HALEY ALDRICH

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SEMIANNUAL REPORT ON
SIMPLOT GROWERS SOLUTIONS GROUNDWATER MONITORING MOXEE, WASHINGTON

by
Haley & Aldrich, Inc.
Spokane, Washington

for
J.R. Simplot Company
Boise, Idaho

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SIGNATURE PAGE FOR

SEMIANNUAL REPORT ON
SIMPLOT GROWERS SOLUTIONS
GROUNDWATER MONITORING
MOXEE, WASHINGTON

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BOISE, IDAHO

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1. Introduction

This semiannual report summarizes the field activities Haley & Aldrich, Inc. (Haley & Aldrich) completed, and data collected in October 2022 and January 2023 at the J.R. Simplot Growers Solution Property, located at 7528 Postma Road in Moxee, Washington (Subject Property). The location of the Subject Property is shown on "Vicinity Map", Figure 1. The Subject Property is owned by the J.R. Simplot Company (Simplot) and is operated as a retail outlet for crop nutrition and crop protection products; these products are stored and sometimes blended on site. The site is developed with several structures, a tank farm, truck scale, product mixing/dispensing equipment, and storage areas for vehicles and product totes.

Haley & Aldrich conducted two, quarterly groundwater monitoring events at the Subject Property in October 2022 and January 2023, to assess seasonal changes of concentrations of nitrates, sulfates, total dissolved solids (TDS), and ammonia (contaminants of concern [COC]) in monitoring wells located on and hydraulically downgradient of the Subject Property. The purpose of groundwater monitoring is to track groundwater quality and elevation seasonally beneath the Subject Property and hydraulically downgradient. This ongoing assessment will also continue to consider potential impacts to groundwater quality beneath Subject Property from sources hydraulically upgradient of the property.

Locations of monitoring wells used for groundwater monitoring are shown on "Site Plan", Figure 2. Additional details regarding the background of the Subject Property, subsurface geology, scope of services, field activities conducted, chemical analytical results, and our findings are summarized in the sections below.

2. Background

The Subject Property is approximately 3.74 acres and is bounded on the north by Postma Road, on the south by Burlington Northern Sante Fe (BNSF) rail lines and State Route 24, a card-lock fuel facility and agricultural land to the east, and the Moxee City Shop to the west. The Moxee City Shop facility to the west is a former sewage treatment plant with documented petroleum releases. According to the Yakima County Assessor, the first structure constructed on the Subject Property was in 1950, and additional structures were added in the 1980s and 2000s. The facility has an aboveground storage tank (AST) farm containing about 16 ASTs that are used to store retail agricultural products.

Generally, the land surrounding the Subject Property and north of State Route 24 is a mixture of commercial properties and farmland, and the land south of State Route 24 is a mixture of residential properties and farmland. Aerial photographs and maps accessed from the Yakima County website also show several irrigation and drainage ditches north and east of the Subject Property.

2.1 GEOLOGY AND HYDROGEOLOGY

The Subject Property is located within the Yakima River Basin in south central Washington, locally called the Moxee Valley. The local geology is comprised of high ridges of basalt thrusted upward by the tectonic event that created the Yakima Fold Belt: "…a series of anticlinal- ridges and synclinal valleys that covers about 14,000 square kilometers of the western Columbia Plateau. The fold belt formed as basalt flows of the Columbia River Basalt Group intercalated sediments of the Ellensburg Formation…" (Reidel and Campbell, 1987).

The low-lying land in the Moxee Valley typically is overlain by alluvium and/or windblown sediment. The local groundwater generally flows east to west towards the Yakima River, about 2.86 miles west of the Subject Property. Static groundwater levels measured in local domestic drinking water wells range between 4.7 and 32 feet below ground surface (bgs). The local hydrogeologic and surface water systems are heavily influenced by agricultural activities. Based on our field observations during assessment activities, the surface and subsurface east/northeast of the property consists of alluvium and fill material. Reportedly, the Subject Property is underlain by silt loam soils of the Umapine silt loam soil series and the regional geology consists of loess that overlies glacial flood deposits (HDR Engineering [HDR], 2021).

According to a Moxee Valley aquifer study conducted by Washington State Department of Ecology (Ecology) in 2006, the hydrogeologic units of the Moxee Valley are comprised of four general units and are, from oldest to youngest: Miocene age basalts (Unit 4); consolidated Miocene age continental sediments (Unit 3); unconsolidated Pliocene-to-Pleistocene age continental sediments (Unit 2); and Holocene alluvium (Unit 1). Unit 2 occur at land surfaces throughout most of the Moxee Valley except where Unit 2 deposits have been eroded, never were deposited, or were overlain by Yakima River deposits [(Unit 1). Therefore, most shallow domestic wells in the valley interior are completed in Unit 2 or in weakly consolidated sand and gravel lenses of Unit 3. These two units are recharged by downward percolation of local precipitation, leakage from unlined irrigation ditches or streams, percolation of unconsumed irrigation water, and by upward discharge from the underlying basalt and inter-bedded sediments of Unit 4 (Ecology, 2007).

The 2006 Ecology study focused on "…a screening-level assessment of groundwater quality in the Moxee Valley". During the study, Ecology monitored groundwater quality in 26 domestic wells distributed across the Moxee Valley in two events: one in January and one in June of 2006. The purpose of the study was to collect current information about groundwater quality, establish a network of water supply wells that could be used to track changes in water quality over time, and assess nutrient and bacterial concentrations in groundwater seasonally. The study also compared the 2006 results against a similar study Ecology conducted in September 1992. Results of the study indicated the three wells that contained nitrogen at concentrations greater than the Federal drinking water standards were in or near Moxee City, specifically, upgradient, cross gradient, and downgradient of the Subject Property. The study also found that nitrogen concentrations in four of the wells sampled in 1992 had increased when compared to samples collected during the 2006 sampling events. Based on this comparison, the study concluded "…these findings suggest that groundwater nitrate concentrations may be increasing in the Moxee Valley, at least locally, over time." The study also concluded that there were minor seasonal variations in concentrations observed.

2.2 PREVIOUS SITE ASSESSMENTS

In 2014, Ecology notified Simplot of potential releases of nutrient contaminants from the Subject Property to the subsurface. Ecology informed Simplot that recent borings drilled on the Subject Property by GeoEngineers, Inc. (GeoEngineers) while assessing petroleum releases on the adjacent Moxee City Shop property, identified elevated concentrations of nitrates and sulfates in the soil and groundwater. GeoEngineers concluded that "groundwater anion data support the suggestion that a source area exists near and east of the Moxee City Shop/Simplot property boundary and downgradient transport via groundwater flow are ongoing" (GeoEngineers 2014). Based on these assessment results, Ecology assigned a Site Number to the Subject Property (Site Number 84612438) and Simplot entered Ecology's Voluntary Cleanup Program (VCP) under VCP Number CE0419.

HDR conducted additional assessments on the Subject Property in 2015, 2016, and 2020. Assessment activities included drilling a series of direct-push borings and installing five monitoring wells on the Subject Property and one monitoring well on the Moxee City Shop property. Results of these assessments concluded that elevated concentrations of nitrates were present in soil and groundwater beneath the Subject Property. Groundwater monitoring results from events conducted between 2018 and 2020 indicate that nitrates, sulfates, and/or TDS in groundwater exceed Maximum Contaminant Levels (MCLs) in each of the five on-site monitoring wells and two additional monitoring wells on the Moxee City Shop property. Data collected during off-site assessment conducted in 2020 also indicates another possible source of nitrates in the groundwater could be from the 12-inch-diameter sewer line present south of the Subject Property and that sulfate contamination likely is migrating on site from the adjacent property to the east.

3. Scope of Services

Our groundwater monitoring scope of our services includes: gauging groundwater elevations, collecting groundwater samples, submitting groundwater samples for chemical analyses, and comparing analytical results to Primary and Secondary MCLs. During the October 2022 and January 2023 monitoring events, we completed the following activities:

- measured and recorded depth to groundwater from top of monitoring well casing in wells MW-1 through MW-5 on the Subject Property and MW-6, CS-4, and CS-6 on the adjacent Moxee City Shops property;
- deployed three In-Situ Rugged TROLL 100 pressure transducers (transducer) and one In-Situ BaroTROLL transducer (BaroTROLL) to continuously record groundwater elevations and barometric pressures, respectively;
- collected groundwater samples from monitoring wells MW-1 through MW-5 on the Subject Property, and from monitoring wells MW-6, CS-4, and CS-6 on the adjacent Moxee City Shops property;
- submitted groundwater and quality control samples to Eurofins Environment Testing Northwest LLC, (Eurofins) for chemical analyses; and
- compared groundwater analytical results to Primary and Secondary MCLs.

4. Field Activities

We completed quarterly groundwater monitoring activities on 10 October 2022 and 16 January 2023. Field activities we completed are discussed in more detail in the sections below.

4.1 GROUNDWATER ELEVATION MONITORING

Prior to sampling monitoring wells MW-1 through MW-5 on the Subject Property and MW-6, CS-4, and CS-6 on the adjacent Moxee City Shops property, Haley & Aldrich measured depth to water (DTW) using a Waterline, electronic, water level indicator probe. We recorded the DTW measurements and referenced it to the surveyed top of casing elevations that are referenced to North American Vertical Datum of 1988 (NAVD88). We then calculated groundwater elevations by subtracting the measured DTW from the top of casing in each well.

After we collected groundwater samples from monitoring wells MW-1, MW-2, and MW-3 on 10 October 2022, we installed a transducer in each of these wells and one BaroTROLL in MW-1. We programmed the transducers and BaroTROLL to record pressure measurements every 12 hours. We deployed the transducers in each well using vinyl coated stainless steel wire and placed the transducers approximately 1 foot above the bottom of the well. We deployed the BaroTROLL within the well riser pipe of MW-1 thereby allowing it to be continuously exposed to atmospheric conditions.

Prior to collecting groundwater samples in January 2023, we again manually measured DTW in MW-1 through MW-5 on the Subject Property and MW-6, CS-4, and CS-6 on the adjacent Moxee City Shops property, and then retrieved the transducers from MW-1, MW-2, and MW-3. After retrieval, we downloaded the transducers and BaroTROLL using an In-Situ wireless communication device. We exported the data to the In-Situ software program Baro-Merg and used data recorded by the BaroTROLL to correct the transducer data for atmospheric pressure. After correcting for atmospheric pressure, we used the In-Situ software program Win-Situ 5 to export the data to Microsoft Excel (Excel) for further analysis. Using Excel, we referenced transducer data to the surveyed top of casing and plotted elevation values versus time as shown on “Hydrograph – Simplot Moxee, WA”, Figure 3.

4.2 GROUNDWATER SAMPLING

Haley & Aldrich sampled five monitoring wells (MW-1 through MW-5) on the Subject Property, and three monitoring wells on the adjacent Moxee City Shop property to the west (wells CS-6, CS-4, and MW-6) as part of groundwater sampling activities. Monitoring well locations are shown on Figure 2.

After measuring DTW, we purged each well using low flow/low stress techniques and a peristaltic pump fitted with new, disposable, polyethylene tubing; and the tubing inlet was place at approximately the middle of the wetted well screen. The depth varied based on the water level in the wells. During purging, Haley & Aldrich used a Pro DSS YSI multimeter equipped with a flow through cell to measure and record water quality parameters (pH, temperature, conductivity, dissolved oxygen, turbidity, and oxidation-reduction potential [ORP]). Purge water was placed in a 55-gallon steel drum and stored on site pending disposal. Recorded water quality parameters at the time of sampling are provided in “Depth to Groundwater, Elevation, and Water Quality Parameters”, Table 1.

Haley & Aldrich collected groundwater samples from each well when the water quality parameters reached stabilization; wells were considered stabilized when readings 1 minute apart were +/- 10 percent of the previous reading or a maximum of 30 minutes of purging time had elapsed. Haley & Aldrich collected groundwater samples by allowing the groundwater to freely flow from the sample tubing into laboratory-provided, 250 milliliter sample containers. The filled sample containers were then placed into zip-top bags and stored in an insulated cooler with ice until delivered to the laboratory under chain-of-custody.

4.2.1 Quality Control and Assurance Sampling

Haley & Aldrich collected an equipment blank and duplicate sample while on site for data control and assurance purposes. Eurofins provided Haley & Aldrich with a liter container filled with deionized (DI) water and an additional sample container to collect an equipment blank. While in the field, we collected the equipment blank by placing, new, disposable tubing in the liter bottle of DI water and used the peristaltic pump to transfer DI water into the sample container. After we finished collecting the primary sample from MW-2, we collected a duplicate sample (sample MW-200).

5. Groundwater Elevation Monitoring Results

Calculated groundwater elevations are summarized in Table 1 and transducer data from October 2022 through January 2023 are visually presented in Figure 3. We calculated groundwater gradients observed during the October 2022 and January 2023 monitoring events by comparing the difference in groundwater elevations in monitoring wells MW-1 and MW-3 over the approximate distance between the two wells. We determined the general groundwater flow direction by calculating a line of equipotential using groundwater elevations recorded from MW-1, MW-2, and MW-5. We used the calculated groundwater elevations to generate inferred groundwater contours and calculated general flow direction as shown on Figures 4 through 7.

5.1 GROUNDWATER ELEVATION – OCTOBER 2022

Water level measurements recorded on 10 October 2022 indicate that depth to groundwater ranged between 6.03 and 11.16 feet below the top of casing in CS-6 and MW-5, respectively. Calculated groundwater elevations ranged between 1019.02 and 1021.44 feet in CS-6 and MW-1, respectively. Calculated groundwater elevations from the October event indicate groundwater generally was flowing southwest at approximately 236 degrees from north. The groundwater gradient observed during the October event was approximately 0.004 feet per foot (feet/foot). We used calculated groundwater elevations to generate inferred groundwater elevation contours for the October event; these are presented in “Groundwater Contours with Nitrate Concentrations – October 2022”, Figure 4, and in “Groundwater Contours with Sulfate Concentrations – October 2022”, Figure 5.

5.2 GROUNDWATER ELEVATION – JANUARY 2023

Water level measurements recorded on 16 January 2023 indicate that depth to groundwater ranged between 2.62 and 7.14 feet below the top of casing in CS-6 and MW-5, respectively. Calculated groundwater elevations ranged between 1022.61 and 1024.55 feet in CS-4 and MW-1, respectively. Calculated groundwater elevations indicate groundwater was generally flowing west-southwest or

approximately 257 degrees from north. The groundwater gradient observed during the January groundwater sampling event was approximately 0.006 feet/foot. We used groundwater elevations to generate elevation contours from the January event; these are presented in "Groundwater Contours with Nitrate Concentrations – January 2023", Figure 6, and in "Groundwater Contours with Sulfate Concentrations – January 2023", Figure 7.

5.3 CONTINUOUS GROUNDWATER ELEVATION MONITORING

Transducer data from the deployment period indicate groundwater elevations ranged between 1019.92 feet in MW-3 and 1024.63 feet in MW-1. Minimum groundwater elevations were observed in MW-1 (1021.34 feet) and MW-2 (1019.92 feet) on 11 October 2022, and in MW-3 (1019.95 feet) on 15 November 2022. Maximum groundwater elevations were observed in MW-1 (1024.63 feet) and MW-3 (1022.91 feet) on 15 January 2023, and in MW-2 (1024.24 feet) on 16 January 2023. Generally, groundwater elevations gradually increased between October 2022 and late December 2022, then increased exponentially until 15 January 2023.

6. Analytical Results

Haley & Aldrich submitted a total of 16 groundwater samples (eight per monitoring event) to Eurofins for analyses of nitrate-nitrogen by EPA Method 353.2, ammonia by EPA Method 350.1, sulfate by EPA Method 300.0, and TDS by Standard Method 2540C. We submitted one equipment blank and one duplicate sample per monitoring event to Eurofins for analyses of nitrate-nitrogen by EPA Method 353.2 and sulfate by EPA Method 300.0. Analytical results are included in the attached "Groundwater Analytical Results", Table 2. Chemical analytical results are summarized below. Analytical reports are provided in Appendix A.

6.1 CHEMICAL ANALYTICAL RESULTS – OCTOBER 2022

Chemical analytical results for detectable COC concentrations in groundwater samples collected during the October monitoring event are summarized below:

- nitrate concentrations ranged between 3.3 and 87 milligrams per liter (mg/L) in CS-4 and MW-5, respectively;
- sulfate concentrations ranged between 44 and 680 mg/L in CS-4 and MW-5, respectively;
- TDS concentrations ranged between 400 and 2,500 mg/L in MW-1 and MW-5, respectively; and
- ammonia concentrations ranged between 0.13 and 68 mg/L in CS-4 and MW-4, respectively. Ammonia was not detected in MW-1, MW-2, and CS-6 greater than Method Reporting Limit.

Nitrate and sulfate concentrations from October 2022 are visually depicted in Figures 4 and 5.

6.2 CHEMICAL ANALYTICAL RESULTS – JANUARY 2023

Chemical analytical results for detectable COC concentrations in groundwater samples collected during the January monitoring event are summarized below:

- nitrate concentrations ranged between 0.32 and 370 mg/L in MW-6 and MW-2, respectively;

- sulfate concentrations ranged between 29 and 520 mg/L in MW-6 and MW-2, respectively;
- TDS concentrations ranged between 760 and 2,400 mg/L in MW-3 and MW-5, respectively; and
- ammonia was detected in MW-3 and MW-4 at concentrations of 1.3 and 35 mg/L, respectively.

Nitrate and sulfate concentrations from January 2023 are visually depicted in Figures 6 and 7.

6.3 QUALITY CONTROL SAMPLE RESULTS

Haley & Aldrich submitted equipment blanks and duplicate samples to conduct quality control checks for nitrate and sulfate analytical results. Analytical results of the equipment blank samples were reviewed to assess if potential cross contamination effected groundwater sample analytical results, and analytical results of the duplicate samples were compared to the primary sample analytical results to assess the precision of analytical results. The results of the quality control samples are summarized below.

6.3.1 Equipment Blank Sample Results

Chemical analytical results indicate that the equipment blank samples collected during the October and January monitoring events did not contain sulfate or nitrates at concentrations greater than the Method Detection Limit. These results indicate the sampling equipment likely did not contribute to the sulfate or nitrate concentrations detected in the groundwater samples.

6.3.2 Deplicate Sample Results

To compare the primary sample and the duplicate sample nitrate and sulfate concentrations, we expressed the precision of the results as a relative percent difference (RPD). For the purposes of this comparison, we assumed an RPD of less than 40 percent is acceptable. The RPD was calculated using the equation below:

$$RPD = \frac{(D_1 - D_2)}{(D_1 + D_2)/2} \times 100$$

Where:
D1 = primary sample value
D2 = duplicate sample value

Analytical and RPD results from the primary sample (MW-2) and duplicate sample (MW-200) are presented below in “Relative Percent Difference”, Table 3.

Table 3. Relative Percent Difference

	MW-2	MW-200	RPD (percent)	MW-2	MW-200	RPD (percent)
	Nitrate (mg/L)			Sulfate (mg/L)		
October	86	84	2.35	300	300	0
January	370	340	8.45	520	510	1.94

RPD calculations indicate that Eurofins achieved an acceptable degree of variability and precision.

7. Findings

The groundwater flow regime (direction, gradient, and elevations) varied between October 2022 and January 2023. The direction of groundwater flow in October 2022 was about 236 degrees from north (southwest) and shifted to about 257 degrees from north in January 2023 (west-southwest). Additionally, the calculated groundwater gradient increased slightly from 0.004 and 0.006 feet/foot between the October 2022 and January 2023 monitoring events.

The hydrograph (Figure 3) indicates that groundwater elevations steadily increased between 0.04 and 0.72 feet between 10 October and 22 December 2022; after 22 December 2022 groundwater elevations began to increase exponentially until 15 January 2023. These results are consistent with the 2006 Ecology groundwater study where they found groundwater elevations between Moxee and the Yakima River change seasonally and may be affected by unlined irrigation channels (like those hydraulically upgradient of the Subject Property).

Detected nitrate concentrations in groundwater samples collected in October 2022 exceed the Primary MCL of 10 mg/L in monitoring wells MW-2, MW-4, and MW-5 and in off-site monitoring wells MW-6 and CS-6 downgradient of the Subject Property. Detected nitrate concentrations in groundwater samples collected on site in January 2023 exceed the Primary MCL in monitoring wells MW-2, MW-4, MW-1, and MW-3 and in off-site monitoring well CS-6 downgradient of the Subject Property. Nitrate concentrations in MW-1 and MW-2 increased an order of magnitude between October 2022 and January 2023. This occurred during a period of groundwater flow regime change where flow direction changed from generally southwest to west-southwest, groundwater gradient increased from 0.004 to 0.006 feet, and an observed exponential increase in groundwater elevation. This observation is consistent with seasonal groundwater monitoring data collected to date (see Table 2). Data collected to date generally indicates nitrate concentrations are greater in January and March (winter and spring) when compared to September and October (late summer and fall). In addition, the data indicates the flow regime change from generally southwest during the fall to generally west-southwest in the winter and spring generally has been consistent across monitoring events conducted between 2016 and 2023.

Detected sulfate concentrations in groundwater samples collected in October 2022 indicate that concentrations exceeded the Secondary MCL of 250 mg/L in monitoring wells MW-2, MW-4, and MW-5 and in off-site monitoring wells MW-6 and CS-6 downgradient of the Subject Property. Detected sulfate concentrations in groundwater samples collected in January 2023 exceeded the Secondary MCL in MW-1, MW-2, MW-4, and MW-5; none of the groundwater samples collected in downgradient monitoring wells exceeded the Secondary MCL during the January event. Samples that contain nitrate and/or sulfate concentrations that exceeded the Primary and Secondary MCLs are highlighted in Table 2.

Nitrate concentrations observed in monitoring wells MW-1 and MW-2 during the October and January monitoring events indicate that nitrate contamination observed in site wells could originate from hydraulically upgradient, off-site sources (see Figures 3 and 5). It appears that a potential source located east-northeast of the Subject Property combined with seasonal changes in groundwater elevational/flow regime could impacting the Subject Property. We observed similar trends with sulfate concentrations (see Figures 4 and 6). Average sulfate concentrations observed in monitoring wells MW-1 and MW-2 increase seasonally from the fall to winter/spring in conjunction with observed changes in the groundwater elevations/flow regimes. A summary of these seasonal trends from monitoring events conducted between 2019 and 2023 is provided in "Historical Seasonal Average Nitrate and Sulfate Concentrations and Groundwater Flow Regimes", Table 4 below.

Table 4. Historical Seasonal Average Nitrate and Sulfate Concentrations and Groundwater Flow Regimes

	Nitrate Concentrations (mg/L)		Sulfate Concentrations (mg/L)		Groundwater Flow Direction (degrees from north)	Groundwater Gradient (feet)
	MW-1	MW-2	MW-1	MW-2		
Winter/Spring	45	162	303	370	258	0.006
Fall	15	91.1	234	318	233	0.004

Notes:

All values represent averages from the previous six groundwater sampling events conducted by HDR and Haley & Aldrich between September 2019 and January 2023.

Winter/Spring months include January and March and Fall months include September and October.

Continued seasonal monitoring of existing monitoring well network should be conducted to better understand the potential impacts of upgradient sources on groundwater quality beneath the Subject Property.

References

1. GeoEngineers, 2014. "Data Gap Investigation Report Moxee City Shop and Former STP". File number 0504-078-01.

2. HDR Engineering, 2021. "Offsite Groundwater Investigation Report". Simplot Grower Solutions Facility Site Number: 84612438 VCP Number: CE0419. January.

3. Reidel and Campbell, 1987. "Guide to the structure of the Yakima Fold Belt", Geologic Guidebook for Washington and adjacent areas, Washington Division of Geology and Earth Resources Information Circular 86. 275 304.

4. Washington State Department of Ecology (Ecology), 2007. "Ambient Groundwater Quality in the Moxee Valley Surficial Aquifer, Yakima County, January-June 2006". Publication No. 07-03-023.

TABLES

TABLE 1
DEPTH TO GROUNDWATER, ELEVATIONS, AND WATER QUALITY PARAMETERS
SEMIANNUAL GROUNDWATER MONITORING REPORT
0202395-000
MOXEE, WASHINGTON

Monitoring Well	Date of Sampling	Depth to Water (feet)	Groundwater Elevation (feet NAVD88)	Temperature (C°)	pH	Specific Conductivity (mS/cm)	ORP (mV)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
MW-1	10/10/2022	9.71	1021.44	17.6	7.78	1.0	99.1	21	0.6
	1/16/2023	6.60	1024.55	8.7	7.37	2.2	58.0	13	6.9
MW-2	10/10/2022	10.84	1020.02	17.6	8.28	2.3	111.1	14	0.3
	1/16/2023	6.62	1024.24	10.1	7.57	4.5	41.2	4	2.3
MW-3	10/10/2022	8.83	1020.14	20.9	6.76	1.0	155.4	5	0.2
	1/16/2023	6.18	1022.79	9.8	5.9	1.9	99.2	2	1.8
MW-4	10/10/2022	6.20	1020.35	20.4	7.75	0.2	144.6	5	0.2
	1/16/2023	3.12	1023.43	12.1	7.56	2.6	66.1	15	0.6
MW-5	10/10/2022	11.16	1019.32	20.1	7.72	3.5	112.3	4	0.5
	1/16/2023	7.14	1023.34	9.8	7.97	2.7	32.1	2	7.7
MW-6	10/10/2022	6.38	--	19.4	8.19	1.3	142.9	26	0.5
	1/16/2023	2.98	--	13.6	8.85	0.5	23.4	12	0.7
CS-4	10/10/2022	6.65	1019.02	22.1	7.77	0.9	133.0	8	2.0
	1/16/2023	3.06	1022.61	12.2	7.82	1.1	49.1	2	3.9
CS-6	10/10/2022	6.03	1019.47	21.9	7.6	1.5	147.0	6.5	0.8
	1/16/2023	2.62	1022.88	11.9	7.8	1.4	48.1	2.3	1.8

Notes:

°C = degrees Celsius.

DO = dissolved oxygen.

mg/L = milligrams per liter.

mS/cm = millisiemens per centimeter.

mV = millivolts.

MW = monitoring well

NAVD88 = North American Vertical Datum of 1988

NTU = nephelometric turbidity units.

ORP = oxidation-reduction potential.

Depth to water is referenced from top of casing.

-- = not measured/calculated

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
SEMIANNUAL GROUNDWATER MONITORING REPORT
0202395-000
MOXEE, WASHINGTON

Sample ID	Sample Date	Analyte							
		Nitrate-Nitrogen (mg/L)	Q	Ammonia-Nitrogen (mg/L)	Q	Sulfate (mg/L)	Q	TDS (mg/L)	Q
MW-1	10/19/2016	41.4		ND		300		1300	
	3/7/2017	249.0		ND		833		3330	
	6/27/2017	127.0		ND		616		2440	J3
	9/27/2017	63.7		ND		606		1770	
	1/16/2018	84.0	Q[1]	ND		606		2300	
	3/27/2018	62.1		ND		629		2280	
	6/19/2018	46.8		ND		556		1970	
	9/12/2018	25.9		ND		427		1460	
	11/7/2018	21.8		ND		353		1331	
	3/21/2019	145.0		ND		742	M6	2850	
	9/1/2019	24.6		ND		395		1360	
	3/1/2020	45		ND		358		1570	
	10/6/2020	15.7		*0.10*	U	**219**		1050	
	3/2/2022	11		*0.50*	U	**140**		1100	
	10/10/2022	**4.6**		*0.10*	U	**88**		**400**	
	1/16/2023	79		*0.10*	U	410		870	
MW-2	10/19/2016	106		**0.078**	J	500		2180	
	3/7/2017	181		ND		531		2490	
	6/27/2017	185		ND		508		2640	Q[1]
	9/27/2017	182		ND		496		2180	
	1/16/2018	168	Q[1]	ND		464		2210	
	3/27/2018	88.4		ND		391		1770	
	6/19/2018	128.0		ND		416		2130	
	9/12/2018	84.0		ND		379		1740	
	11/7/2018	92.4		ND		359		1620	
	3/21/2019	181.0		ND		401		2470	
	9/1/2019	141		ND		442		2470	
	3/1/2020	80.9		ND		260		1710	
	10/6/2020	46.3		*0.10*	U	**213**		1220	
	3/2/2022	34		*0.50*	U	330		2100	
	10/10/2022	86		*0.10*	U	300		1600	
	1/16/2023	370		*0.10*	U	520		1600	
MW-3	10/19/2016	8.08		0.8914		**105**		840	
	3/7/2017	8.65		1.1		**92.7**		723	
	6/27/2017	7.68		4		**104**		705	
	9/27/2017	9.98		1.27		**104**		777	
	1/16/2018	10.5	Q[1]	1.13		**102**		783	
	3/27/2018	13.8		1.1		**77.3**		693	
	6/19/2018	27.2		5.2		**111**		920	
	9/12/2018	14.1		5.5		**64.7**		670	
	11/7/2018	27		3.1		**92.4**		764	
	3/21/2019	21.6		3.7		**166**		970	
	9/1/2019	24.3		**4.8**		**130**		986	
	3/1/2020	**8.8**		0.35		**57.4**		666	
	10/6/2020	12.8		*0.10*	U	**78**		756	
	3/2/2022	**3.8**		*0.50*	U	**69**		740	
	10/10/2022	**9.8**		**1.40**		**81**		600	
	1/16/2023	19		**1.3**		**110**		760	
MW-4	10/19/2016	119		113		355		1430	
	3/7/2017	134		89.1		302		1350	
	6/27/2017	102		85		406		1370	
	9/27/2017	98		95.9		375		1190	
	1/16/2018	135	Q[1]	83.6		589		1680	
	3/27/2018	105		86.3		526		1450	
	6/19/2018	88.5		133		491		1570	
	9/12/2018	107		127		493		1890	
Groundwater Qualtiy Criteria	**Primary Standards**	**10**		**--**		**--**		**--**	
	Secondary Standards	**--**		**--**		**250**		**500**	

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
SEMIANNUAL GROUNDWATER MONITORING REPORT
0202395-000
MOXEE, WASHINGTON

Sample ID	Sample Date	Analyte							
		Nitrate-Nitrogen (mg/L)	Q	Ammonia-Nitrogen (mg/L)	Q	Sulfate (mg/L)	Q	TDS (mg/L)	Q
MW-4	11/7/2018	170		110		680		2110	
	3/21/2019	106		90		589		1520	
	9/1/2019	103		131		668		1640	
	10/6/2020	130		120		360		1490	
	3/2/2022	33		54		240		1300	
	10/10/2022	82		68		400		1200	
	1/16/2023	85		35		370		1300	
MW-5	10/19/2016	95		0.212	J	977		3160	
	3/7/2017	117		ND		713		2940	
	6/27/2017	96.3		ND		546		2500	
	9/27/2017	103		ND		749		2770	
	1/16/2018	135	Q[1]	ND		511		2800	
	3/27/2018	124		ND		474		2670	
	6/19/2018	142		ND		431		2600	
	9/12/2018	151		ND		833		3330	
	11/7/2018	158		ND		524		2560	
	3/21/2019	136		ND		550		3090	
	9/1/2019	105		ND		634		2890	
	3/1/2020	97.5		ND		408		2480	
	10/6/2020	119		*0.10*	U	683		2990	
	3/2/2022	24		*0.50*	U	470		2300	
	10/10/2022	87		0.28		680		2500	
	1/16/2023	5.1		*0.1*	U	360		2400	
MW-6	3/1/2020	91.1		ND		290		1610	
	10/6/2020	95.5		*0.10*	U	434		2040	
	3/2/2022	*3.0*	U	*0.50*	U	54		510	
	10/10/2022	55		0.20		290		1100	
	1/16/2023	0.32		*0.1*	U	29		990	
CS-4	10/19/2016	5.58		ND		29.4		521	
	3/7/2017	8.9		ND		34.9		720	
	6/27/2017	3.86		ND		24		534	
	9/27/2017	1.74		ND		17.7		405	
	1/16/2018	3.59	Q[1]	ND		23.9		518	
	3/27/2018	4.7		ND		24.4		490	
	6/19/2018	3.1		ND		23.9		464	
	9/12/2018	0.45	FS	ND		20.9		383	
	11/7/2018	3.3		ND		39		607	
	3/21/2019	5.1		ND		30.6		614	
	9/1/2019	ND		ND		28.2		217	
	3/1/2020	4.9		ND		30.3		560	
	10/6/2020	*1.5*	U	*0.10*	U	31		448	
	3/2/2022	*3.0*	U	*0.50*	U	23		820	
	10/10/2022	3.3		0.13		44		520	
	1/16/2023	6.3		*0.1*	U	44		820	
CS-6	10/19/2016	206		ND		829		2420	
	3/7/2017	143		ND		447		1690	
	6/27/2017	100		ND		403		1280	
	9/27/2017	151		ND		378		1350	
	1/16/2018	138		ND		350		1460	
	3/27/2018	118		ND		316		1370	
	6/19/2018	106		ND		343		1360	
	9/12/2018	110		ND		363		1430	
	11/7/2018	89.9		ND		314		1130	
	3/21/2019	74.3		ND		341		1170	
Groundwater Qualtiy Criteria	**Primary Standards**	**10**		**--**		**--**		**--**	
	Secondary Standards	**--**		**--**		**250**		**500**	

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
SEMIANNUAL GROUNDWATER MONITORING REPORT
0202395-000
MOXEE, WASHINGTON

Sample ID	Sample Date	Analyte							
		Nitrate-Nitrogen (mg/L)	Q	Ammonia-Nitrogen (mg/L)	Q	Sulfate (mg/L)	Q	TDS (mg/L)	Q
CS-6	9/1/2019	**105**		ND		**411**		**1560**	
	3/1/2020	**178**		ND		**407**		**1680**	
	10/6/2020	**208**		*0.10*	U	**381**		**1890**	
	3/2/2022	**31**		*0.50*	U	**310**		**1400**	
	10/10/2022	**59**		*0.10*	U	**320**		**890**	
	1/16/2023	**38**		*0.1*	U	**220**		**900**	
Groundwater Qualtiy Criteria	**Primary Standards**	**10**		**--**		**--**		**--**	
	Secondary Standards	**--**		**--**		**250**		**500**	

Notes:

Samples collected during March, October 2022, and January 2023 events were collected by Haley & Aldrich and were analyzed by Eurofins Environment Northwest, LLC Spokane, WA for Nitrate - Nitrogen and Sulfate by Environmental Protection Agency (EPA)Method 300.0 and total dissolved solids (TDS) by Standard Method (SM) 2540C. Monitoring well samples were additionally analyzed for Nitrogen-Ammonia by EPA Method 350.1.

Samples prior to March 2022 were collected by HDR and analyzed by Pace Analytical in Minneapolis, Minnesota for Nitrate - Nitrite by EPA Method 353.2; Nitrogen-Ammonia by EPA Method 350.1; Sulfate by EPA Method 300.0; and TDS by SM 2540C.

***BOLD** = detections at or above method reporting limits (MRL)*

***BOLD** = detections at or above primary groundwater criteria standards.*

***BOLD** = detections at or above secondary groundwater criteria standards.*

ND = Not detected at or above Reporting Limit

NS = Not sampled

J3 = associated batch QC was outside quality control range for precision

mg/L = milligrams per liter

m6 = matrix spike and matrix spike duplicate not evaluated agaisnt control limits because of sample dilution

Q= Laboratory qualifier

Q^1= Sample was prepared/or analyzed past recommended hold times and results should be considered a minimum value

TDS = Total Dissolved Solids

U= Analyte not detected at or above MRL indicated.

-- = Not applicable

FIGURES

MAP SOURCE: ESRI
SITE COORDINATES: 46°33'43"N, 120°23'60"W

HALEY ALDRICH

SIMPLOT MOXEE SEMIANNUAL GROUNDWATER MONITORING REPORT
SIMPLOT GROWERS SOLUTION
7528 POSTMA ROAD
MOXEE, WASHINGTON

VICINITY MAP

APPROXIMATE SCALE: 1 IN = 2000 FT
FEBRUARY 2023

FIGURE 1

GIS: \\haleyaldrich.com\share\pdx_data\Notebooks\0202395-002_2022 SGS Moxee GW Monitoring\GIS\202395_SGS_MOXEE_GW_MONITORING\202395_SGS_MOXEE_GW_MONITORING.aprx - alarson - 12/16/2022 3:01 PM

LEGEND

- MONITORING WELL
- CITY MONITORING WELL
- SEWER LINE
- PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. SEWER LINE DATA SOURCE: CITY OF MOXEE
3. AERIAL IMAGERY SOURCE: ESRI

N

0 100 200
SCALE IN FEET

HALEY ALDRICH

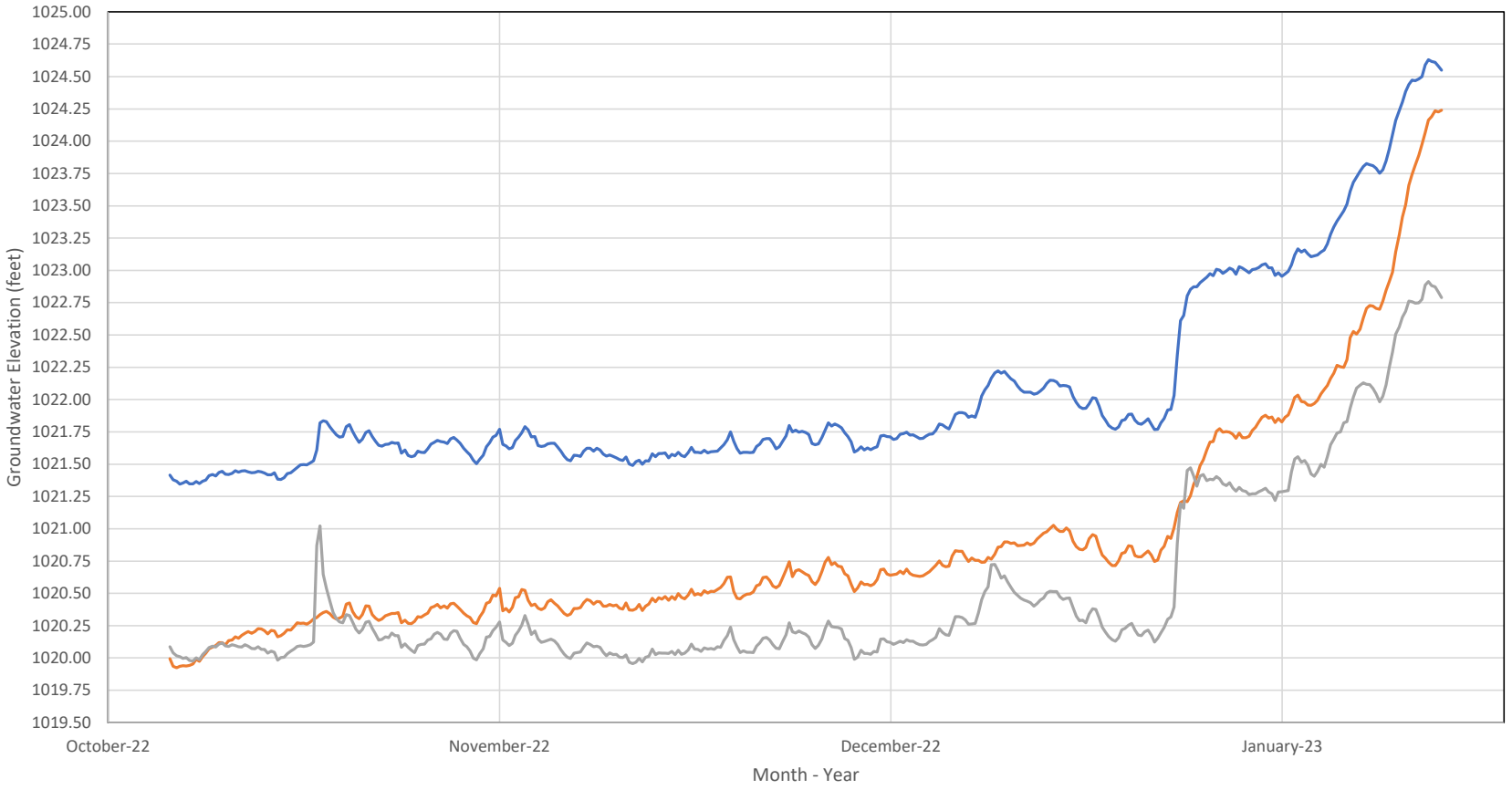
SIMPLOT MOXEE SEMIANNUAL GROUNDWATER MONITORING
7528 POSTMA ROAD
MOXEE, WASHINGTON

SITE PLAN

FEBRUARY 2023

FIGURE 2

GIS FILE PATH: \\haleyaldrich.com\share\pdx_data\Notebooks\0202395-002_2022 SGS Moxee GW Monitoring\GIS\202395_SGS_MOXEE_GW_MONITORING\202395_SGS_MOXEE_GW_MONITORING_SEMI_ANNUAL.aprx — USER: khaskins — LAST SAVED: 2/10/2023 4:10 PM



Notes:
Groundwater elevation reference to North American Vertical Datum 1988

FIGURE 3

HYDROGRAPH – SIMPLOT MOXEE, WA

SEMIANNUAL GROUNDWATER MONITORING REPORT

7528 POSTMA ROAD

MOXEE, WASHINGTON

HALEY ALDRICH

LEGEND

- MONITORING WELL
- CITY MONITORING WELL
- INFERRED GROUNDWATER ELEVATION CONTOUR, IN FEET
- GENERAL GROUNDWATER FLOW DIRECTION, OCTOBER 2022
- SEWER LINE
- PROPERTY BOUNDARY

NITRATE CONCENTRATION IN MILLIGRAMS PER LITER (mg/L)

- 10 TO 25
- 25 TO 50
- 50 TO 75
- > 75

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. SAMPLING LOCATION WITH ID AND **TOTAL NITRATE-NITROGEN CONCENTRATION** INDICATED IN MILLIGRAMS PER LITER (mg/L)
3. GROUNDWATER SAMPLES COLLECTED ON 10 OCTOBER 2022
4. GROUNDWATER ELEVATION CONTOURS REFERENCE TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88)
5. SEWER LINE DATA SOURCE: CITY OF MOXEE
6. AERIAL IMAGERY SOURCE: ESRI

N

0 100 200
SCALE IN FEET

HALEY ALDRICH

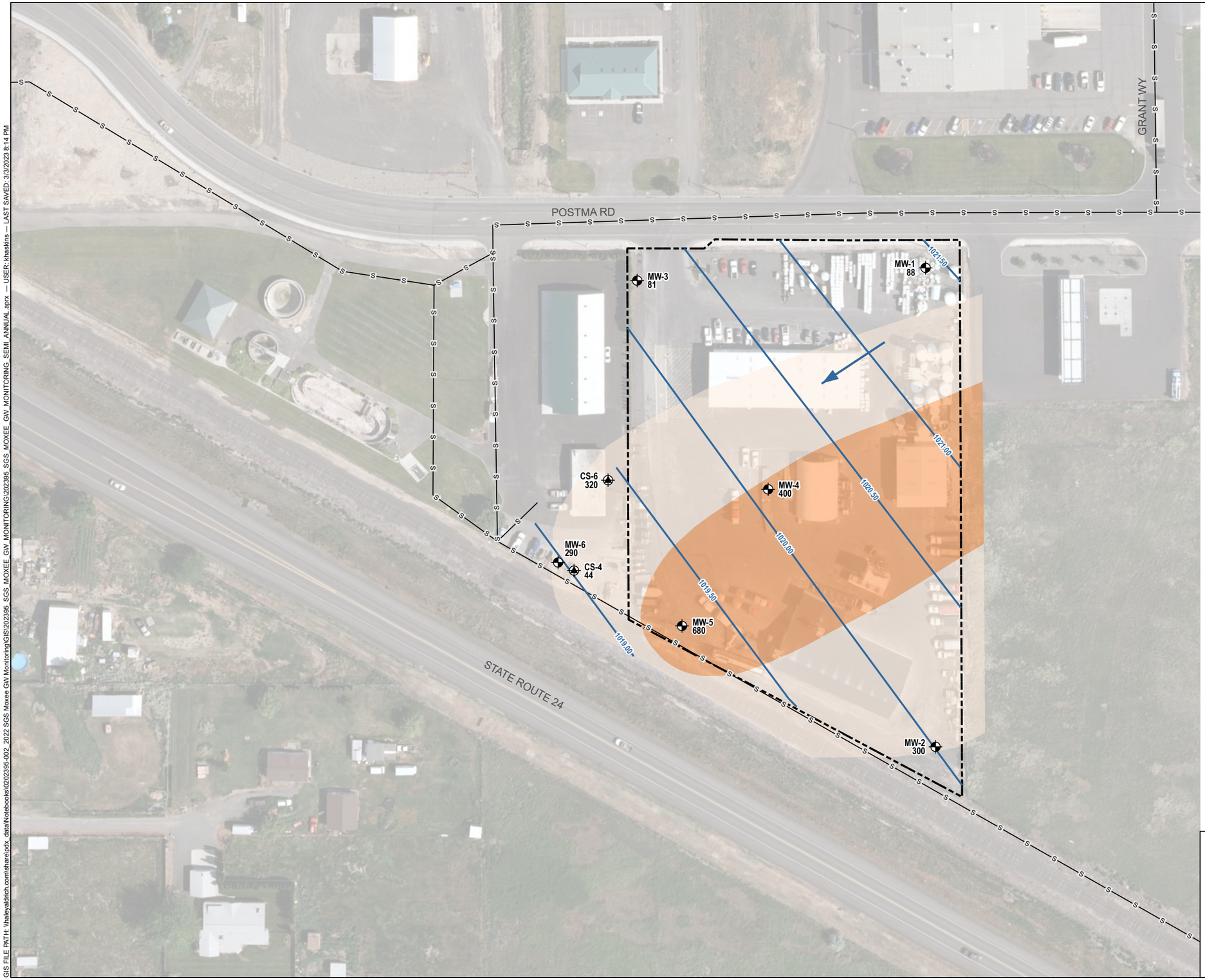
SIMPLOT MOXEE SEMIANNUAL GROUNDWATER MONITORING REPORT
7528 POSTMA ROAD
MOXEE, WASHINGTON

GROUNDWATER CONTOURS WITH NITRATE CONCENTRATIONS - OCTOBER 2022

MARCH 2023

FIGURE 4

GIS FILE PATH: \\haleyaldrich.com\share\pdx_data\Notebooks\0202395-002_2022 SGS Moxee GW Monitoring\GIS\202395_SGS_MOXEE_GW_MONITORING\202395_SGS_MOXEE_GW_MONITORING_SEMI_ANNUAL.aprx — USER: khaskins — LAST SAVED: 3/3/2023 8:14 PM



LEGEND

- MONITORING WELL
- CITY MONITORING WELL
- GENERAL GROUNDWATER FLOW DIRECTION, OCTOBER 2022
- INFERRED GROUNDWATER ELEVATION CONTOUR, IN FEET
- SEWER LINE
- PROPERTY BOUNDARY

SULFATE CONCENTRATION IN MILLIGRAMS PER LITER (mg/L)

- 250 TO 400
- ≥ 400

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. SAMPLING LOCATION WITH ID AND SULFATE CONCENTRATION INDICATED IN MILLIGRAMS PER LITER (mg/L)
3. GROUNDWATER SAMPLES COLLECTED ON 10 OCTOBER 2022
4. GROUNDWATER ELEVATION CONTOURS REFERENCE TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88)
5. SEWER LINE DATA SOURCE: CITY OF MOXEE
6. AERIAL IMAGERY SOURCE: ESRI

N

0 100 200
SCALE IN FEET

HALEY ALDRICH

SIMPLOT MOXEE SEMIANNUAL GROUNDWATER MONITORING REPORT
7528 POSTMA ROAD
MOXEE, WASHINGTON

GROUNDWATER CONTOURS WITH SULFATE CONCENTRATIONS - OCTOBER 2022

MARCH 2023

FIGURE 5

LEGEND

- MONITORING WELL
- CITY MONITORING WELL
- INFERRED GROUNDWATER ELEVATION CONTOUR, IN FEET
- GENERAL GROUNDWATER FLOW DIRECTION, JANUARY 2023
- SEWER LINE
- PROPERTY BOUNDARY

NITRATE CONCENTRATION IN MILLIGRAMS PER LITER (mg/L)

- 10 TO 25
- 25 TO 50
- 50 TO 75
- 75 TO 100
- > 100

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. SAMPLING LOCATION WITH ID AND **TOTAL NITRATE-NITROGEN CONCENTRATION** INDICATED IN MILLIGRAMS PER LITER (mg/L)
3. GROUNDWATER SAMPLES COLLECTED ON 16 JANUARY 2023
4. GROUNDWATER ELEVATION CONTOURS REFERENCE TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88)
5. SEWER LINE DATA SOURCE: CITY OF MOXEE
6. AERIAL IMAGERY SOURCE: ESRI

N

0 100 200
SCALE IN FEET

HALEY ALDRICH

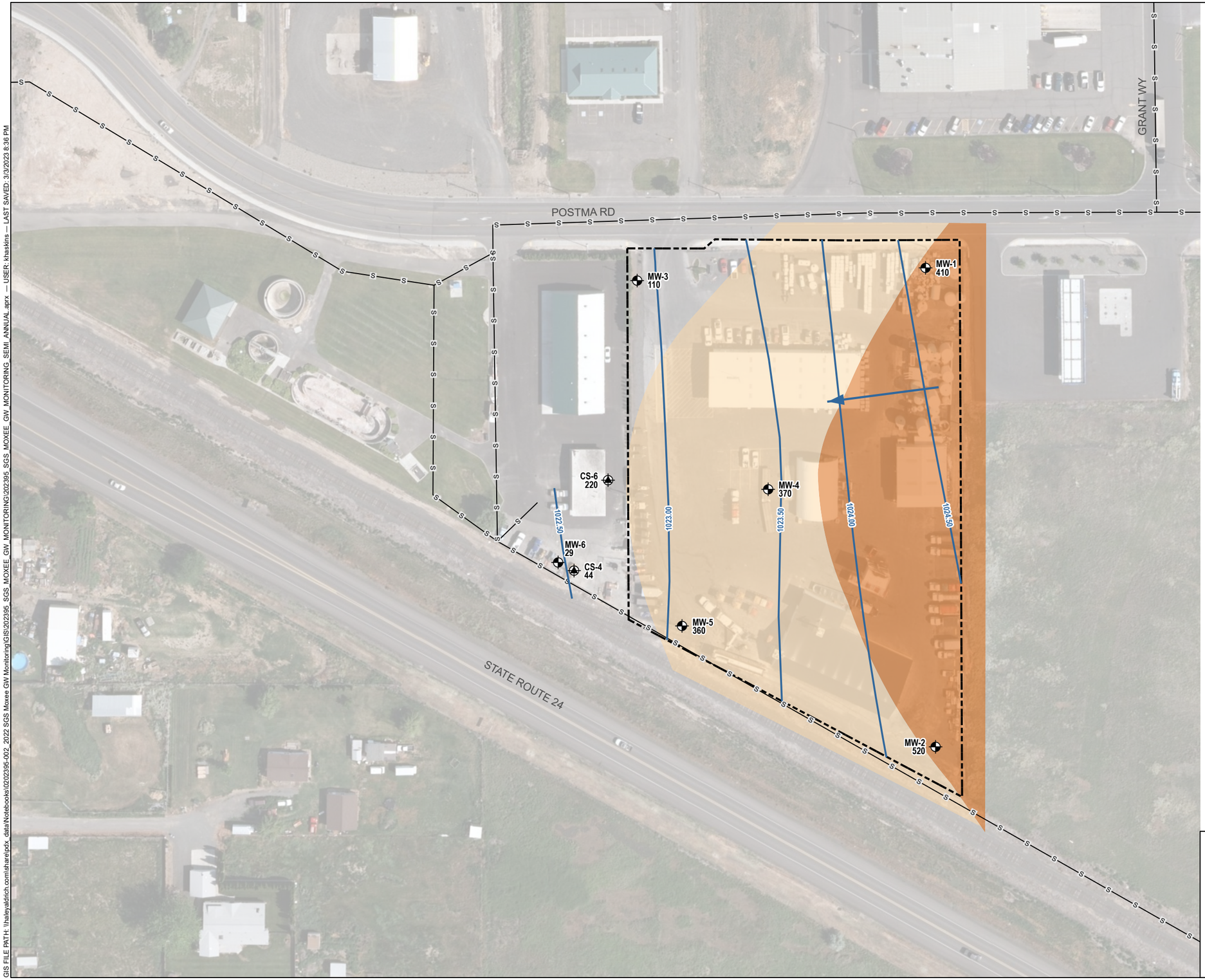
SIMPLOT MOXEE SEMIANNUAL GROUNDWATER MONITORING REPORT
7528 POSTMA ROAD
MOXEE, WASHINGTON

GROUNDWATER CONTOURS WITH NITRATE CONCENTRATIONS - JANUARY 2023

MARCH 2023

FIGURE 6

GIS FILE PATH: \\haleyaldrich.com\share\pdx_data\Notebooks\0202395-002_2022 SGS Moxee GW Monitoring\GIS\202395_SGS_MOXEE_GW_MONITORING_SEMI_ANNUAL.aprx — USER: khaskins — LAST SAVED: 3/3/2023 8:14 PM



LEGEND

- MONITORING WELL
- CITY MONITORING WELL
- INFERRED GROUNDWATER ELEVATION CONTOUR, IN FEET
- GENERAL GROUNDWATER FLOW DIRECTION, JANUARY 2023
- SEWER LINE
- PROPERTY BOUNDARY

SULFATE CONCENTRATION IN MILLIGRAMS PER LITER (mg/L)

- 250 TO 400
- ≥ 400

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. SAMPLING LOCATION WITH ID AND SULFATE CONCENTRATION INDICATED IN MILLIGRAMS PER LITER (mg/L)
3. GROUNDWATER SAMPLES COLLECTED ON 16 JANUARY 2023
4. GROUNDWATER ELEVATION CONTOURS REFERENCE TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88)
5. SEWER LINE DATA SOURCE: CITY OF MOXEE
6. AERIAL IMAGERY SOURCE: ESRI

N

0 100 200
SCALE IN FEET

HALEY ALDRICH

SIMPLOT MOXEE SEMIANNUAL GROUNDWATER MONITORING REPORT
7528 POSTMA ROAD
MOXEE, WASHINGTON

GROUNDWATER CONTOURS WITH SULFATE CONCENTRATIONS - JANUARY 2023

MARCH 2023

FIGURE 7

GIS FILE PATH: \\haleyaldrich.com\share\pdx_data\Notebooks\0202395-002_2022 SGS Moxee GW Monitoring\GIS\202395_SGS_MOXEE_GW_MONITORING\202395_SGS_MOXEE_GW_MONITORING_SEMI_ANNUAL.aprx — USER: khaskins — LAST SAVED: 3/3/2023 8:36 PM

APPENDIX A
Laboratory Reports

eurofins | Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 590-18961-1
Client Project/Site: Simplot Moxee/1500450.01

For:
Hart Crowser, Inc.
505 West Riverside Avenue, Suite 205
Spokane, Washington 99201

Attn: John Haney

Authorized for release by:
10/31/2022 1:54:11 PM

Randee Arrington, Lab Director
(509)924-9200
Randee.Arrington@et.eurofinsus.com

Table of Contents

Case Narrative

Client: Hart Crowser, Inc.
Project/Site: Simplot Moxee/1500450.01

Job ID: 590-18961-1

Job ID: 590-18961-1

Laboratory: Eurofins Spokane

Narrative

Receipt
The samples were received on 10/13/2022 3:30 PM. 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 was 4.1º C.

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

General Chemistry
Method 350.1: The continuing calibration verification (CCV) and the continuing calibration verification low (CCVL) associated with batch 280-591673 recovered above the upper control limit for ammonia. The samples associated with this CCV and CCVL were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: (CCV 280-591673/58), (CCV 280-591673/72), (CCV 280-591673/88), (CCVL 280-591673/59), (CCVL 280-591673/73) and (CCVL 280-591673/89).

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

Sample Summary

Client: Hart Crowser, Inc.
Project/Site: Simplot Moxee/1500450.01

Job ID: 590-18961-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-18961-1	MW-1	Water	10/10/22 11:20	10/13/22 15:30
590-18961-2	MW-2	Water	10/10/22 12:35	10/13/22 15:30
590-18961-3	MW-3	Water	10/10/22 14:40	10/13/22 15:30
590-18961-4	MW-4	Water	10/10/22 13:30	10/13/22 15:30
590-18961-5	MW-5	Water	10/10/22 14:05	10/13/22 15:30
590-18961-6	MW-6	Water	10/10/22 16:15	10/13/22 15:30
590-18961-7	CS-4	Water	10/10/22 15:40	10/13/22 15:30
590-18961-8	CS-6	Water	10/10/22 17:05	10/13/22 15:30
590-18961-9	MW-200	Water	10/10/22 13:05	10/13/22 15:30
590-18961-10	Field Blank	Water	10/10/22 16:35	10/13/22 15:30

Definitions/Glossary

Client: Hart Crowser, Inc.
Job ID: 590-18961-1
Project/Site: Simplot Moxee/1500450.01

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 Results

Client: Hart Crowser, Inc.
Project/Site: Simplot Moxee/1500450.01

Job ID: 590-18961-1

Client Sample ID: MW-1
Lab Sample ID: 590-18961-1
Date Collected: 10/10/22 11:20
Matrix: Water
Date Received: 10/13/22 15:30

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**88**		0.50		mg/L			10/14/22 14:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (MCAWW 350.1)	ND		0.10		mg/L			10/28/22 11:59	1
Nitrate Nitrite as N (MCAWW 353.2	**4.6**		0.10		mg/L			10/18/22 12:12	1
Total Dissolved Solids (SM 2540C)	**400**		25		mg/L			10/17/22 15:41	1

Client Sample ID: MW-2
Lab Sample ID: 590-18961-2
Date Collected: 10/10/22 12:35
Matrix: Water
Date Received: 10/13/22 15:30

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**300**		10		mg/L			10/18/22 18:17	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (MCAWW 350.1)	ND		0.10		mg/L			10/28/22 12:02	1
Nitrate Nitrite as N (MCAWW 353.2	**86**		1.0		mg/L			10/18/22 12:18	10
Total Dissolved Solids (SM 2540C)	**1600**		25		mg/L			10/17/22 15:41	1

Client Sample ID: MW-3
Lab Sample ID: 590-18961-3
Date Collected: 10/10/22 14:40
Matrix: Water
Date Received: 10/13/22 15:30

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**81**		5.0		mg/L			10/14/22 14:39	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (MCAWW 350.1)	**1.4**		0.10		mg/L			10/28/22 12:12	1
Nitrate Nitrite as N (MCAWW 353.2	**9.8**		0.20		mg/L			10/18/22 13:56	2
Total Dissolved Solids (SM 2540C)	**600**		25		mg/L			10/17/22 15:41	1

Client Sample ID: MW-4
Lab Sample ID: 590-18961-4
Date Collected: 10/10/22 13:30
Matrix: Water
Date Received: 10/13/22 15:30

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**400**		10		mg/L			10/18/22 18:30	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (MCAWW 350.1)	**68**		5.0		mg/L			10/30/22 10:53	50
Nitrate Nitrite as N (MCAWW 353.2	**82**		1.0		mg/L			10/18/22 12:22	10
Total Dissolved Solids (SM 2540C)	**1200**		25		mg/L			10/17/22 15:41	1

Client Sample ID: MW-5

Lab Sample ID: 590-18961-5

Date Collected: 10/10/22 14:05

Matrix: Water

Date Received: 10/13/22 15:30

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	680		10		mg/L			10/18/22 18:42	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (MCAWW 350.1)	0.28		0.10		mg/L			10/28/22 12:18	1
Nitrate Nitrite as N (MCAWW 353.2	87		1.0		mg/L			10/18/22 12:24	10
Total Dissolved Solids (SM 2540C)	2500		50		mg/L			10/17/22 15:41	1

Client Sample ID: MW-6

Lab Sample ID: 590-18961-6

Date Collected: 10/10/22 16:15

Matrix: Water

Date Received: 10/13/22 15:30

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	290		10		mg/L			10/18/22 18:55	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (MCAWW 350.1)	0.20		0.10		mg/L			10/30/22 10:56	1
Nitrate Nitrite as N (MCAWW 353.2	55		1.0		mg/L			10/18/22 12:26	10
Total Dissolved Solids (SM 2540C)	1100		25		mg/L			10/17/22 15:41	1

Client Sample ID: CS-4

Lab Sample ID: 590-18961-7

Date Collected: 10/10/22 15:40

Matrix: Water

Date Received: 10/13/22 15:30

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	44		0.50		mg/L			10/14/22 19:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (MCAWW 350.1)	0.13		0.10		mg/L			10/30/22 10:59	1
Nitrate Nitrite as N (MCAWW 353.2	3.3		0.10		mg/L			10/18/22 12:40	1
Total Dissolved Solids (SM 2540C)	520		25		mg/L			10/17/22 15:41	1

Client Sample ID: CS-6

Lab Sample ID: 590-18961-8

Date Collected: 10/10/22 17:05

Matrix: Water

Date Received: 10/13/22 15:30

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	320		10		mg/L			10/18/22 19:08	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (MCAWW 350.1)	ND		0.10		mg/L			10/30/22 11:01	1
Nitrate Nitrite as N (MCAWW 353.2	59		1.0		mg/L			10/18/22 12:42	10
Total Dissolved Solids (SM 2540C)	890		25		mg/L			10/17/22 15:41	1

Client Sample Results

Client: Hart Crowser, Inc.
Job ID: 590-18961-1
Project/Site: Simplot Moxee/1500450.01

Client Sample ID: MW-200
Lab Sample ID: 590-18961-9
Date Collected: 10/10/22 13:05
Matrix: Water
Date Received: 10/13/22 15:30

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**300**		10		mg/L			10/18/22 19:20	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (MCAWW 353.2	**84**		1.0		mg/L			10/18/22 12:44	10

Client Sample ID: Field Blank
Lab Sample ID: 590-18961-10
Date Collected: 10/10/22 16:35
Matrix: Water
Date Received: 10/13/22 15:30

Method: MCAWW 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/14/22 18:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (MCAWW 353.2)	ND		0.10		mg/L			10/18/22 12:46	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 590-38588/1003
Matrix: Water
Analysis Batch: 38588

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/14/22 11:12	1

Lab Sample ID: LCS 590-38588/1004
Matrix: Water
Analysis Batch: 38588

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	12.5	12.8		mg/L		102	90 - 110

Lab Sample ID: MB 590-38600/1001
Matrix: Water
Analysis Batch: 38600

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/14/22 17:54	1

Lab Sample ID: LCS 590-38600/1002
Matrix: Water
Analysis Batch: 38600

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	12.5	12.8		mg/L		102	90 - 110

Lab Sample ID: 590-18961-10 MS
Matrix: Water
Analysis Batch: 38600

Client Sample ID: Field Blank
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	ND		11.4	11.4		mg/L		101	80 - 120

Lab Sample ID: 590-18961-10 MSD
Matrix: Water
Analysis Batch: 38600

Client Sample ID: Field Blank
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	ND		11.4	11.2		mg/L		99	80 - 120	2	10

Lab Sample ID: 590-18961-10 DU
Matrix: Water
Analysis Batch: 38600

Client Sample ID: Field Blank
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	ND		ND		mg/L		NC	15.7

Lab Sample ID: MB 590-38662/1003
Matrix: Water
Analysis Batch: 38662

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			10/18/22 17:01	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 590-38662/1004
Matrix: Water
Analysis Batch: 38662

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfate			12.5	12.8		mg/L		102	90 - 110		

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-591673/18
Matrix: Water
Analysis Batch: 591673

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.10		mg/L			10/28/22 11:19	1

Lab Sample ID: LCS 280-591673/17
Matrix: Water
Analysis Batch: 591673

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia as N			2.50	2.52		mg/L		101	90 - 110		

Lab Sample ID: MB 280-591752/19
Matrix: Water
Analysis Batch: 591752

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.10		mg/L			10/30/22 09:28	1

Lab Sample ID: LCS 280-591752/17
Matrix: Water
Analysis Batch: 591752

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia as N			2.50	2.53		mg/L		101	90 - 110		

Lab Sample ID: LCSD 280-591752/18
Matrix: Water
Analysis Batch: 591752

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia as N			2.50	2.51		mg/L		100	90 - 110	1	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-590380/23
Matrix: Water
Analysis Batch: 590380

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.10		mg/L			10/18/22 11:34	1

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: MB 280-590380/61
Matrix: Water
Analysis Batch: 590380

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.10		mg/L			10/18/22 12:50	1

Lab Sample ID: LCS 280-590380/21
Matrix: Water
Analysis Batch: 590380

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	5.00	4.98		mg/L		100	90 - 110

Lab Sample ID: LCS 280-590380/60
Matrix: Water
Analysis Batch: 590380

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	5.00	5.00		mg/L		100	90 - 110

Lab Sample ID: LCSD 280-590380/22
Matrix: Water
Analysis Batch: 590380

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	5.00	5.05		mg/L		101	90 - 110	2	10

Lab Sample ID: 590-18961-1 MS
Matrix: Water
Analysis Batch: 590380

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	4.6		4.00	8.67		mg/L		102	90 - 110

Lab Sample ID: 590-18961-1 MSD
Matrix: Water
Analysis Batch: 590380

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	4.6		4.00	8.64		mg/L		102	90 - 110	0	10

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 590-38659/1
Matrix: Water
Analysis Batch: 38659

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		25		mg/L			10/17/22 15:41	1

Client: Hart Crowser, Inc.
Project/Site: Simplot Moxee/1500450.01

Job ID: 590-18961-1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 590-38659/2
Matrix: Water
Analysis Batch: 38659

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	504	495		mg/L		98	80 - 120

Lab Chronicle

Client: Hart Crowser, Inc.
Job ID: 590-18961-1
Project/Site: Simplot Moxee/1500450.01

Client Sample ID: MW-1
Lab Sample ID: 590-18961-1
Date Collected: 10/10/22 11:20
Matrix: Water
Date Received: 10/13/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	5 mL	38588	10/14/22 14:13	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	591673	10/28/22 11:59	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	590380	10/18/22 12:12	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	38659	10/17/22 15:41	AMB	EET SPK

Client Sample ID: MW-2
Lab Sample ID: 590-18961-2
Date Collected: 10/10/22 12:35
Matrix: Water
Date Received: 10/13/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	5 mL	5 mL	38662	10/18/22 18:17	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	591673	10/28/22 12:02	MMP	EET DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	590380	10/18/22 12:18	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	38659	10/17/22 15:41	AMB	EET SPK

Client Sample ID: MW-3
Lab Sample ID: 590-18961-3
Date Collected: 10/10/22 14:40
Matrix: Water
Date Received: 10/13/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	5 mL	5 mL	38588	10/14/22 14:39	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	591673	10/28/22 12:12	MMP	EET DEN
Total/NA	Analysis	353.2		2	100 mL	100 mL	590380	10/18/22 13:56	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	38659	10/17/22 15:41	AMB	EET SPK

Client Sample ID: MW-4
Lab Sample ID: 590-18961-4
Date Collected: 10/10/22 13:30
Matrix: Water
Date Received: 10/13/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	5 mL	5 mL	38662	10/18/22 18:30	NMI	EET SPK
Total/NA	Analysis	350.1		50	10 mL	10 mL	591752	10/30/22 10:53	MMP	EET DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	590380	10/18/22 12:22	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	38659	10/17/22 15:41	AMB	EET SPK

Client Sample ID: MW-5
Lab Sample ID: 590-18961-5
Date Collected: 10/10/22 14:05
Matrix: Water
Date Received: 10/13/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	5 mL	5 mL	38662	10/18/22 18:42	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	591673	10/28/22 12:18	MMP	EET DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	590380	10/18/22 12:24	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	38659	10/17/22 15:41	AMB	EET SPK

Lab Chronicle

Client: Hart Crowser, Inc.
Job ID: 590-18961-1
Project/Site: Simplot Moxee/1500450.01

Client Sample ID: MW-6
Lab Sample ID: 590-18961-6
Date Collected: 10/10/22 16:15
Matrix: Water
Date Received: 10/13/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	5 mL	5 mL	38662	10/18/22 18:55	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	591752	10/30/22 10:56	MMP	EET DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	590380	10/18/22 12:26	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	38659	10/17/22 15:41	AMB	EET SPK

Client Sample ID: CS-4
Lab Sample ID: 590-18961-7
Date Collected: 10/10/22 15:40
Matrix: Water
Date Received: 10/13/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	5 mL	38600	10/14/22 19:23	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	591752	10/30/22 10:59	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	590380	10/18/22 12:40	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	38659	10/17/22 15:41	AMB	EET SPK

Client Sample ID: CS-6
Lab Sample ID: 590-18961-8
Date Collected: 10/10/22 17:05
Matrix: Water
Date Received: 10/13/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	5 mL	5 mL	38662	10/18/22 19:08	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	591752	10/30/22 11:01	MMP	EET DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	590380	10/18/22 12:42	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	38659	10/17/22 15:41	AMB	EET SPK

Client Sample ID: MW-200
Lab Sample ID: 590-18961-9
Date Collected: 10/10/22 13:05
Matrix: Water
Date Received: 10/13/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	5 mL	5 mL	38662	10/18/22 19:20	NMI	EET SPK
Total/NA	Analysis	353.2		10	100 mL	100 mL	590380	10/18/22 12:44	ZPM	EET DEN

Client Sample ID: Field Blank
Lab Sample ID: 590-18961-10
Date Collected: 10/10/22 16:35
Matrix: Water
Date Received: 10/13/22 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	5 mL	38600	10/14/22 18:19	NMI	EET SPK
Total/NA	Analysis	353.2		1	100 mL	100 mL	590380	10/18/22 12:46	ZPM	EET DEN

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

Accreditation/Certification Summary

Client: Hart Crowser, Inc.
Job ID: 590-18961-1
Project/Site: Simplot Moxee/1500450.01

Laboratory: Eurofins Spokane

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C569	01-06-23

Laboratory: Eurofins Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-23
A2LA	ISO/IEC 17025	2907.01	10-31-23
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-08-23
Arizona	State	AZ0713	12-20-22
Arkansas DEQ	State	19-047-0	05-31-23
California	State	2513	01-08-23
Connecticut	State	PH-0686	09-30-22 *
Florida	NELAP	E87667-57	06-30-23
Georgia	State	4025-011	01-08-23
Illinois	NELAP	2000172019-1	04-30-23
Iowa	State	IA#370	12-02-22
Kansas	NELAP	E-10166	04-30-23
Kentucky (WW)	State	KY98047	12-31-22
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-23
Minnesota	NELAP	1788752	12-31-22
Nevada	State	CO000262020-1	07-31-23
New Hampshire	NELAP	205319	04-28-23
New Jersey	NELAP	190002	06-30-23
New York	NELAP	59923	04-01-23
North Carolina (WW/SW)	State	358	12-31-22
North Dakota	State	R-034	01-08-23
Oklahoma	NELAP	8614	08-31-23
Oregon	NELAP	4025-011	01-09-23
Pennsylvania	NELAP	013	07-31-23
South Carolina	State	72002001	01-08-23
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-21-19	09-30-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-20-00065	03-06-23
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-23
Virginia	NELAP	10490	06-14-23
Washington	State	C583-19	08-03-23
West Virginia DEP	State	354	11-30-22
Wisconsin	State	999615430	08-31-23
Wyoming (UST)	A2LA	2907.01	10-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Hart Crowser, Inc.
Project/Site: Simplot Moxee/1500450.01

Job ID: 590-18961-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	EET SPK
350.1	Nitrogen, Ammonia	MCAWW	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET SPK

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100
EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

HALEY ALDRICH
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Suite 205,
Spokane WA, 99212

CHAIN OF CUSTODY RECORD

Phone (617) 886-7400
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H&A FILE NO.	1500450 01	LABORATORY	Eurofins	DELIVERY DATE	10/13/22
PROJECT NAME	Simplot Moxee	ADDRESS		TURNAROUND TIME	10 days
H&A CONTACT	John Haney	CONTACT		PROJECT MANAGER	

Sample No.	Date	Time	Depth	Type	Nitrate (353 2)	Ammonia N (350 1)	Sulfate (300 0)	TDS (SM 2540C)									Number of Containers	Comments (special instructions, precautions, additional method numbers, etc.)
MW-1	10/10/22	11 20		H_2O	X	X	X	X									4	Laboratory to use applicable DEP CAM methods, unless otherwise directed.
MW-2		12 35			X	X	X	X									4	
MW-3		14 40			X	X	X	X									4	
MW-4		13 30			X	X	X	X									4	
MW 5		14 05			X	X	X	X									4	
MW-6		16 15			X	X	X	X									4	
CS-4		15 40			X	X	X	X									4	
CS-6		17 05			X	X	X	X									4	
MW-200		13:05			X		X										4	
Field Blank		16 35			X		X										3	

Sampled and Relinquished by	Received by
Sign [signature]	Sign [signature]
Print Chad M	Print Jeremy Parker
Firm H&A	Firm ETA Spokane
Date 10/13/22 Time 15.28	Date 10/13/22 Time 1530

Relinquished by	Received by
Sign	Sign
Print	Print
Firm	Firm
Date Time	Date Time

Relinquished by	Received by
Sign	Sign
Print	Print
Firm	Firm
Date Time	Date Time

LIQUID

VOA Vial
Amber Glass
Plastic Bottle
Preservative
Volume

590-18961 Chain of Custody

VOA Vial
Amber Glass
Clear Glass
Preservative
Volume

Sampling Comments

3.6°C 4.1°C FR006

Evidence samples were tampered with? YES NO

If YES, please explain in section below

PRESERVATION KEY

A Sample chilled	C NaOH	E H_2SO_4	G Methanol
B Sample filtered	D HNO_3	F HCL	H Water/NaHSO4 (circle)

Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)

If Presumptive Certainty Data Package is needed, initial all sections:

_________ The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty

_________ Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

_________ This Chain of Custody Record (specify) _________ includes _________ does not include samples defined as Drinking Water Samples.

_________ If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable)_________ analyze

Required Reporting Limits and Data Quality Objectives

- ☐ RC-S1 ☐ S1 ☐ GW1
- ☐ RC-S2 ☐ S2 ☐ GW2
- ☐ RC-GW1 ☐ S3 ☐ GW3
- ☐ RC-GW2

WHITE Laboratory CANARY Project Manager PINK Haley & Aldrich Laboratory

FEBRUARY 2016

Form 3003

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 590-7249.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Randee.Arrington@et.eurofinsus.com	State of Origin: Washington	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Washington		Job #: 590-18961-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 10/26/2022			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: Simplot Moxee/1500450.01	Project #: 59001939			
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 - Client ID (Lab ID)	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)	353.2_Pres/ (MOD) Local Method	350.1	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MW-1 (590-18961-1)	10/10/22	11:20 Pacific		Water			X	X	1	
MW-2 (590-18961-2)	10/10/22	12:35 Pacific		Water			X	X	2	
MW-3 (590-18961-3)	10/10/22	14:40 Pacific		Water			X	X	2	
MW-4 (590-18961-4)	10/10/22	13:30 Pacific		Water			X	X	2	
MW-5 (590-18961-5)	10/10/22	14:05 Pacific		Water			X	X	2	
MW-6 (590-18961-6)	10/10/22	16:15 Pacific		Water			X	X	2	
CS-4 (590-18961-7)	10/10/22	15:40 Pacific		Water			X	X	2	
CS-6 (590-18961-8)	10/10/22	17:05 Pacific		Water			X	X	2	
MW-200 (590-18961-9)	10/10/22	13:05 Pacific		Water			X		2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northwest, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northwest, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	10/14/22 14:00	EET080	[signature]	10/15/22 1100	ETA/DEN
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: ☑ Yes ☐ No	Custody Seal No.: 207164, 207162	Cooler Temperature(s) °C and Other Remarks: 1.8, 0.4 IR12 CF 0.0

Ver: 06/08/2021

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

eurofins | Environment Testing America

Chain of Custody Record

Client Information (Sub Contract Lab)
Client Contact: Shipping/Receiving
Company: TestAmerica Laboratories, Inc.
Address: 4955 Yarrow Street, ,
City: Arvada
State, Zip: CO, 80002
Phone: 303-736-0100(Tel) 303-431-7171(Fax)
Email:
Project Name: Simplot Moxee/1500450.01
Site:

Sampler:
Phone:
Lab PM: Arrington, Randee E
E-Mail: Randee.Arrington@et.eurofinsus.com
Carrier Tracking No(s):
State of Origin: Washington
Accreditations Required (See note): State Program - Washington

Due Date Requested: 10/26/2022
TAT Requested (days):
PO #:
WO #:
Project #: 59001939
SSOW#:

COC No: 590-7249.2
Page: Page 2 of 2
Job #: 590-18961-1

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:

Analysis Requested

Sample Identification - Client ID (Lab ID)	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)	353.2_Pres/ (MOD) Local Method	350.1	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
Field Blank (590-18961-10)	10/10/22	16:35 Pacific		Water			X		1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northwest, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northwest, LLC.

Possible Hazard Identification
Unconfirmed
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

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:

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

	Date/Time:	Company		Date/Time:	Company
Relinquished by:	10/14/22 14:00	ETSPO	Received by:	10/15/22 1100	ETHOU
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 590-18961-1

Login Number: 18961
List Number: 1
Creator: Fettig, Riley

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	

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 590-18961-1

Login Number: 18961
List Number: 2
Creator: Lee, Jerry

List Source: Eurofins Denver
List Creation: 10/15/22 03:46 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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?	N/A	
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.	N/A	
Sample Preservation Verified.	True	
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: John Haney
Hart Crowser, Inc.
505 West Riverside Avenue, Suite 205
Spokane, Washington 99201

Generated 2/1/2023 3:51:13 PM

JOB DESCRIPTION

SGS Moxee GW Sampling/0202395-002

JOB NUMBER

590-19634-1

Eurofins Spokane
11922 East 1st Ave
Spokane WA 99206

See page two for job notes and contact information.

Job Notes

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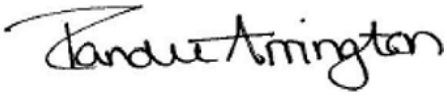
The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

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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2/1/2023 3:51:13 PM

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

Table of Contents

Case Narrative

Client: Hart Crowser, Inc. Job ID: 590-19634-1
Project/Site: SGS Moxee GW Sampling/0202395-002

Job ID: 590-19634-1

Laboratory: Eurofins Spokane

Narrative

Receipt
The samples were received on 1/17/2023 4:03 PM. 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 was 3.3º C.

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

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

Sample Summary

Client: Hart Crowser, Inc.
Job ID: 590-19634-1
Project/Site: SGS Moxee GW Sampling/0202395-002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-19634-1	MW-1	Water	01/16/23 09:40	01/17/23 16:03
590-19634-2	MW-2	Water	01/16/23 10:35	01/17/23 16:03
590-19634-3	MW-3	Water	01/16/23 13:10	01/17/23 16:03
590-19634-4	MW-4	Water	01/16/23 12:25	01/17/23 16:03
590-19634-5	MW-5	Water	01/16/23 11:40	01/17/23 16:03
590-19634-6	MW-6	Water	01/16/23 15:15	01/17/23 16:03
590-19634-7	CS-4	Water	01/16/23 14:40	01/17/23 16:03
590-19634-8	CS-6	Water	01/16/23 14:00	01/17/23 16:03
590-19634-9	MW-200	Water	01/16/23 11:05	01/17/23 16:03
590-19634-10	Field Blank	Water	01/16/23 10:45	01/17/23 16:03

Definitions/Glossary

Client: Hart Crowser, Inc. Job ID: 590-19634-1
Project/Site: SGS Moxee GW Sampling/0202395-002

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 Results

Client: Hart Crowser, Inc. Job ID: 590-19634-1
Project/Site: SGS Moxee GW Sampling/0202395-002

Client Sample ID: MW-1 — Lab Sample ID: 590-19634-1
Date Collected: 01/16/23 09:40 — **Matrix: Water**
Date Received: 01/17/23 16:03

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	410		10		mg/L			01/19/23 09:20	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	ND		0.10		mg/L			01/31/23 13:03	1
Nitrate Nitrite as N (MCAWW 353.2	79		10		mg/L			01/27/23 14:22	100
Total Dissolved Solids (SM 2540C)	870		130		mg/L			01/20/23 15:23	1

Client Sample ID: MW-2 — Lab Sample ID: 590-19634-2
Date Collected: 01/16/23 10:35 — **Matrix: Water**
Date Received: 01/17/23 16:03

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	520		10		mg/L			01/18/23 16:32	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	ND		0.10		mg/L			01/31/23 13:05	1
Nitrate Nitrite as N (MCAWW 353.2	370		5.0		mg/L			01/27/23 12:46	50
Total Dissolved Solids (SM 2540C)	1600		130		mg/L			01/20/23 15:23	1

Client Sample ID: MW-3 — Lab Sample ID: 590-19634-3
Date Collected: 01/16/23 13:10 — **Matrix: Water**
Date Received: 01/17/23 16:03

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	110		5.0		mg/L			01/18/23 16:45	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	1.3		0.10		mg/L			01/31/23 13:09	1
Nitrate Nitrite as N (MCAWW 353.2	19		0.20		mg/L			01/27/23 12:48	2
Total Dissolved Solids (SM 2540C)	760		130		mg/L			01/20/23 15:23	1

Client Sample ID: MW-4 — Lab Sample ID: 590-19634-4
Date Collected: 01/16/23 12:25 — **Matrix: Water**
Date Received: 01/17/23 16:03

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	370		10		mg/L			01/18/23 16:58	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	35		1.0		mg/L			01/31/23 13:57	10
Nitrate Nitrite as N (MCAWW 353.2	85		5.0		mg/L			01/27/23 14:24	50
Total Dissolved Solids (SM 2540C)	1300		130		mg/L			01/20/23 15:23	1

Client Sample Results

Client: Hart Crowser, Inc. Job ID: 590-19634-1
Project/Site: SGS Moxee GW Sampling/0202395-002

Client Sample ID: MW-5 — Lab Sample ID: 590-19634-5
Date Collected: 01/16/23 11:40 — **Matrix: Water**
Date Received: 01/17/23 16:03

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	360		10		mg/L			01/18/23 17:10	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	ND		0.10		mg/L			01/31/23 13:52	1
Nitrate Nitrite as N (MCAWW 353.2	5.1		1.0		mg/L			01/27/23 14:26	10
Total Dissolved Solids (SM 2540C)	2400		130		mg/L			01/20/23 15:23	1

Client Sample ID: MW-6 — Lab Sample ID: 590-19634-6
Date Collected: 01/16/23 15:15 — **Matrix: Water**
Date Received: 01/17/23 16:03

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	29		10		mg/L			01/18/23 17:23	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	ND		0.10		mg/L			01/31/23 13:54	1
Nitrate Nitrite as N (MCAWW 353.2	0.32		0.10		mg/L			01/27/23 13:06	1
Total Dissolved Solids (SM 2540C)	990		130		mg/L			01/20/23 15:23	1

Client Sample ID: CS-4 — Lab Sample ID: 590-19634-7
Date Collected: 01/16/23 14:40 — **Matrix: Water**
Date Received: 01/17/23 16:03

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	44		0.50		mg/L			01/18/23 17:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	ND		0.10		mg/L			01/31/23 13:33	1
Nitrate Nitrite as N (MCAWW 353.2	6.3		0.10		mg/L			01/27/23 13:14	1
Total Dissolved Solids (SM 2540C)	820		130		mg/L			01/20/23 15:23	1

Client Sample ID: CS-6 — Lab Sample ID: 590-19634-8
Date Collected: 01/16/23 14:00 — **Matrix: Water**
Date Received: 01/17/23 16:03

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	220		10		mg/L			01/18/23 17:49	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	ND		0.10		mg/L			01/31/23 13:43	1
Nitrate Nitrite as N (MCAWW 353.2	38		0.50		mg/L			01/27/23 13:16	5
Total Dissolved Solids (SM 2540C)	900		130		mg/L			01/20/23 15:23	1

Client Sample Results

Client: Hart Crowser, Inc. Job ID: 590-19634-1
Project/Site: SGS Moxee GW Sampling/0202395-002

Client Sample ID: MW-200 Lab Sample ID: 590-19634-9

Date Collected: 01/16/23 11:05 **Matrix: Water**
Date Received: 01/17/23 16:03

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**510**		10		mg/L			01/18/23 18:02	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (MCAWW 353.2	**340**		5.0		mg/L			01/27/23 13:18	50

Client Sample ID: Field Blank Lab Sample ID: 590-19634-10

Date Collected: 01/16/23 10:45 **Matrix: Water**
Date Received: 01/17/23 16:03

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			01/18/23 18:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (MCAWW 353.2)	ND		0.10		mg/L			01/27/23 13:20	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 590-39849/1003
Matrix: Water
Analysis Batch: 39849

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			01/18/23 12:17	1

Lab Sample ID: LCS 590-39849/1004
Matrix: Water
Analysis Batch: 39849

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	12.5	12.7		mg/L		102	90 - 110

Lab Sample ID: MB 590-39856/1003
Matrix: Water
Analysis Batch: 39856

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			01/19/23 08:55	1

Lab Sample ID: LCS 590-39856/1004
Matrix: Water
Analysis Batch: 39856

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	12.5	12.7		mg/L		101	90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-600997/18
Matrix: Water
Analysis Batch: 600997

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.10		mg/L			01/31/23 12:52	1

Lab Sample ID: LCS 280-600997/17
Matrix: Water
Analysis Batch: 600997

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	2.50	2.55		mg/L		102	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-600671/22
Matrix: Water
Analysis Batch: 600671

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.10		mg/L			01/27/23 12:30	1

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: MB 280-600671/60 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 600671

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		0.10		mg/L			01/27/23 13:46	1

Lab Sample ID: LCS 280-600671/21 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 600671

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	5.00	4.97		mg/L		99	90 - 110

Lab Sample ID: LCS 280-600671/59 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 600671

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	5.00	4.93		mg/L		99	90 - 110

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 590-39889/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 39889

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		25		mg/L			01/20/23 15:23	1

Lab Sample ID: LCS 590-39889/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 39889

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	503	489		mg/L		97	80 - 120

Lab Chronicle

Client: Hart Crowser, Inc. Job ID: 590-19634-1
Project/Site: SGS Moxee GW Sampling/0202395-002

Client Sample ID: MW-1
Lab Sample ID: 590-19634-1
Date Collected: 01/16/23 09:40
Matrix: Water
Date Received: 01/17/23 16:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	5 mL	5 mL	39856	01/19/23 09:20	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	600997	01/31/23 13:03	MMP	EET DEN
Total/NA	Analysis	353.2		100	100 mL	100 mL	600671	01/27/23 14:22	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	39889	01/20/23 15:23	AMB	EET SPK

Client Sample ID: MW-2
Lab Sample ID: 590-19634-2
Date Collected: 01/16/23 10:35
Matrix: Water
Date Received: 01/17/23 16:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	5 mL	5 mL	39849	01/18/23 16:32	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	600997	01/31/23 13:05	MMP	EET DEN
Total/NA	Analysis	353.2		50	100 mL	100 mL	600671	01/27/23 12:46	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	39889	01/20/23 15:23	AMB	EET SPK

Client Sample ID: MW-3
Lab Sample ID: 590-19634-3
Date Collected: 01/16/23 13:10
Matrix: Water
Date Received: 01/17/23 16:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	5 mL	5 mL	39849	01/18/23 16:45	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	600997	01/31/23 13:09	MMP	EET DEN
Total/NA	Analysis	353.2		2	100 mL	100 mL	600671	01/27/23 12:48	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	39889	01/20/23 15:23	AMB	EET SPK

Client Sample ID: MW-4
Lab Sample ID: 590-19634-4
Date Collected: 01/16/23 12:25
Matrix: Water
Date Received: 01/17/23 16:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	5 mL	5 mL	39849	01/18/23 16:58	NMI	EET SPK
Total/NA	Analysis	350.1		10	10 mL	10 mL	600997	01/31/23 13:57	MMP	EET DEN
Total/NA	Analysis	353.2		50	100 mL	100 mL	600671	01/27/23 14:24	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	39889	01/20/23 15:23	AMB	EET SPK

Client Sample ID: MW-5
Lab Sample ID: 590-19634-5
Date Collected: 01/16/23 11:40
Matrix: Water
Date Received: 01/17/23 16:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	5 mL	5 mL	39849	01/18/23 17:10	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	600997	01/31/23 13:52	MMP	EET DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	600671	01/27/23 14:26	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	39889	01/20/23 15:23	AMB	EET SPK

Lab Chronicle

Client: Hart Crowser, Inc. Job ID: 590-19634-1
Project/Site: SGS Moxee GW Sampling/0202395-002

Client Sample ID: MW-6
Lab Sample ID: 590-19634-6
Date Collected: 01/16/23 15:15 **Matrix: Water**
Date Received: 01/17/23 16:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	5 mL	5 mL	39849	01/18/23 17:23	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	600997	01/31/23 13:54	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	600671	01/27/23 13:06	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	39889	01/20/23 15:23	AMB	EET SPK

Client Sample ID: CS-4
Lab Sample ID: 590-19634-7
Date Collected: 01/16/23 14:40 **Matrix: Water**
Date Received: 01/17/23 16:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	5 mL	39849	01/18/23 17:36	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	600997	01/31/23 13:33	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	600671	01/27/23 13:14	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	39889	01/20/23 15:23	AMB	EET SPK

Client Sample ID: CS-6
Lab Sample ID: 590-19634-8
Date Collected: 01/16/23 14:00 **Matrix: Water**
Date Received: 01/17/23 16:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	5 mL	5 mL	39849	01/18/23 17:49	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	600997	01/31/23 13:43	MMP	EET DEN
Total/NA	Analysis	353.2		5	100 mL	100 mL	600671	01/27/23 13:16	KEG	EET DEN
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	39889	01/20/23 15:23	AMB	EET SPK

Client Sample ID: MW-200
Lab Sample ID: 590-19634-9
Date Collected: 01/16/23 11:05 **Matrix: Water**
Date Received: 01/17/23 16:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	5 mL	5 mL	39849	01/18/23 18:02	NMI	EET SPK
Total/NA	Analysis	353.2		50	100 mL	100 mL	600671	01/27/23 13:18	KEG	EET DEN

Client Sample ID: Field Blank
Lab Sample ID: 590-19634-10
Date Collected: 01/16/23 10:45 **Matrix: Water**
Date Received: 01/17/23 16:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	5 mL	39849	01/18/23 18:14	NMI	EET SPK
Total/NA	Analysis	353.2		1	100 mL	100 mL	600671	01/27/23 13:20	KEG	EET DEN

Laboratory References:
EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100
EET SPK = Eurofins Spokane, 11922 East 1st Ave, Spokane, WA 99206, TEL (509)924-9200

Accreditation/Certification Summary

Client: Hart Crowser, Inc. Job ID: 590-19634-1
Project/Site: SGS Moxee GW Sampling/0202395-002

Laboratory: Eurofins Spokane

The accreditations/certifications listed below are applicable to this report.

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

Laboratory: Eurofins Denver

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-23
A2LA	ISO/IEC 17025	2907.01	10-31-23
Alabama	State Program	40730	09-30-12 *
Alaska (UST)	State	18-001	02-08-23
Arizona	State	AZ0713	12-20-22 *
Arkansas DEQ	State	19-047-0	05-31-23
California	State	2513	01-08-23 *
Connecticut	State	PH-0686	09-30-22 *
Florida	NELAP	E87667-57	06-30-23
Illinois	NELAP	2000172019-1	04-30-23
Iowa	State	IA#370	12-01-24
Kansas	NELAP	E-10166	04-30-23
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-23
Louisiana (All)	NELAP	30785	06-30-23
Minnesota	NELAP	1788752	12-31-22 *
Nevada	State	CO000262020-1	07-31-23
New Hampshire	NELAP	205319	04-28-23
New Jersey	NELAP	190002	06-30-23
New York	NELAP	59923	04-01-23
North Carolina (WW/SW)	State	358	12-31-22 *
North Dakota	State	R-034	01-08-23 *
Oklahoma	NELAP	8614	08-31-23
Oregon	NELAP	4025-011	01-10-24
Pennsylvania	NELAP	013	07-31-23
South Carolina	State	72002001	01-08-23 *
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-21-19	09-30-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-20-00065	03-06-23
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-23
Virginia	NELAP	10490	06-14-23
Washington	State	C583-19	08-03-23
West Virginia DEP	State	354	11-30-22 *
Wisconsin	State	999615430	08-31-23
Wyoming (UST)	A2LA	2907.01	10-31-22 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Hart Crowser, Inc.
Job ID: 590-19634-1
Project/Site: SGS Moxee GW Sampling/0202395-002

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET SPK
350.1	Nitrogen, Ammonia	EPA	EET DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET SPK

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

HALEY ALDRICH

Haley & Aldrich, Inc.
505 W Riverside,
Suite 205,
Spokane WA, 99212

CHAIN OF CUSTODY RECORD

Phone (617) 886-7400
Fax (617) 886-7600
Page 1 of 1

H&A FILE NO.	0202395 - 002	LABORATORY	Eurofins
PROJECT NAME	SGS Moxee GW Sampling	ADDRESS	
H&A CONTACT	John Haney	CONTACT	
DELIVERY DATE	1/17/23		
TURNAROUND TIME	10 days		
PROJECT MANAGER			

Sample No.	Date	Time	Depth	Type	Nitrogen, Nitrate EPA 353.2	Ammonia N EPA 350.1	Sulfate EPA 300.0	TDS SM 2540C	Number of Containers
MW 1	1/16/23	9:40		H2O	X	X	X	X	2
MW 2		10:35			X	X	X	X	2
MW-3		13:10			X	X	X	X	2
MW-4		12.25			X	X	X	X	2
MW 5		11 40			X	X	X	X	2
MW-6		15.15			X	X	X	X	2
CS 4		14.40			X	X	X	X	2
CS-6		14 00			X	X	X	X	2
MW-200		11:05			X	~~X~~	X	~~X~~	2
Field Blank		10:45			X	~~X~~	X	~~X~~	2

Analysis Requested

Comments (special instructions, precautions, additional method numbers, etc.)

Laboratory to use applicable DEP CAM methods, unless otherwise directed.

] no ammonia, TDS analysis

Sampled and Relinquished by	Received by
Sign	Sign
Print Chad M	Print Riley
Firm H&A	Firm Eurofins
Date 1/17/23 Time 16 03	Date 1/17/23 Time 1603

3 0 3 3 coolers IR006

Relinquished by	Received by
Sign	Sign
Print	Print
Firm	Firm
Date Time	Date Time

Relinquished by	Received by
Sign	Sign
Print	Print
Firm	Firm
Date Time	Date Time

LIQUID	SOLID
VOA Vial	VOA Vial
Amber Glass	Amber Glass
Plastic Bottle	Clear Glass
Preservative	Preservative
Volume	Volume

Sampling Comments

590-19634 Chain of Custody

Evidence samples were tampered with? YES NO

If YES, please explain in section below.

PRESERVATION KEY

A Sample chilled	C NaOH	E H_2SO_4	G Methanol
B Sample filtered	D HNO_3	F HCL	H Water/NaHSO4 (circle)

Presumptive Certainty Data Package (Laboratory to use applicable DEP CAM methods)

If Presumptive Certainty Data Package is needed, initial all sections:

_____ The required minimum field QC samples, as designated in BWSC CAM-VII have been or will be collected, as appropriate, to meet the requirements of Presumptive Certainty

_____ Matrix Spike (MS) samples for MCP Metals and/or Cyanide are included and identified herein.

_____ This Chain of Custody Record (specify) _____ includes _____ does not include samples defined as Drinking Water Samples.

_____ If this Chain of Custody Record identifies samples defined as Drinking Water Samples, Trip Blanks and Field Duplicates are included and identified and analysis of TICs are required, as appropriate. Laboratory should (specify if applicable) _____ analyze

Required Reporting Limits and Data Quality Objectives

☐ RC-S1 ☐ S1 ☐ GW1
☐ RC-S2 ☐ S2 ☐ GW2
☐ RC-GW1 ☐ S3 ☐ GW3
☐ RC-GW2

WHITE Laboratory CANARY Project Manager PINK Haley & Aldrich Laboratory

FEBRUARY 2016

Form 3003

Eurofins Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone: 912-354-7858 Fax: 912-352-0165

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arrington, Randee E	Carrier Tracking No(s):	COC No: 680-724820.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Randee.Arrington@et.eurofinsus.com	State of Origin: Washington	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Washington		Job #: 590-19634-1
Address: 4955 Yarrow Street,	Due Date Requested: 1/30/2023			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: SGS Moxee GW Sampling/0202395-002	Project #: 59001939			
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 - Client ID (Lab ID)	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)	353.2_Pres/ Nitrogen, Nitrate-Nitrite	350.1/ Nitrogen, Ammonia	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MW-1 (590-19634-1)	1/16/23	09:40 Pacific		Water			X	X	1	
MW-5 (590-19634-5)	1/16/23	11:40 Pacific		Water			X	X	1	
MW-6 (590-19634-6)	1/16/23	15:15 Pacific		Water			X	X	1	
CS-4 (590-19634-7)	1/16/23	14:40 Pacific		Water			X	X	1	
MW-200 (590-19634-9)	1/16/23	11:05 Pacific		Water			X		1	
Field Blank (590-19634-10)	1/16/23	10:45 Pacific		Water			X		1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		1/24/23 1600			1-25-23 0945	ETADEN
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: 0.9°C IR12 CF0-0

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 590-19634-1

Login Number: 19634
List Number: 1
Creator: Fettig, Riley

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	

Login Sample Receipt Checklist

Client: Hart Crowser, Inc.

Job Number: 590-19634-1

Login Number: 19634
List Number: 2
Creator: Held, Wesley

List Source: Eurofins Denver
List Creation: 01/26/23 03:29 PM

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?	N/A	
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.	True	
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	