09/21 14:58*	*02/09/21 21:50*	*1*

Client: Spokane Environmental Solutions LLC
Project/Site: Avista GW Monitoring

Job ID: 590-14590-1

Client Sample ID: MW-5B

Date Collected: 02/01/21 11:00
Date Received: 02/01/21 14:09

Lab Sample ID: 590-14590-5

Matrix: Water

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:25	1
2-Methylnaphthalene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:25	1
1-Methylnaphthalene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:25	1
Acenaphthylene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:25	1
Acenaphthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:25	1
Fluorene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:25	1
Phenanthrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:25	1
Anthracene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:25	1
Fluoranthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:25	1
Pyrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:25	1
Benzo[a]anthracene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:25	1
Chrysene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:25	1
Benzo[b]fluoranthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:25	1
Benzo[k]fluoranthene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:25	1
Benzo[a]pyrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:25	1
Indeno[1,2,3-cd]pyrene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:25	1
Dibenz(a,h)anthracene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:25	1
Benzo[g,h,i]perylene	ND		0.083		ug/L		02/03/21 13:24	02/03/21 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*85*		*29 - 121*	*02/03/21 13:24*	*02/03/21 17:25*	*1*
2-Fluorobiphenyl (Surr)	*78*		*36 - 120*	*02/03/21 13:24*	*02/03/21 17:25*	*1*
p-Terphenyl-d14	*76*		*51 - 121*	*02/03/21 13:24*	*02/03/21 17:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.091		ug/L		02/09/21 11:05	02/09/21 15:54	1
PCB-1221	ND		0.091		ug/L		02/09/21 11:05	02/09/21 15:54	1
PCB-1232	ND		0.091		ug/L		02/09/21 11:05	02/09/21 15:54	1
PCB-1242	ND		0.091		ug/L		02/09/21 11:05	02/09/21 15:54	1
PCB-1248	ND		0.091		ug/L		02/09/21 11:05	02/09/21 15:54	1
PCB-1254	ND		0.091		ug/L		02/09/21 11:05	02/09/21 15:54	1
PCB-1260	ND		0.091		ug/L		02/09/21 11:05	02/09/21 15:54	1
PCB-1268	ND		0.091		ug/L		02/09/21 11:05	02/09/21 15:54	1
PCB-1262	ND		0.091		ug/L		02/09/21 11:05	02/09/21 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*49*		*20 - 120*	*02/09/21 11:05*	*02/09/21 15:54*	*1*
DCB Decachlorobiphenyl (Surr)	*72*		*39 - 120*	*02/09/21 11:05*	*02/09/21 15:54*	*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		0.22		mg/L		02/09/21 14:58	02/09/21 22:10	1
Residual Range Organics (RRO) (C25-C36)	ND		0.37		mg/L		02/09/21 14:58	02/09/21 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*90*		*50 - 150*	*02/09/21 14:58*	*02/09/21 22:10*	*1*
n-Triacontane-d62	*87*		*50 - 150*	*02/09/21 14:58*	*02/09/21 22:10*	*1*

Client Sample Results

Client: Spokane Environmental Solutions LLC
Project/Site: Avista GW Monitoring

Job ID: 590-14590-1

Client Sample ID: MW-DUP

Date Collected: 02/01/21 10:00
Date Received: 02/01/21 14:09

Lab Sample ID: 590-14590-6

Matrix: Water

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		0.22		mg/L		02/09/21 14:58	02/09/21 22:30	1
Residual Range Organics (RRO) (C25-C36)	ND		0.37		mg/L		02/09/21 14:58	02/09/21 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*87*		*50 - 150*	*02/09/21 14:58*	*02/09/21 22:30*	*1*
n-Triacontane-d62	*85*		*50 - 150*	*02/09/21 14:58*	*02/09/21 22:30*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 590-30460/1-A
Matrix: Water
Analysis Batch: 30457

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 30460

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.090		ug/L		02/03/21 13:24	02/03/21 14:43	1
2-Methylnaphthalene	ND		0.090		ug/L		02/03/21 13:24	02/03/21 14:43	1
1-Methylnaphthalene	ND		0.090		ug/L		02/03/21 13:24	02/03/21 14:43	1
Acenaphthylene	ND		0.090		ug/L		02/03/21 13:24	02/03/21 14:43	1
Acenaphthene	ND		0.090		ug/L		02/03/21 13:24	02/03/21 14:43	1
Fluorene	ND		0.090		ug/L		02/03/21 13:24	02/03/21 14:43	1
Phenanthrene	ND		0.090		ug/L		02/03/21 13:24	02/03/21 14:43	1
Anthracene	ND		0.090		ug/L		02/03/21 13:24	02/03/21 14:43	1
Fluoranthene	ND		0.090		ug/L		02/03/21 13:24	02/03/21 14:43	1
Pyrene	ND		0.090		ug/L		02/03/21 13:24	02/03/21 14:43	1
Benzo[a]anthracene	ND		0.090		ug/L		02/03/21 13:24	02/03/21 14:43	1
Chrysene	ND		0.090		ug/L		02/03/21 13:24	02/03/21 14:43	1
Benzo[b]fluoranthene	ND		0.090		ug/L		02/03/21 13:24	02/03/21 14:43	1
Benzo[k]fluoranthene	ND		0.090		ug/L		02/03/21 13:24	02/03/21 14:43	1
Benzo[a]pyrene	ND		0.090		ug/L		02/03/21 13:24	02/03/21 14:43	1
Indeno[1,2,3-cd]pyrene	ND		0.090		ug/L		02/03/21 13:24	02/03/21 14:43	1
Dibenz(a,h)anthracene	ND		0.090		ug/L		02/03/21 13:24	02/03/21 14:43	1
Benzo[g,h,i]perylene	ND		0.090		ug/L		02/03/21 13:24	02/03/21 14:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*71*		*29 - 121*	*02/03/21 13:24*	*02/03/21 14:43*	*1*
2-Fluorobiphenyl (Surr)	*63*		*36 - 120*	*02/03/21 13:24*	*02/03/21 14:43*	*1*
p-Terphenyl-d14	*90*		*51 - 121*	*02/03/21 13:24*	*02/03/21 14:43*	*1*

Lab Sample ID: LCS 590-30460/2-A
Matrix: Water
Analysis Batch: 30457

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 30460

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	1.60	1.32		ug/L		82	52 - 120
2-Methylnaphthalene	1.60	1.27		ug/L		79	44 - 120
1-Methylnaphthalene	1.60	1.27		ug/L		79	49 - 120
Acenaphthylene	1.60	1.30		ug/L		81	50 - 120
Acenaphthene	1.60	1.26		ug/L		79	54 - 120
Fluorene	1.60	1.39		ug/L		87	53 - 120
Phenanthrene	1.60	1.45		ug/L		91	55 - 120
Anthracene	1.60	1.44		ug/L		90	59 - 120
Fluoranthene	1.60	1.53		ug/L		96	53 - 120
Pyrene	1.60	1.54		ug/L		96	61 - 126
Benzo[a]anthracene	1.60	1.61		ug/L		101	51 - 128
Chrysene	1.60	1.60		ug/L		100	58 - 126
Benzo[b]fluoranthene	1.60	1.55		ug/L		97	51 - 137
Benzo[k]fluoranthene	1.60	1.64		ug/L		102	58 - 120
Benzo[a]pyrene	1.60	1.56		ug/L		98	54 - 120
Indeno[1,2,3-cd]pyrene	1.60	1.47		ug/L		92	46 - 120
Dibenz(a,h)anthracene	1.60	1.49		ug/L		93	51 - 120
Benzo[g,h,i]perylene	1.60	1.53		ug/L		96	55 - 120

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 590-30460/2-A
Matrix: Water
Analysis Batch: 30457

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 30460

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*82*		*29 - 121*
2-Fluorobiphenyl (Surr)	*67*		*36 - 120*
p-Terphenyl-d14	*86*		*51 - 121*

Lab Sample ID: LCSD 590-30460/3-A
Matrix: Water
Analysis Batch: 30457

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 30460

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene			1.60	1.38		ug/L		87	52 - 120	5	21
2-Methylnaphthalene			1.60	1.31		ug/L		82	44 - 120	3	16
1-Methylnaphthalene			1.60	1.29		ug/L		81	49 - 120	2	15
Acenaphthylene			1.60	1.37		ug/L		86	50 - 120	6	15
Acenaphthene			1.60	1.36		ug/L		85	54 - 120	8	15
Fluorene			1.60	1.49		ug/L		93	53 - 120	7	15
Phenanthrene			1.60	1.52		ug/L		95	55 - 120	5	16
Anthracene			1.60	1.53		ug/L		96	59 - 120	7	15
Fluoranthene			1.60	1.66		ug/L		104	53 - 120	8	15
Pyrene			1.60	1.64		ug/L		102	61 - 126	6	15
Benzo[a]anthracene			1.60	1.74		ug/L		109	51 - 128	8	15
Chrysene			1.60	1.75		ug/L		109	58 - 126	9	15
Benzo[b]fluoranthene			1.60	1.66		ug/L		104	51 - 137	7	15
Benzo[k]fluoranthene			1.60	1.70		ug/L		106	58 - 120	4	15
Benzo[a]pyrene			1.60	1.67		ug/L		104	54 - 120	7	15
Indeno[1,2,3-cd]pyrene			1.60	1.57		ug/L		98	46 - 120	7	18
Dibenz(a,h)anthracene			1.60	1.60		ug/L		100	51 - 120	7	18
Benzo[g,h,i]perylene			1.60	1.46		ug/L		91	55 - 120	5	17

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*87*		*29 - 121*
2-Fluorobiphenyl (Surr)	*71*		*36 - 120*
p-Terphenyl-d14	*93*		*51 - 121*

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

Lab Sample ID: MB 590-30505/1-A
Matrix: Water
Analysis Batch: 30499

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 30505

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.10		ug/L		02/09/21 11:05	02/09/21 12:03	1
PCB-1221	ND		0.10		ug/L		02/09/21 11:05	02/09/21 12:03	1
PCB-1232	ND		0.10		ug/L		02/09/21 11:05	02/09/21 12:03	1
PCB-1242	ND		0.10		ug/L		02/09/21 11:05	02/09/21 12:03	1
PCB-1248	ND		0.10		ug/L		02/09/21 11:05	02/09/21 12:03	1
PCB-1254	ND		0.10		ug/L		02/09/21 11:05	02/09/21 12:03	1
PCB-1260	ND		0.10		ug/L		02/09/21 11:05	02/09/21 12:03	1
PCB-1268	ND		0.10		ug/L		02/09/21 11:05	02/09/21 12:03	1

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

Lab Sample ID: MB 590-30505/1-A
Matrix: Water
Analysis Batch: 30499

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 30505

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1262	ND		0.10		ug/L		02/09/21 11:05	02/09/21 12:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*20 - 120*	*02/09/21 11:05*	*02/09/21 12:03*	*1*
DCB Decachlorobiphenyl (Surr)	*104*		*39 - 120*	*02/09/21 11:05*	*02/09/21 12:03*	*1*

Lab Sample ID: LCS 590-30505/2-A
Matrix: Water
Analysis Batch: 30499

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 30505

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			1.60	1.18		ug/L		74	44 - 120		
PCB-1260			1.60	1.11		ug/L		69	48 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*59*		*20 - 120*
DCB Decachlorobiphenyl (Surr)	*86*		*39 - 120*

Lab Sample ID: LCSD 590-30505/3-A
Matrix: Water
Analysis Batch: 30499

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 30505

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			1.60	1.11		ug/L		69	44 - 120	6	17
PCB-1260			1.60	1.08		ug/L		68	48 - 120	2	21

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*49*		*20 - 120*
DCB Decachlorobiphenyl (Surr)	*88*		*39 - 120*

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

Lab Sample ID: MB 590-30513/1-A
Matrix: Water
Analysis Batch: 30508

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 30513

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO) (C10-C25)	ND		0.24		mg/L		02/09/21 14:58	02/09/21 19:51	1
Residual Range Organics (RRO) (C25-C36)	ND		0.40		mg/L		02/09/21 14:58	02/09/21 19:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*89*		*50 - 150*	*02/09/21 14:58*	*02/09/21 19:51*	*1*
n-Triacontane-d62	*85*		*50 - 150*	*02/09/21 14:58*	*02/09/21 19:51*	*1*

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

Lab Sample ID: LCS 590-30513/2-A
Matrix: Water
Analysis Batch: 30508

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 30513

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (DRO) (C10-C25)			1.60	1.40		mg/L		88	50 - 150		
Residual Range Organics (RRO) (C25-C36)			1.60	1.55		mg/L		97	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*87*		*50 - 150*
n-Triacontane-d62	*87*		*50 - 150*

Lab Sample ID: LCSD 590-30513/3-A
Matrix: Water
Analysis Batch: 30508

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 30513

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (DRO) (C10-C25)			1.60	1.32		mg/L		83	50 - 150	6	25
Residual Range Organics (RRO) (C25-C36)			1.60	1.56		mg/L		98	50 - 150	1	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl	*88*		*50 - 150*
n-Triacontane-d62	*90*		*50 - 150*

Lab Chronicle

Client: Spokane Environmental Solutions LLC
Project/Site: Avista GW Monitoring

Job ID: 590-14590-1

Client Sample ID: MW-1A
Date Collected: 02/01/21 10:00
Date Received: 02/01/21 14:09

Lab Sample ID: 590-14590-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			271.3 mL	2 mL	30460	02/03/21 13:24	NMI	TAL SPK
Total/NA	Analysis	8270E SIM		1			30457	02/03/21 15:52	NMI	TAL SPK
Total/NA	Prep	3510C			269.6 mL	2 mL	30505	02/09/21 11:05	NMI	TAL SPK
Total/NA	Analysis	8082A		1			30499	02/09/21 14:30	NMI	TAL SPK
Total/NA	Prep	3510C			273.1 mL	2 mL	30513	02/09/21 14:58	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1			30508	02/09/21 20:50	NMI	TAL SPK

Client Sample ID: MW-2
Date Collected: 02/01/21 11:40
Date Received: 02/01/21 14:09

Lab Sample ID: 590-14590-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			270.9 mL	2 mL	30460	02/03/21 13:24	NMI	TAL SPK
Total/NA	Analysis	8270E SIM		1			30457	02/03/21 16:16	NMI	TAL SPK
Total/NA	Prep	3510C			271.7 mL	2 mL	30505	02/09/21 11:05	NMI	TAL SPK
Total/NA	Analysis	8082A		1			30499	02/09/21 14:51	NMI	TAL SPK
Total/NA	Prep	3510C			265.7 mL	2 mL	30513	02/09/21 14:58	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1			30508	02/09/21 21:10	NMI	TAL SPK

Client Sample ID: MW-3
Date Collected: 02/01/21 12:45
Date Received: 02/01/21 14:09

Lab Sample ID: 590-14590-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			271.4 mL	2 mL	30460	02/03/21 13:24	NMI	TAL SPK
Total/NA	Analysis	8270E SIM		1			30457	02/03/21 16:39	NMI	TAL SPK
Total/NA	Prep	3510C			271.8 mL	2 mL	30505	02/09/21 11:05	NMI	TAL SPK
Total/NA	Analysis	8082A		1			30499	02/09/21 15:12	NMI	TAL SPK
Total/NA	Prep	3510C			267.2 mL	2 mL	30513	02/09/21 14:58	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1			30508	02/09/21 21:30	NMI	TAL SPK

Client Sample ID: MW-4
Date Collected: 02/01/21 13:30
Date Received: 02/01/21 14:09

Lab Sample ID: 590-14590-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			270.8 mL	2 mL	30460	02/03/21 13:24	NMI	TAL SPK
Total/NA	Analysis	8270E SIM		1			30457	02/03/21 17:02	NMI	TAL SPK
Total/NA	Prep	3510C			270.1 mL	2 mL	30505	02/09/21 11:05	NMI	TAL SPK
Total/NA	Analysis	8082A		1			30499	02/09/21 15:33	NMI	TAL SPK
Total/NA	Prep	3510C			271.7 mL	2 mL	30513	02/09/21 14:58	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1			30508	02/09/21 21:50	NMI	TAL SPK

Lab Chronicle

Client: Spokane Environmental Solutions LLC
Project/Site: Avista GW Monitoring

Job ID: 590-14590-1

Client Sample ID: MW-5B

Date Collected: 02/01/21 11:00
Date Received: 02/01/21 14:09

Lab Sample ID: 590-14590-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			272.1 mL	2 mL	30460	02/03/21 13:24	NMI	TAL SPK
Total/NA	Analysis	8270E SIM		1			30457	02/03/21 17:25	NMI	TAL SPK
Total/NA	Prep	3510C			273.6 mL	2 mL	30505	02/09/21 11:05	NMI	TAL SPK
Total/NA	Analysis	8082A		1			30499	02/09/21 15:54	NMI	TAL SPK
Total/NA	Prep	3510C			267.1 mL	2 mL	30513	02/09/21 14:58	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1			30508	02/09/21 22:10	NMI	TAL SPK

Client Sample ID: MW-DUP

Date Collected: 02/01/21 10:00
Date Received: 02/01/21 14:09

Lab Sample ID: 590-14590-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			272.5 mL	2 mL	30513	02/09/21 14:58	NMI	TAL SPK
Total/NA	Analysis	NWTPH-Dx		1			30508	02/09/21 22:30	NMI	TAL SPK

Laboratory References:

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

Accreditation/Certification Summary

Client: Spokane Environmental Solutions LLC
Job ID: 590-14590-1
Project/Site: Avista GW Monitoring

Laboratory: Eurofins TestAmerica, 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	01-06-22

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	3510C	Water	PCB-1262
8082A	3510C	Water	PCB-1268
NWTPH-Dx	3510C	Water	Residual Range Organics (RRO) (C25-C36)

Method Summary

Client: Spokane Environmental Solutions LLC
Project/Site: Avista GW Monitoring

Job ID: 590-14590-1

Method	Method Description	Protocol	Laboratory
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL SPK
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL SPK
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	TAL SPK
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL SPK

Protocol References:

NWTPH = Northwest Total Petroleum Hydrocarbon

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

Laboratory References:

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

TestAmerica Spokane
11922 E. 1st Ave.
Spokane, WA 99206
Phone: 509.924.9200 Fax:

Chain of Custody Record

014094

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Gary Panther	Site Contact:	Date:	COC No:
Company Name: Spokane Environmental Sol	Tel/Fax: 509-954-5090	Lab Contact:	Carrier:	___ of ___ COCs
Address: 3810 E Boone Ave #101	Analysis Turnaround Time			Sampler:
City/State/Zip: Spokane WA 99202	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 509-954-5090	TAT if different from Below Standard			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Avista GW monitoring	☐ 1 week			
Site: Mission Campus	☐ 2 days			Job / SDG No.:
P O # 0200-017	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	8082A-PCB	8270E_SIM PAH	NWTPH Dx DRO, RRO	Sample Specific Notes:
MW-1A	2.1.21	10:00	G	water				X	X	X	
MW-2	|	11:40	|	|				X	X	X	
MW-3	|	12:45	|	|				X	X	X	
MW-4	|	13:30	|	|				X	X	X	
MW-56	|	11:00	|	|				X	X	X	
MW-DUP		24:00								X	

590-14590 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 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:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: 11.1 Corr'd: 11.3	Therm ID No.: IR006

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Brandon Kantanen	SES	2.1.21 2:09PM	Maria Crooke	TASPO	2/1/21 14:09
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: Spokane Environmental Solutions LLC

Job Number: 590-14590-1

Login Number: 14590
List Number: 1
Creator: O'Toole, Maria C

List Source: Eurofins TestAmerica, Spokane

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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.	N/A	Received same day of collection; chilling process has begun.
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?	N/A	Not present
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	No analysis requiring residual chlorine check assigned.