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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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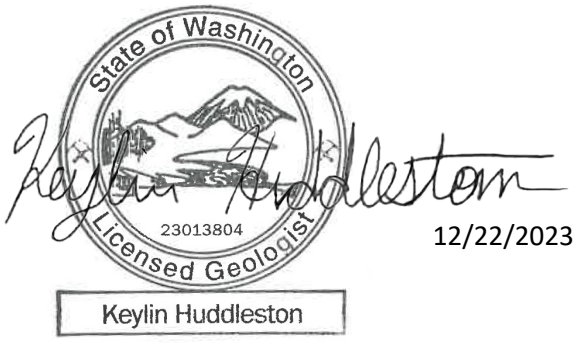
SEMIANNUAL REPORT ON
SIMPLOT GROWERS SOLUTIONS
GROUNDWATER MONITORING
MOXEE, WASHINGTON

PREPARED FOR
J.R. SIMPLOT COMPANY
BOISE, IDAHO

PREPARED BY:



12/22/2023

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1. Introduction

This semiannual report summarizes the field activities Haley & Aldrich, Inc. (Haley & Aldrich) completed, and data collected between April and July 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 recently conducted four groundwater monitoring events at the Subject Property (October 2022 and January, April, and July 2023) to assess seasonal changes in groundwater elevations and concentrations of nitrates, sulfates, total dissolved solids (TDS), and ammonia (contaminants of concern [COCs]) 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 identify potential trends over time. This ongoing assessment also has been used to monitor potential impacts to groundwater quality beneath Subject Property from sources hydraulically upgradient.

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. 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 and hydraulically downgradient of the Subject Property. Groundwater monitoring results from events conducted between 2018 and 2020 indicate that nitrates, sulfates, and/or TDS in groundwater exceed Primary and Secondary Maximum Contaminant Levels (MCLs) in each of the five on-site monitoring wells and two additional monitoring wells on the Moxee City Shop property. An off-site groundwater investigation conducted in 2020 found that nitrates were present in groundwater hydraulically downgradient of the Subject Property in concentrations greater than the Primary MCL. In the 2020 report, HDR concluded an explanation for the elevated nitrate concentrations:

> "…may be that nitrate at the groundwater/vadose zone interface undergoes denitrification in the area of the Moxee City Shop underground storage tank (UST), where historic petroleum releases have occurred. Microorganisms that biodegrade hydrocarbons will use nitrate as an electron acceptor when oxygen becomes depleted."

In addition, the concentrations found downgradient of the Subject Property typically are less than half the concentrations found in MW-5 (nearest on-site monitoring well) during the sampling event indicating the influence of nitrates from the Subject Property is likely low. Data collected during an off-site assessment conducted in 2020 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 services includes: monitoring groundwater elevations, collecting groundwater samples, submitting groundwater samples for chemical analyses, and comparing analytical results to Primary and Secondary MCLs. During the April and July 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 Shop property;

- downloaded data from In-Situ Rugged TROLL 100 pressure transducers (transducer) deployed in MW-1, MW-2, and MW-3 and one In-Situ BaroTROLL transducer (BaroTROLL) deployed in MW-1;
- 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 Shop 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 13 April and 13 July 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 Shop 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.

Prior to collecting groundwater samples, we 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; the tubing inlet was placed at approximately the middle of the wetted well screen during purging and sampling. 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 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. We 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 for quality assurance and quality control purposes. Eurofins provided Haley & Aldrich with a liter container filled with deionized (DI) water and an additional sample container to collect the 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 from the same well (sample MW-200).

5. Groundwater Elevation Monitoring Results

Calculated groundwater elevations are summarized in Table 1 and transducer data from October 2022 through July 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 “Inferred Groundwater Contours – April 2023”, Figure 4; “Inferred Groundwater Contours – July 2023”, Figure 5; and “July 2023 Groundwater Contours and Water Quality Versus Time”, Figure 6.

5.1 GROUNDWATER ELEVATION – APRIL 2023

Water level measurements recorded on 13 April 2023 indicate that depth to groundwater ranged between 3.11 and 8.18 feet below the top of casing in CS-6 and MW-5, respectively. Calculated groundwater elevations ranged between 1021.95 and 1023.48 feet in CS-4 and MW-2, respectively. Calculated groundwater elevations from the July event indicate groundwater generally was flowing west-southwest at approximately 257 degrees from north. The groundwater gradient observed during the April event was approximately 0.005 feet per foot (feet/foot). We used calculated groundwater elevations to generate inferred groundwater elevation contours for the April event; these are presented in Figure 4.

5.2 GROUNDWATER ELEVATION – JULY 2023

Water level measurements recorded on 13 July 2023 indicate that depth to groundwater ranged between 7.06 and 12.42 feet below the top of casing in CS-6 and MW-5, respectively. Calculated groundwater elevations ranged between 1017.87 and 1020.74 feet in CS-4 and MW-1, respectively. Calculated groundwater elevations indicate groundwater generally was flowing south-southwest or approximately 221 degrees from north. The groundwater gradient observed during the July groundwater sampling event was approximately 0.006 feet/foot. We used groundwater elevations to generate elevation contours from the July event; these are presented in Figure 5.

5.3 CONTINUOUS GROUNDWATER ELEVATION MONITORING

Transducer data from 10 October 2022 through 13 July 2023 (deployment period) indicate groundwater elevations ranged between 1019.46 feet in MW-3 and 1024.63 feet in MW-1. Minimum groundwater elevations were observed in MW-1 (1020.74 feet) and MW-2 (1018.51 feet) on 13 July 2023, and in MW-3 (1019.46 feet) on 10 July 2023. 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 (1024.31 feet) on 18 January 2023. Generally, groundwater elevations gradually increased between October 2022 and late December 2022, then increased exponentially until 15 January 2023. Groundwater elevations then began to decrease until early April 2023 when groundwater elevations briefly rose exponentially and then declined until July when transducers were retrieved and data was downloaded.

6. Analytical Results

Haley & Aldrich submitted a total of 16 groundwater samples (eight per monitoring event) to Eurofins for analyses of nitrate-nitrogen by U.S. Environmental Protection Agency (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 and analytical reports from Eurofins are provided in Appendix A.

6.1 CHEMICAL ANALYTICAL RESULTS – APRIL 2023

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

- nitrate concentrations ranged between 6 and 150 milligrams per liter (mg/L) in MW-6 and MW-2, respectively;
- sulfate concentrations ranged between 45 and 610 mg/L in CS-4 and MW-5, respectively;
- TDS concentrations ranged between 380 and 2,000 mg/L in MW-6 and MW-2, respectively; and
- ammonia concentrations ranged between 0.16 and 73 mg/L in MW-5 and MW-4, respectively. Ammonia was not detected in MW-1, MW-2, MW-6, and CS-4 in concentrations greater than the Method Reporting Limit (MRL).

Nitrate, sulfate, and TDS concentrations from April 2023 and previous sampling events are visually depicted in Figure 6.

6.2 CHEMICAL ANALYTICAL RESULTS – JULY 2023

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

- nitrate concentrations ranged between 3.9 and 150 mg/L in CS-4 and MW-2, respectively;
- sulfate concentrations ranged between 39 and 720 mg/L in CS-4 and MW-5, respectively;
- TDS concentrations ranged between 690 and 2,000 mg/L in MW-6 and MW-5, respectively; and
- ammonia was detected in MW-3 and MW-4 at concentrations of 5.5 and 56 mg/L, respectively.

Nitrate, sulfate, and TDS concentrations from July 2023 are visually depicted in Figure 6.

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 April and July monitoring events did not contain sulfate or nitrates at concentrations greater than the MRL. These results indicate the sampling equipment did not contribute to the sulfate or nitrate concentrations detected in the groundwater samples.

6.3.2 Duplicate 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)		
April	150	160	6	400	360	11
July	150	160	6	150	400	5

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 April and July 2023. The direction of groundwater flow in April 2023 was about 257 degrees from north (west-southwest) and shifted to about 221 degrees from north (south-southwest) in July 2023. Additionally, the calculated groundwater gradient increased slightly from 0.005 and 0.006 feet/foot between the April and July 2023 monitoring events. Continuous groundwater measurements indicate that groundwater flow direction varied throughout the deployment period; however, the potentiometric surface of groundwater beneath the Subject Property is relatively flat.

The hydrograph (Figure 3) indicates that groundwater elevations steadily decreased between 3.37 and 5.80 feet between 16 January and 7 July 2023. Groundwater elevations decreased between 16 January and 10 April 2023 then increased between 1.09 and 1.51 feet in the next two to three days, before continuing a steady decrease in elevations until 13 July 2023.

Detected nitrate concentrations in groundwater samples collected in April 2023 exceed the Primary MCL of 10 mg/L in monitoring wells MW-1, MW-2, MW-3, MW-4, and MW-5 and in off-site monitoring well CS-6 downgradient of the Subject Property. Detected nitrate concentrations in groundwater samples collected on site in July 2023 exceed the Primary MCL in monitoring wells MW-1, MW-2, MW-3, MW-4, and MW-5, and in off-site monitoring well CS-6 downgradient of the Subject Property. Nitrate concentrations in MW-1, MW-3, and MW-4 decreased, stayed the same in MW-2, and increased in MW-5 between April and July 2023. 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, March, and April (winter and spring) when compared to July, September, and October (summer and fall). In addition, the data indicates the flow regime changes from generally southwest during the fall to generally west-southwest in the winter and spring. This observation generally has been consistent across monitoring events conducted between 2016 and 2023. Also consistent across monitoring events is that nitrates are not detected at concentrations greater than the MCL in off-site monitoring well CS-4 even though this well is completed to a similar depth as other monitoring wells and is downgradient of on-site monitoring well MW-4 and nearby off-site monitoring well CS-6, both of which consistently exceed the MCL for nitrates.

Detected nitrate concentrations in groundwater samples collected from MW-4 in July 2023 represent the lowest concentrations detected since October 2016 (see Table 2). Detected nitrate concentrations in monitoring wells MW-1, MW-4, and MW-5 and off-site monitoring wells CS-6 and MW-6 during April and July 2023 are less than the average concentrations observed in these wells. Generally, nitrate

concentrations in groundwater beneath the site and immediately downgradient have decreased since monitoring began in 2016.

Detected sulfate concentrations in groundwater samples collected in July 2023 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 well CS-6. Detected sulfate concentrations in groundwater samples collected in July 2023 exceeded the Secondary MCL in MW-2, MW-4, and MW-5; none of the groundwater samples collected in downgradient monitoring wells exceeded the Secondary MCL during the July event. Samples that contain nitrate and/or sulfate concentrations that exceeded the Primary and Secondary MCLs are highlighted in Table 2. Similar to nitrate concentrations, sulfate concentrations consistently do not exceed the Secondary MCL in off-site monitoring well CS-4.

Detected sulfate concentrations in groundwater samples collected in July 2023 at CS-6 represent the lowest concentrations observed since October 2016 (see Table 2). Detected sulfate concentrations in monitoring wells MW-1, MW-2, MW-6, and CS-6 during the April and July 2023 events are less than the average concentrations detected in these wells. Generally, sulfate concentrations in groundwater beneath the site have decreased since monitoring began in 2016.

Results from the groundwater assessment conducted by Haley & Aldrich in 2022 indicate grab groundwater samples collected from push probe borings hydraulically upgradient of the Subject Property indicate sulfates and TDS are present at concentrations greater than the Secondary MCL (Haley & Aldrich, 2022). Additionally, upgradient sulfate and TDS concentrations were found to be present at concentrations greater than concentrations found beneath the Subject Property. Results from the assessment indicate a source or sources of sulfates and TDS upgradient of the Subject Property are impacting water quality beneath the Subject Property and at least a portion of these COCs detected beneath the Subject Property can be attributed to this off-site source(s). Assessment results and observations to date support an interpretation that elevated sulfate and dissolved solids concentrations are transported by groundwater on site from off-site sources; likely in concentrations greater than the Secondary MCL. It should also be noted that TDS concentrations sometimes increase/decrease with increasing/decreasing groundwater elevations but also, at times, exhibit the opposite characteristics and decrease/increase with increasing/decreasing groundwater elevations (see charts for MW-1 and CS-6 in Figure 6).

Site investigations conducted by HDR in 2015 and 2019 found elevated nitrate concentrations are present in soils at shallow depths beneath the Subject Property (HDR, 2019). It is possible that nitrates found in the soil beneath the Subject Property contribute a portion of the nitrate concentrations observed in the groundwater beneath the Subject Property if that soil comes in contact with elevated groundwater. However, this likely is not the only source of nitrates found in groundwater beneath the Subject Property. The Subject Property generally is paved and limits infiltration of meteoric water. Additionally, nitrate concentrations observed in Subject Property soil were the highest in the top foot of the subsurface and likely were deposited prior to paving (HDR, 2015 and 2019). Based on groundwater elevation monitoring, it is unlikely groundwater interacts with the top foot of soil beneath the site.

The distribution of nitrates beneath the Subject Property during the April and July 2023 monitoring events supports the interpretation that nitrate concentrations observed in on-site monitoring wells likely are impacted by hydraulically upgradient sources. Additionally, groundwater monitoring data collected from MW-2 since 2016 (18 events in total) indicates this well generally contains the greatest concentration of nitrates at the Subject Property (see Table 2) and consistently exceeds the MCL. Given

the location of MW-2 on the Subject Property, it is likely that nitrates transported via groundwater from off site is the dominant source of nitrates observed in MW-2.

We generated a graph comparing nitrate concentrations from MW-1 and MW-2 to daily precipitation measured at Priest Rapids Dam weather station in "Groundwater Nitrate Concentrations Compared to Daily Precipitation", Figure 7. Based on observed groundwater flow direction, the location of MW-1 and MW-2 likely represent nitrate concentrations transported by groundwater on site from off-site sources. Based on the graph, it appears nitrate concentrations increase in the months following heavy precipitation events. For example, three of the greatest nitrate concentrations detected in MW-1 and MW-2 were observed in March of 2017 and 2019 and January 2023 following larger annual precipitation events. Generally, nitrate concentrations in these wells decreased during the months that followed along with decreased precipitation rates. It is likely that precipitation events in the region correspond with surface water infiltration and subsequent transport of nutrients, accumulated in the soil from agricultural activities, through the vadose zone and into groundwater. The relationship between precipitation and nitrate concentrations observed seasonally in MW-1 and MW-2 indicates off-site sources likely are contributing nitrates to groundwater beneath the Subject Property.

These results also are supported by Ecology's 2007 report indicating groundwater near and hydraulically upgradient of the City of Moxee contain nitrate concentrations greater than the Primary MCL. These findings demonstrate that background nitrate concentrations in groundwater near the Subject Property likely exceed the Primary MCLs and contribute to the detected concentrations in Subject Property wells.

In general, because groundwater elevations beneath the Subject Property and surrounding area are relatively flat and detected concentrations of COC generally do not fit a consistent pattern, it is difficult to interpret analytical data to support COC isopach maps for each sampling event. Such is the case for the April and July 2023 monitoring events. However, Figure 6 does provide individual charts for COCs detected in monitoring wells over time and, generally, these show that COC concentrations have decreased and/or remained fairly consistent over time. This is unsurprising taking into account the regional issues associated with site COCs and the likelihood that COC concentrations detected beneath the property are affected by regional influences rather than a source beneath the Subject Property.

Groundwater beneath the Subject Property does not serve as a current source of drinking water to nearby residents. Residents of the City of Moxee source their water either from the municipal water supply or domestic wells; residents outside of the city limits generally source their water from domestic wells. Based on HDR's survey of downgradient domestic wells within 0.5 miles of the Subject Property, nearby domestic wells are screened at depths at least four times greater than Subject Property monitoring wells. The geological and hydrogeological characteristics of shallow strata beneath the Subject Property (predominantly silts), like that currently monitored by on-site wells, likely could not produce sufficient quantities to provide sustainable yield for a domestic well. Additionally, the 2007 Ecology report indicates regional domestic wells contain background concentrations of COCs that are unfavorable for potable water supply. Ecology identified COCs that exceed Primary and Secondary MCLs include: nitrates, total coliform, manganese, iron, and TDS. Based on these findings, shallow groundwater beneath the Subject Property does not meet the definition of "potable groundwater" and background concentrations as defined in Washington Administrative Code (WAC) 173-340-720(2).

Data collected to date is sufficient to conclude groundwater quality beneath the Subject Property currently is impacted by off-site sources of nitrates, sulfates, and TDS. Additionally, shallow groundwater beneath the Subject Property is not of sufficient quantity or quality to qualify as potable water per

WAC 173-340-720(2). Based on these findings, we propose to cease groundwater monitoring activities and request that Ecology consider a “No Further Action” determination for the Subject Property.

References

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

2. Haley & Aldrich, 2022. “Report On: Simplot Growers Solutions Groundwater Assessment”. J.R. Simplot Grower Solutions. June.

3. Haley & Aldrich, 2023. “Semiannual Report On: Simplot Growers Solutions Groundwater Monitoring”. J.R. Simplot Grower Solutions. March.

4. HDR Engineering, 2015. “Preliminary Site Investigation Report”. J.R. Simplot Grower Solutions Facility Site Number: 84612438 VCP Number: CE0419. October.

5. HDR Engineering, 2019. “Additional Site Investigation Report” J.R. Simplot Grower Solutions Facility Site Number: 84612438 VCP Number: CE0419. December.

6. HDR Engineering, 2020. “Offsite Groundwater Investigation Report”. J.R. Simplot Grower Solutions Facility Site Number: 84612438 VCP Number: CE0419. October.

7. HDR Engineering, 2021. “Offsite Groundwater Investigation Report”. J.R. Simplot Grower Solutions Facility Site Number: 84612438 VCP Number: CE0419. January.

8. 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.

9. 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, ELEVATION, AND WATER QUALITY PARAMETERs
ANNUAL GROUNDWATER MONITORING REPORT
0202395-000
MOXEE, WASHINGTON

Monitoring Well	Date of Sampling	Depth to Water (feet)	Groundwater Elevation (feet NAVD88)	pH	Temperature (C°)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)
MW-1	4/13/2023	7.15	1024.00	7.65	10.3	1.5	1.8	12	102.1
	7/13/2023	10.41	1020.74	7.86	16	1.1	0.0	7	86.5
MW-2	4/13/2023	7.38	1023.48	8.05	10.1	2.9	0.7	3	100.1
	7/13/2023	12.31	1018.55	8.29	16.2	2.7	0.3	4	60.0
MW-3	4/13/2023	6.66	1022.31	6.3	11.9	1.2	0.9	3	148.1
	7/13/2023	9.50	1019.47	6.3	18.3	1.0	0.0	4	139.7
MW-4	4/13/2023	3.13	1023.42	7.6	11.5	2.7	0.4	4	138.0
	7/13/2023	7.29	1019.26	7.7	17.1	1.6	0.0	11	99.0
MW-5	4/13/2023	8.18	1022.30	8.3	10.2	2.4	7.4	5	82.2
	7/13/2023	12.42	1018.06	7.7	18.2	3.4	0.9	4	89.3
MW-6	4/13/2023	3.75	1022.14	8.64	14	0.6	0.2	27	76.4
	7/13/2023	7.53	1018.36	8.58	6.2	0.7	0.4	8	26.5
CS-4	4/13/2023	3.72	1021.95	7.84	12.9	1.3	2.4	9	105.9
	7/13/2023	7.80	1017.87	8.02	19	0.9	1.2	4	64.6
CS-6	4/13/2023	3.11	1022.39	7.8	12.9	1.3	0.9	3.3	102.7
	7/13/2023	7.06	1018.44	7.9	19.5	1.2	0.0	2.8	75.0

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
ANNUAL 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	
	4/13/2023	32		*0.10*	U	**220**		720	
	7/13/2023	16		*0.10*	U	**140**		800	
	Minimum	4.6		0.1		88		400	
	Maximum	249.0		0.5		833		3330	
	Average	60.8		0.2		424		1606	
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	
	4/13/2023	150		*0.10*	U	400		2000	
	7/13/2023	150		*0.10*	U	380		1800	
	Minimum	34.0		0.1		213		1220	
	Maximum	370.0		0.5		531		2640	
	Average	136.3		0.2		405		1996	
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**		**0.4**		**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**		**1.4**		**81**		600	
	1/16/2023	19		**1.3**		**110**		760	
	4/13/2023	15		**1**		**120**		640	
	7/13/2023	10		**5.5**		**91**		720	
	Minimum	3.8		0.1		57		600	
	Maximum	27.2		5.5		166		986	
	Average	14.0		2.3		98		762	
Groundwater Qualtiy Criteria	**Primary Standards**	**10**		**--**		**--**		**--**	
	Secondary Standards	**--**		**--**		**250**		**500**	

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
ANNUAL 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	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	
	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	
	4/13/2023	51		73		440		1800	
	7/13/2023	25		56		460		1600	
	Minimum	25.0		35.0		240		1190	
	Maximum	170.0		133.0		680		2110	
	Average	98.4		91.2		456		1523	
MW-5	10/19/2016	95		0.21	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		*0.10*	U	360		2400	
	4/13/2023	29		0.16		610		1500	
	7/13/2023	71		*0.10*	U	720		2000	
	Minimum	5.1		0.1		360		1500	
	Maximum	158.0		0.5		977		3330	
	Average	99.7		0.2		604		2638	
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		*0.10*	U	29		990	
	4/13/2023	6.0		*0.10*	U	58		380	
	7/13/2023	12		*0.10*	U	82		690	
	Minimum	0.3		0.1		29		380	
	Maximum	158.0		0.5		977		3330	
	Average	45.3		0.2		230		1245	
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	
Groundwater Qualtiy Criteria	**Primary Standards**	**10**		**--**		**--**		**--**	
	Secondary Standards	**--**		**--**		**250**		**500**	

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
ANNUAL 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-4	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**		*0.10*	U	**44**		**820**	
	4/13/2023	**8.6**		*0.10*	U	**45**		**750**	
	7/13/2023	**3.9**		*0.10*	U	**39**		**800**	
	Minimum	0.5		0.1		18		217	
	Maximum	10.0		0.5		250		820	
	Average	4.5		0.2		42		563	
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**	
	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**		*0.10*	U	**220**		**900**	
	4/13/2023	**35**		**0.33**		**260**		**1100**	
	7/13/2023	**57**		*0.10*	U	**210**		**1100**	
	Minimum	31.0		0.1		210		890	
	Maximum	208.0		0.5		829		2420	
	Average	108.2		0.2		367		1399	
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
OCTOBER 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

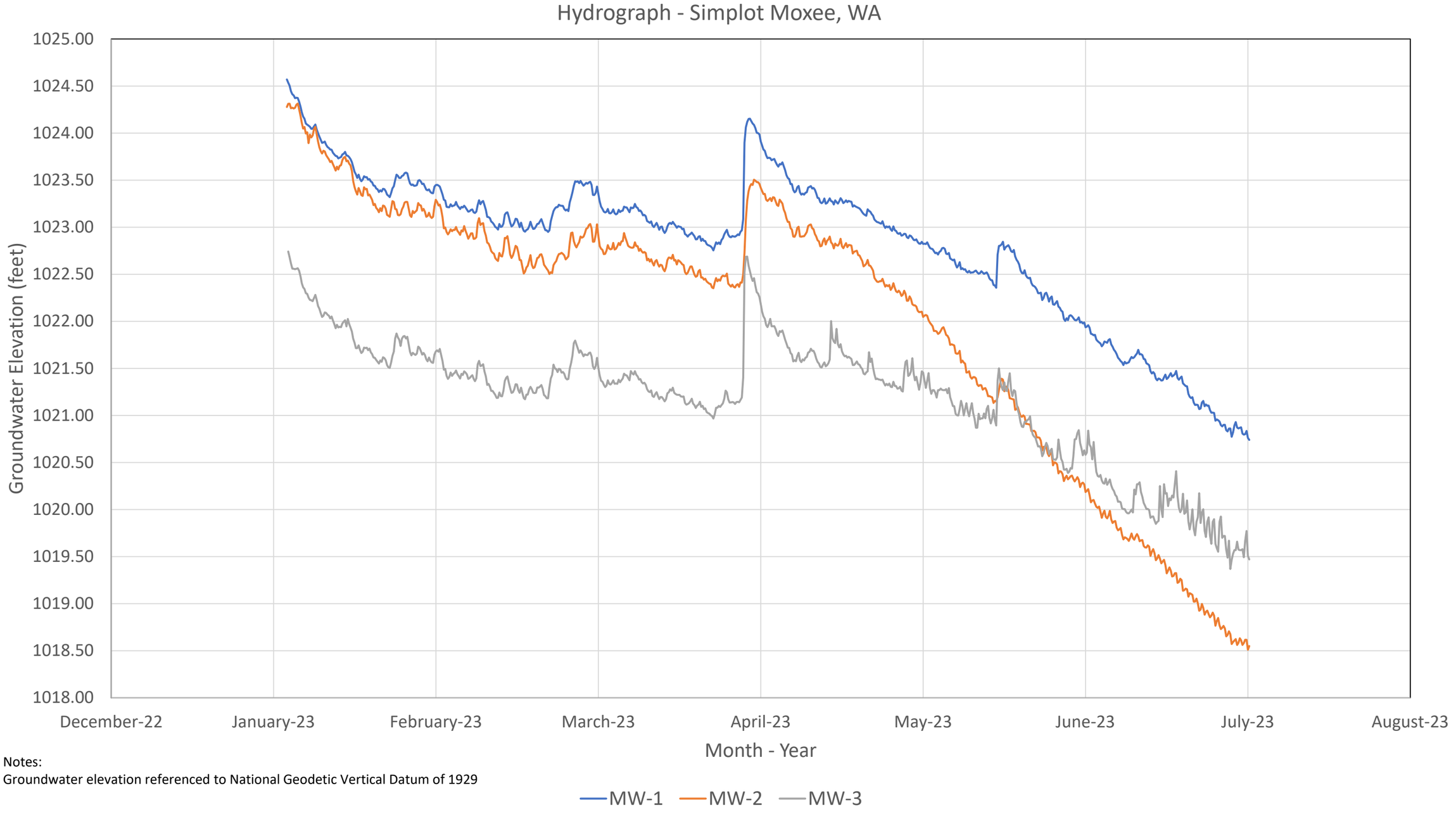
SIMPLOT MOXEE SEMIANNUAL GROUNDWATER MONITORING
7528 POSTMA ROAD
MOXEE, WASHINGTON

SITE PLAN

OCTOBER 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



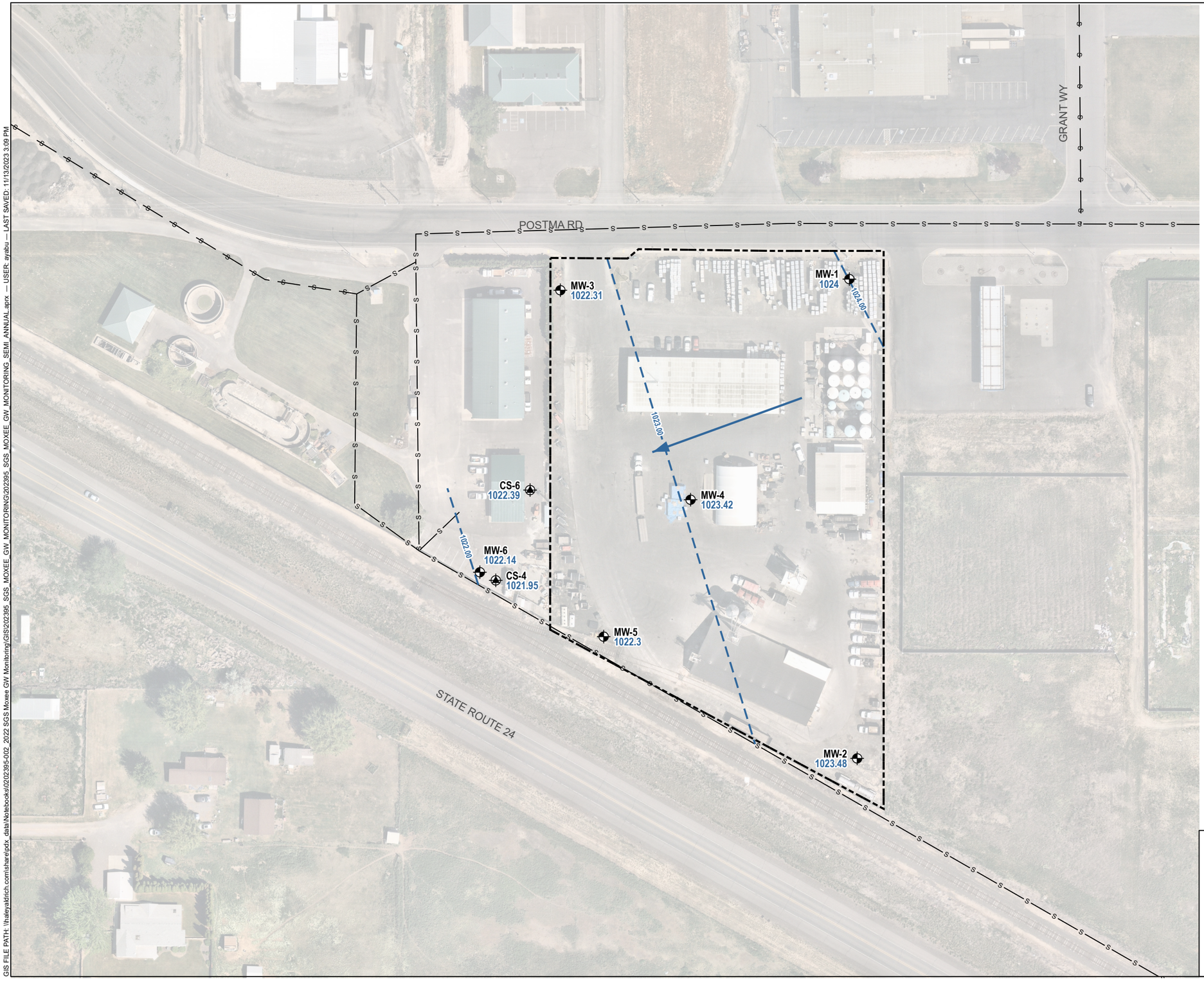
Notes:
Groundwater elevation referenced to National Geodetic Vertical Datum of 1929

FIGURE 3

HYDROGRAPH – SIMPLOT MOXEE, WA

NOVEMBER 2023

HALEY ALDRICH



LEGEND

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

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. **GROUNDWATER ELEVATION** IN FEET BELOW GROUND SURFACE.
3. GROUNDWATER SAMPLES COLLECTED APRIL, 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: NEARMAP, 20 MAY 2023

N

0 100 200
SCALE IN FEET

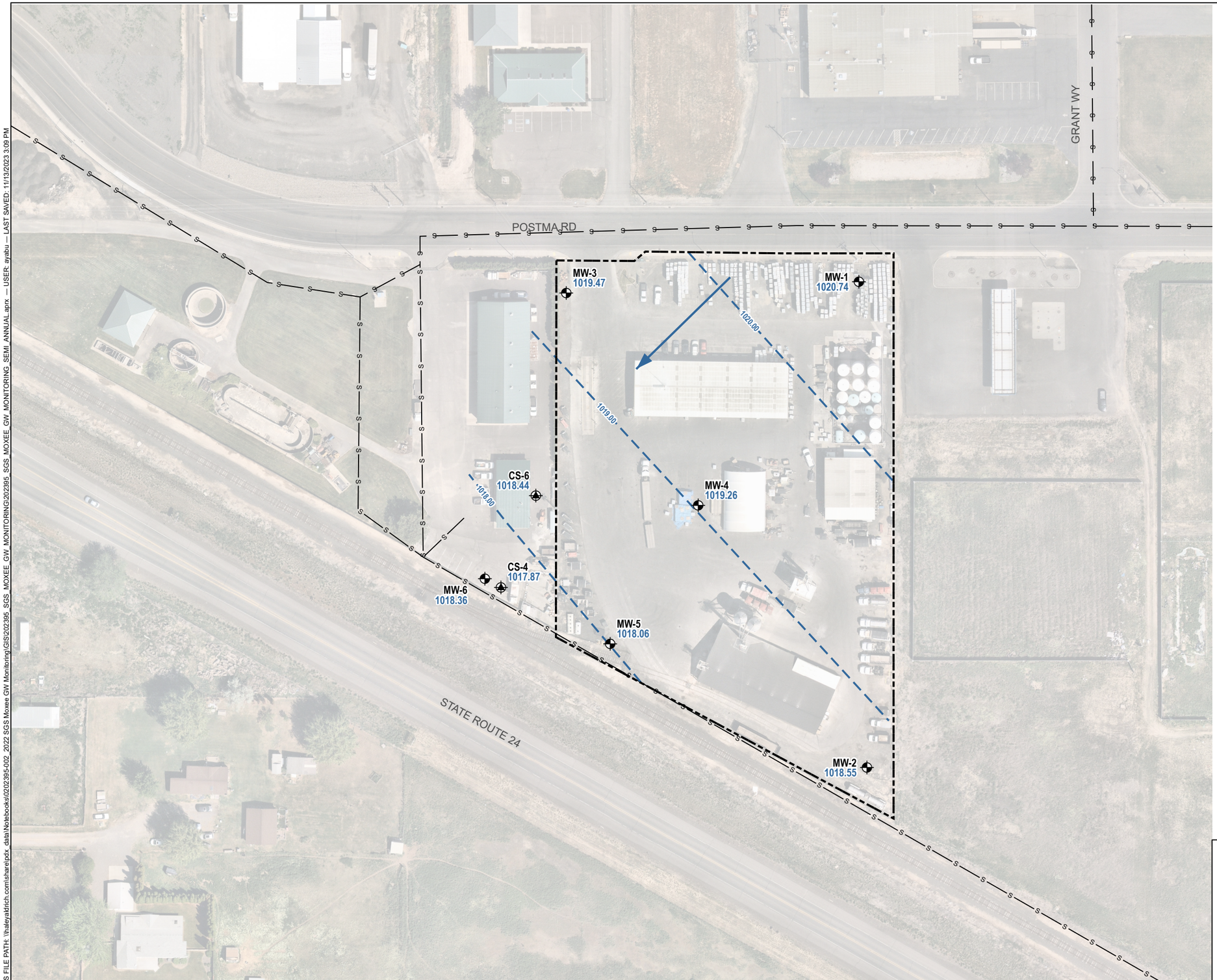
HALEY ALDRICH

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

INFERRED GROUNDWATER CONTOURS
APRIL 2023

NOVEMBER 2023

FIGURE 4



LEGEND

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

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. **GROUNDWATER ELEVATION** IN FEET BELOW GROUND SURFACE.
3. GROUNDWATER SAMPLES COLLECTED JULY, 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: NEARMAP, 20 MAY 2023

N

0 100 200
SCALE IN FEET

HALEY ALDRICH

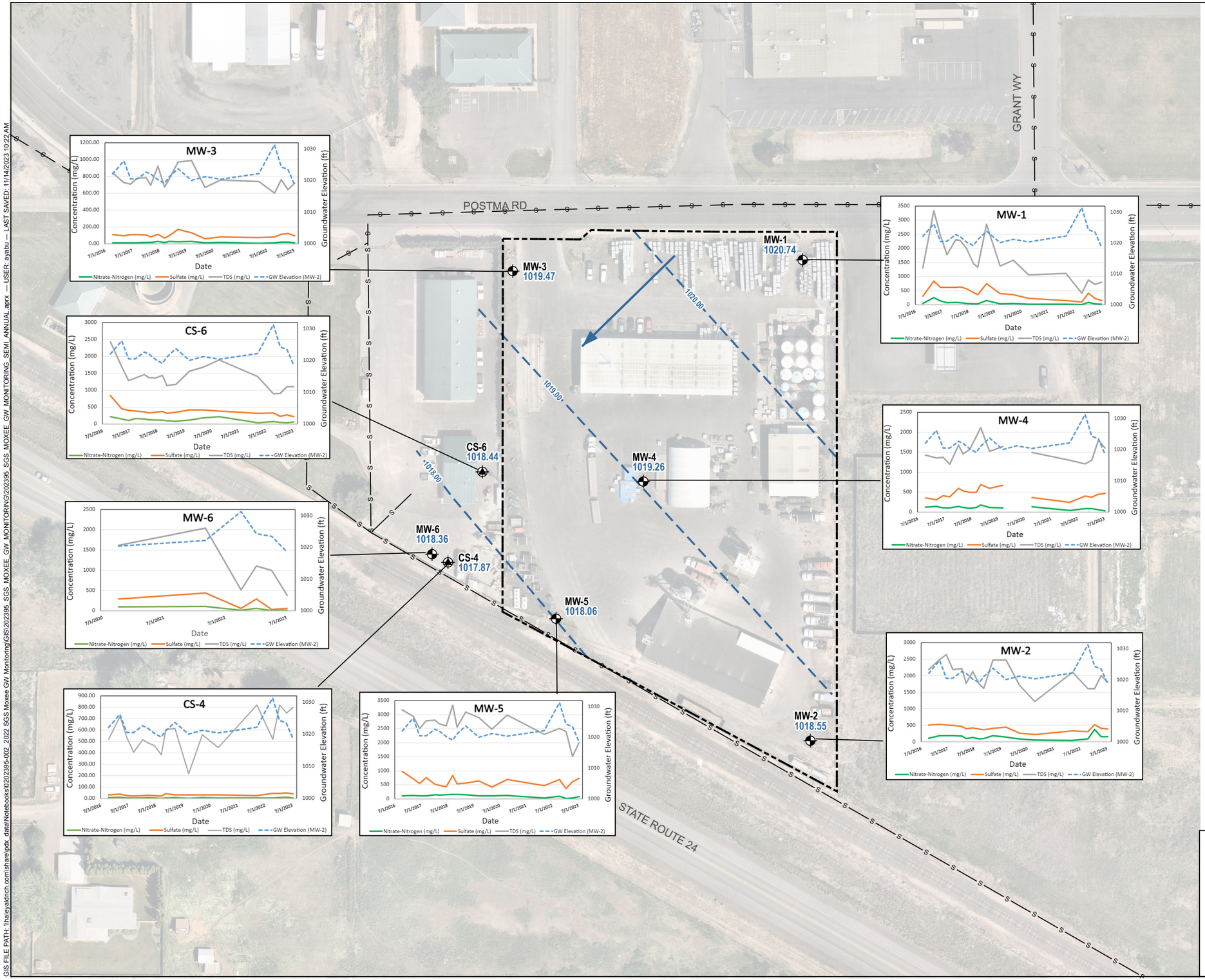
SIMPLOT MOXEE ANNUAL GROUNDWATER MONITORING REPORT
7528 POSTMA ROAD
MOXEE, WASHINGTON

INFERRED GROUNDWATER CONTOURS
JULY 2023

NOVEMBER 2023

FIGURE 5

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: ayabu — LAST SAVED: 11/13/2023 3:09 PM



LEGEND

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

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. **GROUNDWATER ELEVATION** IN FEET BELOW GROUND SURFACE.
3. GROUNDWATER SAMPLES COLLECTED BETWEEN OCTOBER 2016 AND JULY 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: NEARMAP, 20 MAY 2023

N

0 100 200
SCALE IN FEET

HALEY ALDRICH

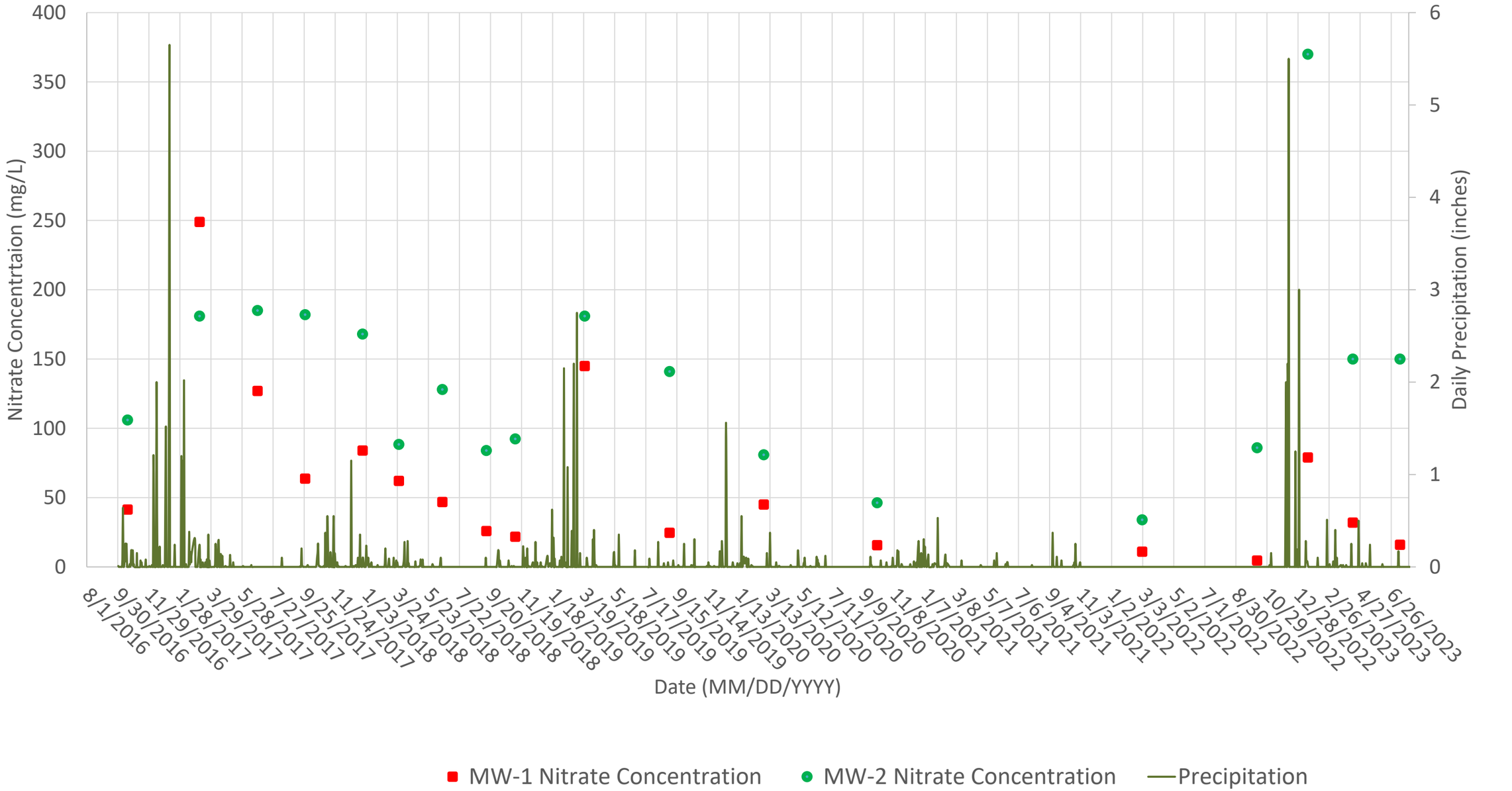
SIMPLOT MOXEE ANNUAL GROUNDWATER MONITORING REPORT
7528 POSTMA ROAD
MOXEE, WASHINGTON

JULY 2023 GROUNDWATER CONTOURS WITH WATER QUALITY VERSUS TIME

NOVEMBER 2023

FIGURE 6

GIS FILE PATH: \\haleyaldrich.com\share\pdx_data\Notebooks\02022395-002_2022 SGS Moxee GW Monitoring\GIS\202395_SGS_MOXEE_GW_MONITORING\202395_SGS_MOXEE_GW_MONITORING_SEMI_ANNUAL.aprx — USER: syabu — LAST SAVED: 11/14/2023 10:22 AM



Notes:
Precipitation data sourced from Priest Rapids Dam weather station.
mg/L = milligrams per liter

FIGURE 7
GROUNDWATER NITRATE CONCENTRATIONS
VERSUS DAILY PRECIPITATION

NOVEMBER 2023

HALEY ALDRICH

APPENDIX A
Laboratory Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: John Haney
Haley & Aldrich, Inc.
505 W Riverside Ave
Suite 205
Spokane, Washington 99201

Generated 5/1/2023 12:49:09 PM

JOB DESCRIPTION

Moxee Simpot GW Sampling/0202345-002

JOB NUMBER

590-20264-1

Eurofins Spokane
11922 East 1st Ave
Spokane WA 99206

See page two for job notes and contact information.

Job Notes

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Authorization

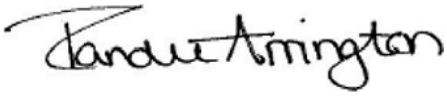

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Table of Contents

Case Narrative

Client: Haley & Aldrich, Inc.
Job ID: 590-20264-1
Project/Site: Moxee Simpot GW Sampling/0202345-002

Job ID: 590-20264-1

Laboratory: Eurofins Spokane

Narrative

Receipt
The samples were received on 4/14/2023 12:47 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 4.0º 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: Haley & Aldrich, Inc.
Job ID: 590-20264-1
Project/Site: Moxee Simpot GW Sampling/0202345-002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-20264-1	MW-1	Water	04/13/23 12:20	04/14/23 12:47
590-20264-2	MW-2	Water	04/13/23 10:30	04/14/23 12:47
590-20264-3	MW-200	Water	04/13/23 11:00	04/14/23 12:47
590-20264-4	MW-3	Water	04/13/23 11:50	04/14/23 12:47
590-20264-5	MW-4	Water	04/13/23 11:15	04/14/23 12:47
590-20264-6	MW-5	Water	04/13/23 09:45	04/14/23 12:47
590-20264-7	MW-6	Water	04/13/23 14:00	04/14/23 12:47
590-20264-8	CS-4	Water	04/13/23 13:30	04/14/23 12:47
590-20264-9	CS-6	Water	04/13/23 13:00	04/14/23 12:47
590-20264-10	Equipment Blank	Water	04/13/23 10:45	04/14/23 12:47

Client: Haley & Aldrich, Inc.
Job ID: 590-20264-1
Project/Site: Moxee Simpot GW Sampling/0202345-002

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 ID: MW-1
Lab Sample ID: 590-20264-1
Date Collected: 04/13/23 12:20
Matrix: Water
Date Received: 04/14/23 12:47

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**220**		10		mg/L			04/19/23 15:13	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			04/26/23 16:54	1
Nitrate Nitrite as N (EPA 353.2)	**32**		1.0		mg/L			04/19/23 11:38	10
Total Dissolved Solids (SM 2540C)	**720**		25		mg/L			04/19/23 09:46	1

Client Sample ID: MW-2
Lab Sample ID: 590-20264-2
Date Collected: 04/13/23 10:30
Matrix: Water
Date Received: 04/14/23 12:47

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**400**		10		mg/L			04/19/23 15:25	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			04/26/23 16:57	1
Nitrate Nitrite as N (EPA 353.2)	**150**		2.0		mg/L			04/19/23 11:40	20
Total Dissolved Solids (SM 2540C)	**2000**		25		mg/L			04/19/23 09:46	1

Client Sample ID: MW-200
Lab Sample ID: 590-20264-3
Date Collected: 04/13/23 11:00
Matrix: Water
Date Received: 04/14/23 12:47

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**360**		10		mg/L			04/19/23 15:38	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (EPA 353.2)	**160**		2.0		mg/L			04/19/23 11:42	20

Client Sample ID: MW-3
Lab Sample ID: 590-20264-4
Date Collected: 04/13/23 11:50
Matrix: Water
Date Received: 04/14/23 12:47

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**120**		5.0		mg/L			04/19/23 15:51	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	**1.0**		0.10		mg/L			04/28/23 13:13	1
Nitrate Nitrite as N (EPA 353.2)	**15**		0.20		mg/L			04/19/23 11:44	2
Total Dissolved Solids (SM 2540C)	**640**		25		mg/L			04/19/23 09:46	1

Client Sample Results

Client: Haley & Aldrich, Inc.
Job ID: 590-20264-1
Project/Site: Moxee Simpot GW Sampling/0202345-002

Client Sample ID: MW-4
Lab Sample ID: 590-20264-5
Date Collected: 04/13/23 11:15
Matrix: Water
Date Received: 04/14/23 12:47

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**440**		10		mg/L			04/19/23 16:03	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	**73**		5.0		mg/L			04/28/23 16:26	50
Nitrate Nitrite as N (EPA 353.2)	**51**		1.0		mg/L			04/19/23 11:46	10
Total Dissolved Solids (SM 2540C)	**1800**		25		mg/L			04/19/23 09:46	1

Client Sample ID: MW-5
Lab Sample ID: 590-20264-6
Date Collected: 04/13/23 09:45
Matrix: Water
Date Received: 04/14/23 12:47

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**610**		10		mg/L			04/19/23 16:16	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	**0.16**		0.10		mg/L			04/28/23 13:19	1
Nitrate Nitrite as N (EPA 353.2)	**29**		1.0		mg/L			04/19/23 12:00	10
Total Dissolved Solids (SM 2540C)	**1500**		25		mg/L			04/19/23 09:46	1

Client Sample ID: MW-6
Lab Sample ID: 590-20264-7
Date Collected: 04/13/23 14:00
Matrix: Water
Date Received: 04/14/23 12:47

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**58**		10		mg/L			04/19/23 16:54	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			04/28/23 13:22	1
Nitrate Nitrite as N (EPA 353.2)	**6.0**		0.10		mg/L			04/19/23 12:02	1
Total Dissolved Solids (SM 2540C)	**380**		25		mg/L			04/19/23 09:46	1

Client Sample ID: CS-4
Lab Sample ID: 590-20264-8
Date Collected: 04/13/23 13:30
Matrix: Water
Date Received: 04/14/23 12:47

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**45**		0.50		mg/L			04/19/23 17:07	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			04/28/23 13:08	1
Nitrate Nitrite as N (EPA 353.2)	**8.6**		0.10		mg/L			04/19/23 12:04	1
Total Dissolved Solids (SM 2540C)	**750**		25		mg/L			04/19/23 09:46	1

Client Sample Results

Client: Haley & Aldrich, Inc.
Job ID: 590-20264-1
Project/Site: Moxee Simpot GW Sampling/0202345-002

Client Sample ID: CS-6
Lab Sample ID: 590-20264-9
Date Collected: 04/13/23 13:00
Matrix: Water
Date Received: 04/14/23 12:47

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**260**		10		mg/L			04/19/23 17:19	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	**0.33**		0.10		mg/L			04/28/23 13:40	1
Nitrate Nitrite as N (EPA 353.2)	**35**		1.0		mg/L			04/19/23 12:06	10
Total Dissolved Solids (SM 2540C)	**1100**		25		mg/L			04/19/23 09:46	1

Client Sample ID: Equipment Blank
Lab Sample ID: 590-20264-10
Date Collected: 04/13/23 10:45
Matrix: Water
Date Received: 04/14/23 12:47

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			04/19/23 17:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (EPA 353.2)	ND		0.10		mg/L			04/19/23 12:14	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 590-41116/1003
Matrix: Water
Analysis Batch: 41116

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			04/19/23 13:57	1

Lab Sample ID: LCS 590-41116/1004
Matrix: Water
Analysis Batch: 41116

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	12.1		mg/L		97	90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-610406/123
Matrix: Water
Analysis Batch: 610406

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			04/26/23 14:27	1

Lab Sample ID: MB 280-610406/163
Matrix: Water
Analysis Batch: 610406

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			04/26/23 16:16	1

Lab Sample ID: LCS 280-610406/122
Matrix: Water
Analysis Batch: 610406

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: LCS 280-610406/162
Matrix: Water
Analysis Batch: 610406

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: MB 280-610677/91
Matrix: Water
Analysis Batch: 610677

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			04/28/23 12:36	1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 280-610677/90
Matrix: Water
Analysis Batch: 610677

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	2.60		mg/L		104	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-609328/22
Matrix: Water
Analysis Batch: 609328

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			04/19/23 10:54	1

Lab Sample ID: MB 280-609328/61
Matrix: Water
Analysis Batch: 609328

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			04/19/23 12:12	1

Lab Sample ID: LCS 280-609328/21
Matrix: Water
Analysis Batch: 609328

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	5.02		mg/L		100	90 - 110

Lab Sample ID: LCS 280-609328/59
Matrix: Water
Analysis Batch: 609328

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	5.01		mg/L		100	90 - 110

Lab Sample ID: LCSD 280-609328/60
Matrix: Water
Analysis Batch: 609328

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	4.90		mg/L		98	90 - 110	2	10

Lab Sample ID: 590-20264-10 MS
Matrix: Water
Analysis Batch: 609328

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	ND		4.00	4.04		mg/L		101	90 - 110

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

Lab Sample ID: 590-20264-10 MSD
Matrix: Water
Analysis Batch: 609328

Client Sample ID: Equipment Blank
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	ND		4.00	4.09		mg/L		102	90 - 110	1	10

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

Lab Sample ID: MB 590-41131/1
Matrix: Water
Analysis Batch: 41131

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			04/19/23 09:46	1

Lab Sample ID: LCS 590-41131/2
Matrix: Water
Analysis Batch: 41131

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			503	485		mg/L		96	80 - 120		

Lab Sample ID: 590-20264-9 DU
Matrix: Water
Analysis Batch: 41131

Client Sample ID: CS-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1100			1080		mg/L				2	10

Lab Chronicle

Client: Haley & Aldrich, Inc.
Job ID: 590-20264-1
Project/Site: Moxee Simpot GW Sampling/0202345-002

Client Sample ID: MW-1
Lab Sample ID: 590-20264-1
Date Collected: 04/13/23 12:20
Matrix: Water
Date Received: 04/14/23 12:47

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	41116	04/19/23 15:13	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	610406	04/26/23 16:54	MMP	EET DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	609328	04/19/23 11:38	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	41131	04/19/23 09:46	AMB	EET SPK

Client Sample ID: MW-2
Lab Sample ID: 590-20264-2
Date Collected: 04/13/23 10:30
Matrix: Water
Date Received: 04/14/23 12:47

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	41116	04/19/23 15:25	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	610406	04/26/23 16:57	MMP	EET DEN
Total/NA	Analysis	353.2		20	100 mL	100 mL	609328	04/19/23 11:40	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	41131	04/19/23 09:46	AMB	EET SPK

Client Sample ID: MW-200
Lab Sample ID: 590-20264-3
Date Collected: 04/13/23 11:00
Matrix: Water
Date Received: 04/14/23 12:47

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	41116	04/19/23 15:38	NMI	EET SPK
Total/NA	Analysis	353.2		20	100 mL	100 mL	609328	04/19/23 11:42	ZPM	EET DEN

Client Sample ID: MW-3
Lab Sample ID: 590-20264-4
Date Collected: 04/13/23 11:50
Matrix: Water
Date Received: 04/14/23 12:47

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	41116	04/19/23 15:51	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	610677	04/28/23 13:13	MMP	EET DEN
Total/NA	Analysis	353.2		2	100 mL	100 mL	609328	04/19/23 11:44	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	41131	04/19/23 09:46	AMB	EET SPK

Client Sample ID: MW-4
Lab Sample ID: 590-20264-5
Date Collected: 04/13/23 11:15
Matrix: Water
Date Received: 04/14/23 12:47

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	41116	04/19/23 16:03	NMI	EET SPK
Total/NA	Analysis	350.1		50	10 mL	10 mL	610677	04/28/23 16:26	MMP	EET DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	609328	04/19/23 11:46	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	41131	04/19/23 09:46	AMB	EET SPK

Lab Chronicle

Client: Haley & Aldrich, Inc.
Job ID: 590-20264-1
Project/Site: Moxee Simpot GW Sampling/0202345-002

Client Sample ID: MW-5
Lab Sample ID: 590-20264-6
Date Collected: 04/13/23 09:45
Matrix: Water
Date Received: 04/14/23 12:47

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	41116	04/19/23 16:16	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	610677	04/28/23 13:19	MMP	EET DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	609328	04/19/23 12:00	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	41131	04/19/23 09:46	AMB	EET SPK

Client Sample ID: MW-6
Lab Sample ID: 590-20264-7
Date Collected: 04/13/23 14:00
Matrix: Water
Date Received: 04/14/23 12:47

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	41116	04/19/23 16:54	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	610677	04/28/23 13:22	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	609328	04/19/23 12:02	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	41131	04/19/23 09:46	AMB	EET SPK

Client Sample ID: CS-4
Lab Sample ID: 590-20264-8
Date Collected: 04/13/23 13:30
Matrix: Water
Date Received: 04/14/23 12:47

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	41116	04/19/23 17:07	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	610677	04/28/23 13:08	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	609328	04/19/23 12:04	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	41131	04/19/23 09:46	AMB	EET SPK

Client Sample ID: CS-6
Lab Sample ID: 590-20264-9
Date Collected: 04/13/23 13:00
Matrix: Water
Date Received: 04/14/23 12:47

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	41116	04/19/23 17:19	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	610677	04/28/23 13:40	MMP	EET DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	609328	04/19/23 12:06	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	41131	04/19/23 09:46	AMB	EET SPK

Client Sample ID: Equipment Blank
Lab Sample ID: 590-20264-10
Date Collected: 04/13/23 10:45
Matrix: Water
Date Received: 04/14/23 12:47

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	41116	04/19/23 17:32	NMI	EET SPK
Total/NA	Analysis	353.2		1	100 mL	100 mL	609328	04/19/23 12:14	ZPM	EET DEN

Lab Chronicle

Client: Haley & Aldrich, Inc.
Job ID: 590-20264-1
Project/Site: Moxee Simpot GW Sampling/0202345-002

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: Haley & Aldrich, Inc.
Job ID: 590-20264-1
Project/Site: Moxee Simpot GW Sampling/0202345-002

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	02-08-24
Arizona	State	AZ0713	12-20-23
Arkansas DEQ	State	19-047-0	05-31-23
California	State	2513	01-08-24
Connecticut	State	PH-0686	09-30-22 *
Florida	NELAP	E87667-57	06-30-23
Georgia	State	4025-011	01-08-24
Illinois	NELAP	2000172019-1	04-30-23
Iowa	State	IA#370	12-01-24
Kansas	NELAP	E-10166	04-30-23
Kentucky (WW)	State	KY98047	12-31-23
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-23
Louisiana (All)	NELAP	30785	06-30-23
Minnesota	NELAP	1788752	12-31-23
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	03-31-24
North Carolina (WW/SW)	State	358	12-31-22 *
North Dakota	State	R-034	01-08-23 *
Oklahoma	NELAP	8614	08-31-23
Oklahoma	State	2018-006	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	12-19-25
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-23
Virginia	NELAP	12037	06-14-23
Washington	State	C583-19	08-03-23
West Virginia DEP	State	354	11-30-23
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: Haley & Aldrich, Inc.
Job ID: 590-20264-1
Project/Site: Moxee Simpot GW Sampling/0202345-002

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	EPA	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET SPK

Protocol References:

EPA = US Environmental Protection Agency

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	Moxee Simplot GW Sampling	ADDRESS	
H&A CONTACT	Keylin Huddleston	CONTACT	
DELIVERY DATE	4/14/23		
TURNAROUND TIME	Standard		
PROJECT MANAGER			

Sample No.	Date	Time	Depth	Type	Nitrate-N EPA 353.2	Ammonia N EPA 350.1	TDS SM 2540C	Sulfate EPA 300.0	Number of Containers
MW-1	4/13/23	12 20		H_2O	X	X	X	X	2
MW-2		10 30			X	X	X	X	2
MW-200		11 00			X	X	X	X	2
MW 3		11:50			X	X	X	X	2
MW 4		11 15			X	X	X	X	2
MW 5		9 45			X	X	X	X	2
MW 6		14 00			X	X	X	X	2
CS-4		13:30			X	X	X	X	2
CS-6		13 00			X	X	X	X	2
[redacted]		10 45			X	X	X	X	2

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

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

48-hr Hold time

> Sample No = "Equipment Blank"

Sampled and Relinquished by	Received by
Sign	Sign M Vaylor
Print Chad M	Print Madison
Firm H&A	Firm EET SPO
Date 4/14/23 Time 12.47	Date 4/14/23 Time 1247

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

590-20264 Chain of Custody

	VOA Vial	Amber Glass	Clear Glass	Preservative	Volume

Sampling Comments

3, 4, 4.0 1206

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

5/1/2023

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 590-20264-1

Login Number: 20264
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.	True	
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: Haley & Aldrich, Inc.

Job Number: 590-20264-1

Login Number: 20264
List Number: 2
Creator: Cannon, Charles D

List Source: Eurofins Denver
List Creation: 04/18/23 05:14 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.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: John Haney
Haley & Aldrich, Inc.
505 W Riverside Ave
Suite 205
Spokane, Washington 99201

Generated 10/17/2023 1:40:38 PM Revision 1

JOB DESCRIPTION

Simplot Moxee GW Sampling

JOB NUMBER

590-21057-1

Eurofins Spokane
11922 East 1st Ave
Spokane WA 99206

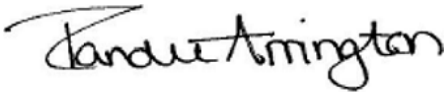
See page two for job notes and contact information.

Job Notes

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

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

Authorization



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Revision 1

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

Table of Contents

Case Narrative

Client: Haley & Aldrich, Inc.
Job ID: 590-21057-1
Project/Site: Simplot Moxee GW Sampling

Job ID: 590-21057-1

Laboratory: Eurofins Spokane

Narrative

Revision
The report being provided is a revision of the original report sent on 7/28/2023. The report (revision 1) is being revised due to: Revised the project description.

Receipt
The samples were received on 7/14/2023 10:42 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.7º C.

GC Semi VOA
Method 300.0: The native sample, matrix spike, and matrix spike duplicate (MS/MSD) associated with analytical batch 590-42467 were performed at the same dilution. Due to the additional level of analyte present in the spiked samples, the concentration of Sulfate in the MS/MSD was above the instrument calibration range. The data have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or 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: Haley & Aldrich, Inc.
Project/Site: Simplot Moxee GW Sampling

Job ID: 590-21057-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-21057-1	MW-1	Water	07/13/23 12:10	07/14/23 10:42
590-21057-2	MW-2	Water	07/13/23 09:35	07/14/23 10:42
590-21057-3	MW-3	Water	07/13/23 11:00	07/14/23 10:42
590-21057-4	MW-4	Water	07/13/23 11:40	07/14/23 10:42
590-21057-5	MW-5	Water	07/13/23 10:15	07/14/23 10:42
590-21057-6	MW-6	Water	07/13/23 13:35	07/14/23 10:42
590-21057-7	CS-4	Water	07/13/23 14:05	07/14/23 10:42
590-21057-8	CS-6	Water	07/13/23 14:40	07/14/23 10:42
590-21057-9	MW-200	Water	07/13/23 10:05	07/14/23 10:42
590-21057-10	Equipment Blank	Water	07/13/23 09:45	07/14/23 10:42

Definitions/Glossary

Client: Haley & Aldrich, Inc.
Project/Site: Simplot Moxee GW Sampling

Job ID: 590-21057-1

Glossary

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

Client Sample ID: MW-1
Lab Sample ID: 590-21057-1
Date Collected: 07/13/23 12:10
Matrix: Water
Date Received: 07/14/23 10:42

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**140**		5.0		mg/L			07/21/23 14:57	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	ND		0.10		mg/L			07/18/23 15:37	1
Nitrate Nitrite as N (EPA 353.2)	**16**		1.0		mg/L			07/17/23 11:47	10
Total Dissolved Solids (SM 2540C)	**800**		130		mg/L			07/20/23 16:31	1

Client Sample ID: MW-2
Lab Sample ID: 590-21057-2
Date Collected: 07/13/23 09:35
Matrix: Water
Date Received: 07/14/23 10:42

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**380**		5.0		mg/L			07/21/23 15:06	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	ND		0.10		mg/L			07/18/23 15:40	1
Nitrate Nitrite as N (EPA 353.2)	**150**		2.0		mg/L			07/17/23 12:05	20
Total Dissolved Solids (SM 2540C)	**1800**		130		mg/L			07/20/23 16:31	1

Client Sample ID: MW-3
Lab Sample ID: 590-21057-3
Date Collected: 07/13/23 11:00
Matrix: Water
Date Received: 07/14/23 10:42

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**91**		0.50		mg/L			07/20/23 12:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	**5.5**		0.20		mg/L			07/18/23 16:39	2
Nitrate Nitrite as N (EPA 353.2)	**10**		0.20		mg/L			07/17/23 12:07	2
Total Dissolved Solids (SM 2540C)	**720**		130		mg/L			07/20/23 16:31	1

Client Sample ID: MW-4
Lab Sample ID: 590-21057-4
Date Collected: 07/13/23 11:40
Matrix: Water
Date Received: 07/14/23 10:42

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**460**		5.0		mg/L			07/21/23 15:16	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	**56**		2.0		mg/L			07/18/23 16:41	20
Nitrate Nitrite as N (EPA 353.2)	**25**		1.0		mg/L			07/17/23 12:09	10
Total Dissolved Solids (SM 2540C)	**1600**		130		mg/L			07/20/23 16:31	1

Client Sample ID: MW-5
Lab Sample ID: 590-21057-5
Date Collected: 07/13/23 10:15
Matrix: Water
Date Received: 07/14/23 10:42

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**720**		10		mg/L			07/21/23 15:25	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			07/18/23 16:55	1
Nitrate Nitrite as N (EPA 353.2)	**71**		2.0		mg/L			07/17/23 12:11	20
Total Dissolved Solids (SM 2540C)	**2000**		130		mg/L			07/20/23 16:31	1

Client Sample ID: MW-6
Lab Sample ID: 590-21057-6
Date Collected: 07/13/23 13:35
Matrix: Water
Date Received: 07/14/23 10:42

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**82**		0.50		mg/L			07/20/23 12:38	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			07/18/23 16:04	1
Nitrate Nitrite as N (EPA 353.2)	**12**		0.20		mg/L			07/17/23 12:13	2
Total Dissolved Solids (SM 2540C)	**690**		130		mg/L			07/20/23 16:31	1

Client Sample ID: CS-4
Lab Sample ID: 590-21057-7
Date Collected: 07/13/23 14:05
Matrix: Water
Date Received: 07/14/23 10:42

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**39**		0.50		mg/L			07/20/23 12:48	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			07/18/23 16:07	1
Nitrate Nitrite as N (EPA 353.2)	**3.9**		0.10		mg/L			07/17/23 12:15	1
Total Dissolved Solids (SM 2540C)	**800**		130		mg/L			07/20/23 16:31	1

Client Sample ID: CS-6
Lab Sample ID: 590-21057-8
Date Collected: 07/13/23 14:40
Matrix: Water
Date Received: 07/14/23 10:42

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**210**		5.0		mg/L			07/21/23 15:35	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	ND		0.10		mg/L			07/18/23 16:09	1
Nitrate Nitrite as N (EPA 353.2)	**57**		1.0		mg/L			07/17/23 12:17	10
Total Dissolved Solids (SM 2540C)	**1100**		130		mg/L			07/20/23 16:31	1

Client Sample Results

Client: Haley & Aldrich, Inc.
Project/Site: Simplot Moxee GW Sampling

Job ID: 590-21057-1

Client Sample ID: MW-200

Lab Sample ID: 590-21057-9
Date Collected: 07/13/23 10:05
Matrix: Water
Date Received: 07/14/23 10:42

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**400**		5.0		mg/L			07/21/23 15:45	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (EPA 353.2)	**160**		2.0		mg/L			07/17/23 12:19	20

Client Sample ID: Equipment Blank

Lab Sample ID: 590-21057-10
Date Collected: 07/13/23 09:45
Matrix: Water
Date Received: 07/14/23 10:42

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			07/20/23 13:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (EPA 353.2)	ND		0.10		mg/L			07/17/23 12:21	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 590-42467/1001
Matrix: Water
Analysis Batch: 42467

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			07/20/23 11:02	1

Lab Sample ID: LCS 590-42467/1002
Matrix: Water
Analysis Batch: 42467

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	12.5		mg/L		100	90 - 110

Lab Sample ID: MB 590-42514/1001
Matrix: Water
Analysis Batch: 42514

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			07/21/23 11:14	1

Lab Sample ID: LCS 590-42514/1002
Matrix: Water
Analysis Batch: 42514

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	12.5		mg/L		100	90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-619964/114
Matrix: Water
Analysis Batch: 619964

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			07/18/23 16:31	1

Lab Sample ID: LCS 280-619964/90
Matrix: Water
Analysis Batch: 619964

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

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-619782/60
Matrix: Water
Analysis Batch: 619782

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			07/17/23 11:09	1

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

Lab Sample ID: LCS 280-619782/59
Matrix: Water
Analysis Batch: 619782

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	4.84		mg/L		97	90 - 110		

Lab Sample ID: 590-21057-1 MS
Matrix: Water
Analysis Batch: 619782

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	16		40.0	57.5		mg/L		104	90 - 110		

Lab Sample ID: 590-21057-1 MSD
Matrix: Water
Analysis Batch: 619782

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	16		40.0	57.3		mg/L		104	90 - 110	0	10

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

Lab Sample ID: MB 590-42496/1
Matrix: Water
Analysis Batch: 42496

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			07/20/23 16:31	1

Lab Sample ID: LCS 590-42496/2
Matrix: Water
Analysis Batch: 42496

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			503	494		mg/L		98	80 - 120		

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Simplot Moxee GW Sampling

Job ID: 590-21057-1

Client Sample ID: MW-1
Date Collected: 07/13/23 12:10
Date Received: 07/14/23 10:42

Lab Sample ID: 590-21057-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	5 mL	5 mL	42514	07/21/23 14:57	MRV	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	619964	07/18/23 15:37	MMP	EET DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	619782	07/17/23 11:47	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	42496	07/20/23 16:31	AMB	EET SPK

Client Sample ID: MW-2
Date Collected: 07/13/23 09:35
Date Received: 07/14/23 10:42

Lab Sample ID: 590-21057-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	5 mL	5 mL	42514	07/21/23 15:06	MRV	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	619964	07/18/23 15:40	MMP	EET DEN
Total/NA	Analysis	353.2		20	100 mL	100 mL	619782	07/17/23 12:05	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	42496	07/20/23 16:31	AMB	EET SPK

Client Sample ID: MW-3
Date Collected: 07/13/23 11:00
Date Received: 07/14/23 10:42

Lab Sample ID: 590-21057-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	5 mL	42467	07/20/23 12:10	NMI	EET SPK
Total/NA	Analysis	350.1		2	10 mL	10 mL	619964	07/18/23 16:39	MMP	EET DEN
Total/NA	Analysis	353.2		2	100 mL	100 mL	619782	07/17/23 12:07	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	42496	07/20/23 16:31	AMB	EET SPK

Client Sample ID: MW-4
Date Collected: 07/13/23 11:40
Date Received: 07/14/23 10:42

Lab Sample ID: 590-21057-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	5 mL	5 mL	42514	07/21/23 15:16	MRV	EET SPK
Total/NA	Analysis	350.1		20	10 mL	10 mL	619964	07/18/23 16:41	MMP	EET DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	619782	07/17/23 12:09	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	42496	07/20/23 16:31	AMB	EET SPK

Client Sample ID: MW-5
Date Collected: 07/13/23 10:15
Date Received: 07/14/23 10:42

Lab Sample ID: 590-21057-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	5 mL	5 mL	42514	07/21/23 15:25	MRV	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	619964	07/18/23 16:55	MMP	EET DEN
Total/NA	Analysis	353.2		20	100 mL	100 mL	619782	07/17/23 12:11	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	42496	07/20/23 16:31	AMB	EET SPK

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Simplot Moxee GW Sampling

Job ID: 590-21057-1

Client Sample ID: MW-6
Date Collected: 07/13/23 13:35
Date Received: 07/14/23 10:42

Lab Sample ID: 590-21057-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	5 mL	5 mL	42467	07/20/23 12:38	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	619964	07/18/23 16:04	MMP	EET DEN
Total/NA	Analysis	353.2		2	100 mL	100 mL	619782	07/17/23 12:13	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	42496	07/20/23 16:31	AMB	EET SPK

Client Sample ID: CS-4
Date Collected: 07/13/23 14:05
Date Received: 07/14/23 10:42

Lab Sample ID: 590-21057-7
Matrix: Water

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	42467	07/20/23 12:48	NMI	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	619964	07/18/23 16:07	MMP	EET DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	619782	07/17/23 12:15	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	42496	07/20/23 16:31	AMB	EET SPK

Client Sample ID: CS-6
Date Collected: 07/13/23 14:40
Date Received: 07/14/23 10:42

Lab Sample ID: 590-21057-8
Matrix: Water

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	42514	07/21/23 15:35	MRV	EET SPK
Total/NA	Analysis	350.1		1	10 mL	10 mL	619964	07/18/23 16:09	MMP	EET DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	619782	07/17/23 12:17	ZPM	EET DEN
Total/NA	Analysis	SM 2540C		1	20 mL	100 mL	42496	07/20/23 16:31	AMB	EET SPK

Client Sample ID: MW-200
Date Collected: 07/13/23 10:05
Date Received: 07/14/23 10:42

Lab Sample ID: 590-21057-9
Matrix: Water

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	42514	07/21/23 15:45	MRV	EET SPK
Total/NA	Analysis	353.2		20	100 mL	100 mL	619782	07/17/23 12:19	ZPM	EET DEN

Client Sample ID: Equipment Blank
Date Collected: 07/13/23 09:45
Date Received: 07/14/23 10:42

Lab Sample ID: 590-21057-10
Matrix: Water

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	42467	07/20/23 13:36	NMI	EET SPK
Total/NA	Analysis	353.2		1	100 mL	100 mL	619782	07/17/23 12:21	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: Haley & Aldrich, Inc.
Job ID: 590-21057-1
Project/Site: Simplot Moxee GW Sampling

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	02-10-24
Arizona	State	AZ0713	08-20-23
Arkansas DEQ	State	19-047-0	05-31-23 *
California	State	2513	01-09-24
Connecticut	State	PH-0686	09-30-24
Florida	NELAP	E87667-57	06-30-24
Georgia	State	4025-011	01-08-24
Illinois	NELAP	2000172019-1	04-30-24
Iowa	State	370	12-01-24
Kansas	NELAP	E-10166	04-30-24
Kentucky (WW)	State	KY98047	12-31-23
Louisiana	NELAP	30785	06-30-14 *
Louisiana	NELAP	30785	06-30-23 *
Louisiana (All)	NELAP	30785	06-30-24
Minnesota	NELAP	1788752	12-31-23
Nevada	State	CO000262020-1	07-31-23
New Hampshire	NELAP	2053	04-28-24
New Jersey	NELAP	230001	06-30-24
New York	NELAP	59923	03-31-24
North Carolina (WW/SW)	State	358	07-23-23
North Dakota	State	R-034	01-08-24
Oklahoma	NELAP	8614	08-31-23
Oklahoma	State	2018-006	08-31-23
Oregon	NELAP	4025-019	01-08-24
Pennsylvania	NELAP	013	07-25-23
South Carolina	State	72002001	01-08-24
Texas	NELAP	TX104704183-08-TX	09-30-09 *
Texas	NELAP	T104704183-21-19	08-20-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-20-00065	12-19-25
Utah	NELAP	QUAN5	06-30-13 *
Utah	NELAP	CO000262019-11	07-31-23
Virginia	NELAP	460232	08-24-23
Washington	State	C583	08-03-23
West Virginia DEP	State	354	07-23-23
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: Haley & Aldrich, Inc.
Project/Site: Simplot Moxee GW Sampling

Job ID: 590-21057-1

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	EPA	EET DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET SPK

Protocol References:

EPA = US Environmental Protection Agency

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	DELIVERY DATE	7/14/23
PROJECT NAME	Simplot Moxee GW Sampling	ADDRESS		TURNAROUND TIME	10 days
H&A CONTACT	Kaylin Huddleston	CONTACT		PROJECT MANAGER	

Sample No.	Date	Time	Depth	Type	Nitrate N EPA 353.2	Ammonia N EPA 350.1	Sulfate EPA 300.0	TDS SM 2540C	Number of Containers
MW-1	7/13/23	12 10		H_2O	X	X	X	X	2
MW-2		9:35			X	X	X	X	2
MW-3		11.00			X	X	X	X	1
MW-4		11.40			X	X	X	X	
MW-5		10 15			X	X	X	X	
MW-6		13 35			X	X	X	X	
CS-4		14.05			X	X	X	X	
CS-6		14 40			X	X	X	X	
MW-200		10 05			X		X		1
Equipment Blank		9.45			X		X		2

590-21057 Chain of Custody

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

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

2.4, 2.7, R006

Sampled and Relinquished by	Received by
Sign	Sign
Print Chad M	Print Macky Morris
Firm H&A	Firm EET SPO
Date 7/14/23 Time 10.42	Date 7/14/23 Time 10.42
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

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)

Sampling Comments

Evidence samples were tampered with? YES NO
If YES, please explain in section below.

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

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 590-21057-1

Login Number: 21057
List Number: 1
Creator: Morris, Mackenzie 1

List Source: Eurofins Spokane

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

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 590-21057-1

Login Number: 21057
List Number: 2
Creator: Martinez, Anthony

List Source: Eurofins Denver
List Creation: 07/15/23 12:03 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.	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?	False	
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	