

REPORT ON

SIMPLOT GROWERS SOLUTIONS
JANUARY 2025 GROUNDWATER MONITORING
WARDEN, WASHINGTON

by Haley & Aldrich, Inc. Spokane, Washington

for J.R. Simplot Company Boise, Idaho

File No. 0211591-000 May 2025





SIGNATURE PAGE FOR

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WARDEN, WASHINGTON

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Table of Contents

			Page
List	of Tab of Figu of App		ii ii ii
1.	Intro	oduction	1
2.	Bacl	kground	2
	2.1	PREVIOUS SITE ASSESSMENTS AND CLEANUP 2.1.1 Site Assessment, Remedial Investigation, and Feasibility Study 2.1.2 Cleanup Action 2.1.3 Current Status GEOLOGY AND HYDROGEOLOGY	2 2 3 3 3
3.	Scop	oe of Services	5
4.	Field	d Activities	6
5.	4.1 4.2 Post	GROUNDWATER ELEVATION MONITORING GROUNDWATER SAMPLING 4.2.1 Quality Assurance/Quality Control Sampling Field Activities	6 6 6
	5.1	GROUNDWATER ELEVATION DATA PROCESSING	7
	5.2	 5.1.1 Groundwater Elevation Monitoring Results ANALYTICAL RESULTS 5.2.1 Data Validation and Processing 5.2.2 Groundwater INVESTIGATION-DERIVED WASTE 	7 7 7 8 8
6.	Find	lings	9
Refe	erence	S	10

i



List of Tables

Table No.	Title
1	Depth to Groundwater, Elevations, and Water Quality Parameters
2	Groundwater Analytical Results

List of Figures

Figure No.	Title
1	Vicinity Map
2	Site Plan
3	Hydrograph
4	Inferred Groundwater Contours with EDB Concentrations – January 2025

List of Appendices

Appendix	Title
Α	Laboratory Reports and Data Usability Summary Report
В	Waste Manifest



1. Introduction

This semiannual Groundwater Monitoring Report describes groundwater monitoring activities that Haley & Aldrich, Inc. (Haley & Aldrich) conducted in January 2025 at the J.R. Simplot Company (Simplot) property operated by Simplot Growers Solution (SGS), located at 1800 West First Street in Warden, Washington (Site). The location of the Site is shown on "Vicinity Map," Figure 1. The Site is operated as an outlet for crop nutrition and agricultural seed. The Washington State Department of Ecology (Ecology) Facility Site ID is 2802409 and the Ecology Cleanup Site ID is 1618.

Haley & Aldrich conducted groundwater monitoring to assess natural attenuation of ethylene dibromide (EDB) concentrations in groundwater beneath and downgradient of the Site following cleanup actions conducted in 2023. Locations of Site monitoring wells are shown on "Site Plan," Figure 2. Additional details regarding the background of the Site, subsurface geology, scope of services, field activities conducted, chemical analytical results, and our findings are summarized in the Sections below.



2. Background

The Site is approximately 2.15 acres and is bounded to the east by a retail agricultural seed facility; the south by West First Street, followed by a canola processing plant; the west by a retail potato facility; and the north by a rail line, undeveloped land, and an unlined irrigation canal (the East Low Canal). Generally, the land surrounding the Site is commercial/industrial. Based on conversations with the East Columbia Basin Irrigation District, we understand that the East Low Canal is unlined and approximately 19 feet deep north of the Site.

2.1 PREVIOUS SITE ASSESSMENTS AND CLEANUP

In 1989, the City of Warden detected concentrations of EDB greater than the Site cleanup level (CUL) of 0.05 micrograms per liter (μ g/L) in one of their production wells: Water Supply Well Number 4 (City Well No. 4). Following detection of EDB in City Well No. 4, the City of Warden detected concentrations of EDB in another production well: Water Supply Well Number 5 (City Well No. 5).

2.1.1 Site Assessment, Remedial Investigation, and Feasibility Study

In 2007, Ecology contracted the Pacific Groundwater Group (PGG) to conduct a preliminary investigation into the EDB contamination found in groundwater beneath the City. PGG installed monitoring wells, conducted surveys, and collected samples from various sources, including soils from the Site. EDB detected in soil at the Site was greater than the Model Toxics Control Act (MTCA) Method A soil cleanup level (PGG, 2007).

Based on the results of PGG's preliminary investigation, Ecology conducted additional investigations to gather information about potential sources of EDB contamination. Ecology's investigation primarily focused on the EDB found in soil at the Site from the PGG investigation.

In 2009, Ecology conducted a Phase II Investigation, which included drilling 22 borings and generally focused on the area south of the East Canal and north of Highway 170. Generally, each boring was advanced until reaching the caliche unit and/or refusal. Samples were collected from the caliche unit and analyzed for EDB. Analytical results indicate EDB was detected in two samples (SB-5 and SB-12); concentrations of EDB were 8.38 and 3.19 micrograms per kilogram (μ g/kg), respectively. The two samples were collected on Site from south of the railroad tracks.

Investigations in 2007 and 2009 indicated the source of EDB contamination likely was from the Site. In 2011, Ecology entered into Agreed Order (AO) No. 8241 with Simplot, which required Simplot to conduct a Remedial Investigation (RI) at the Site and prepare a Feasibility Study (FS).

HDR Engineering, Inc. (HDR) generally conducted RI/FS activities between 2011 and 2013. RI activities included conducting a geophysical investigation, advancing seven soil borings, installing six monitoring wells, and conducting pumping tests on City Well No. 5. HDR advanced seven Geoprobe borings and collected soil samples to fill in gaps remaining from Ecology's 2009 investigation. HDR collected samples periodically during drilling and drilled the borings until refusal, which generally occurred in the caliche layer. A total of 21 soil samples collected from various depths in the Geoprobe borings were analyzed. Analytical results indicate that EDB was detected in two samples from the same boring: EDB was detected in boring GP-7 at 14 and 16.5 feet below ground surface (bgs) at concentrations of 11.8 and $11.6 \mu g/kg$, respectively.



HDR submitted a draft RI/FS to Ecology in 2014. After Ecology input and additional investigations, HDR finalized the RI/FS in 2018. Results of the RI indicate EDB was present in concentrations greater than applicable CULs in soil and groundwater at the Site. Findings from the FS recommended remedial actions, which included soil excavation, *ex-situ* treatment of contaminated soil by soil vapor extraction (SVE), monitoring natural attenuation of EDB in groundwater, and implementing institutional controls at the Site.

2.1.2 Cleanup Action

In 2019, Ecology entered into AO No. DE 16890 with Simplot to implement the recommended remedial action from the FS. In 2021, Simplot excavated and stockpiled approximately 6,500 to 7,200 cubic yards of contaminated soil from two excavations at the Site and began treating the contaminated soil on Site in 2022 using an ex-situ SVE system. HDR collected confirmation samples from the excavations and analyzed them for EDB. EDB concentrations detected in the confirmation samples generally ranged between 0.037 and 100 μ g/kg. Soil treatment was completed in late 2022, and the treated soil was backfilled in previously excavated areas. In August 2023, HDR submitted the *Final Cleanup Action Report*, which summarized the excavation, sampling, ex-situ treatment, and backfill at the Site.

In 2023, HDR drafted a *Groundwater Monitoring Well Construction and Monitoring Plan* to guide semiannual groundwater compliance monitoring and monitoring well installations post remediation. There are currently 11 monitoring wells available for compliance monitoring; however, one of these wells (MW-9S) does not produce water and was initially drilled dry. Two other wells, MW-3 and MW-10S, have been paved over by the neighboring facility.

2.1.3 Current Status

In January 2024, HDR conducted semi-annual monitoring, and in August 2024, Haley & Aldrich conducted the semi-annual monitoring event. During the August sampling event, Haley & Aldrich deployed In-Situ Rugged TROLL 100 pressure transducers (transducers) in monitoring wells MW-1, -5SR, -5DR, -6S, and -7S. We deployed the transducers approximately 1 foot above the bottom of each well. We also deployed one In-Situ BaroTROLL transducer (BaroTROLL) within the well casing of MW-5SR near the top of the well to monitor groundwater elevations during the monitoring period. The BaroTROLL and transducers are programmed to record pressure in pounds per square inch (psi) and temperature in degrees Celsius every six hours.

2.2 GEOLOGY AND HYDROGEOLOGY

The Site is located within the Columbia Plateau, dominated by the Columbia River Basalt Group, and is underlain by approximately 43 feet of unconsolidated fill and sandy material above basalt bedrock (HDR, 2018). A caliche unit was observed in the subsurface at the Site in the 2007 investigation (PGG, 2007). The caliche unit is encountered beneath the Site at depths ranging between 4 and 20 feet bgs and ranges between 5 to 12 feet thick (HDR, 2018).

Groundwater is encountered between about 11 and 30 feet bgs and elevations vary seasonally (HDR, 2018). Multiple aquifers have been identified beneath the Site, including a shallow aquifer within the unconsolidated material/upper layer of the weathered basalt bedrock and a deeper aquifer within the Wanapum and Grand Ronde Formation of the Columbia River Basalt Group (HDR, 2018). It is understood that the East Low Canal acts as a groundwater divide, influences the shallow aquifer at the



Site, and acts as a losing stream when in use. Groundwater monitoring data indicate groundwater flows south (south of the East Low Canal when the Canal is flowing). Monitoring conducted by HDR indicates groundwater beneath the Site does not appear to flow toward City Well No. 4; however, it may flow west toward City Well No. 5 at times.



3. Scope of Services

Haley & Aldrich's groundwater monitoring scope of services includes gauging depth to groundwater, collecting groundwater samples using low flow/low stress techniques, submitting groundwater samples for chemical analyses, and reporting. During the January 2025 monitoring event, we completed the following activities:

- Measured and recorded depth to water (DTW) relative to top of casing (TOC) in monitoring wells MW-1, -2, -5SR, -6S, -7S, -7D, -8S, -11S, and -12S;
- Collected data from five transducers and one BaroTROLL;
- Collected groundwater samples from MW-1, -2, -5SR, -5DR, -7S, -7D, -8S, -11S, and -12S;
- Submitted groundwater and quality control samples to Eurofins Environment Testing Northwest LLC (Eurofins) in Spokane Valley, Washington for EDB analysis; and
- Compared groundwater analytical results to the EDB Site CUL of 0.05μg/L.



4. Field Activities

Haley & Aldrich completed groundwater monitoring activities on January 22 and 23, 2025. Haley & Aldrich collected groundwater samples from MW-1, -2, -5SR, -5DR, -6S, -7S, -7D, -8S, -11S, and -12S. Monitoring wells MW-3 and MW-10S were not found and appear to have been paved over. Monitoring well MW-9S was gauged, but was dry; therefore, we did not sample this well. Monitoring well locations are shown on Figure 2. Field activities completed are discussed in more detail in the Sections below.

4.1 GROUNDWATER ELEVATION MONITORING

Prior to sampling, Haley & Aldrich measured DTW in each well using a Waterline electronic water level indicator probe. We referenced DTW measurements to the surveyed TOC elevations and recorded the measurements in a field notebook (TOC elevations are referenced to the feet above mean sea level datum). We calculated groundwater elevations by subtracting the measured DTW from the TOC elevation in each well; our calculated elevations are provided in "Depth to Groundwater, Elevations, and Water Quality Parameters," Table 1.

After taking DTW measurements, Haley & Aldrich retrieved pressure data from transducers deployed in monitoring wells MW-1, -5SR, -5DR, -6S, and -7S, and the BaroTROLL deployed within the well casing of MW-5SR.

4.2 GROUNDWATER SAMPLING

After measuring DTW, Haley & Aldrich purged each well using low-flow/low-stress techniques and a stainless-steel submersible pump fitted with dedicated polyethylene tubing. We placed the tubing inlet at approximately the middle of the wetted well screen. During purging, we measured and recorded water quality parameters (pH, temperature, conductivity, dissolved oxygen, turbidity, and oxidation-reduction potential) using a Pro DSS YSI multimeter (YSI) equipped with a flow-through cell. Purge water was collected into one 55-gallon drum and staged in the storage building at the Site.

Haley & Aldrich collected groundwater samples from each well after the water quality parameters reached stabilization as defined in the *Groundwater Monitoring Well Construction and Monitoring Plan* (HDR, 2023). Stabilized water quality parameter measurements prior to sampling are provided in Table 1. However, MW-6S was bailed dry after purging approximately 2 gallons; we collected a sample after allowing water to infiltrate back into the well. We collected groundwater samples first by removing the sample tubing from the YSI and allowing the groundwater to freely flow from the sample tubing into laboratory-provided, 40-milliliter volatile organic analysis (VOA) sample containers. We placed filled VOA sample containers into zip-top bags and stored in an insulated cooler with ice until hand delivered to Eurofins under chain-of-custody protocols.

4.2.1 Quality Assurance/Quality Control Sampling

Haley & Aldrich also collected an equipment blank (MW-500SR), field blank (MW-120S), trip blank, matrix spike/matrix spike duplicate (MS/MSD), and duplicate sample (MW-800S) for data quality control and assurance purposes. Eurofins provided a 1-liter container filled with deionized (DI) water and additional sample containers to collect the equipment blank and field blank. After we finished collecting the primary sample from MW-12S, we collected a field blank sample. The field blank was collected by pouring DI water directly into a VOA sample container. After collecting the primary sample from MW-8S, we collected a duplicate sample and labeled it MW-800S.



5. Post Field Activities

Following sampling and data collection, Haley & Aldrich reviewed and processed the groundwater elevation data and reviewed the analytical results. The data and analytical processing procedures are summarized in the following Sections.

5.1 GROUNDWATER ELEVATION DATA PROCESSING

We calculated groundwater elevations by first correcting the transducer data with the barometric data using In-Situ's Baro-Merge software. We then calculated groundwater elevations using corrected transducer data, the surveyed top of monitoring well casing elevation, and the manual DTW measurements collected during the monitoring event. Haley & Aldrich used the resulting data to generate the hydrograph shown in "Hydrograph," Figure 3

5.1.1 Groundwater Elevation Monitoring Results

During the August 2024 to January 2025 monitoring period, the highest groundwater elevation was observed at MW-1 (approximately 1,232 feet), while the lowest was recorded at MW-5SR and MW-5DR (approximately 1,217 feet). Generally, the lowest elevations in each well were encountered in January. However, the highest groundwater elevation in MW-1 was observed in August, and in MW-5SR, MW-5DR, MW-6S, MW-7S, the highest groundwater elevation was observed in October..

Water level measurements recorded on January 22 and 23, 2025 indicate that depth to groundwater ranged between 25.94 and 31.60 feet below the TOC in MW-1 and MW-7D, respectively. Calculated groundwater elevations ranged between 1,217.98 and 1,219.68 feet in MW-2 and MW-1, respectively. Calculated groundwater elevations from the January 2025 event indicate groundwater beneath the Site was generally flowing southwest. Calculated groundwater elevations are summarized in Table 1 and are presented as inferred groundwater contours in "Inferred Groundwater Contours with EDB Concentrations – January 2025," Figure 4. The inferred contours indicate groundwater flows to the southwest (south of the East Low Canal).

5.2 ANALYTICAL RESULTS

Haley & Aldrich submitted a total of 14 groundwater samples to Eurofins for analyses of EDB by U.S. Environmental Protection Agency (EPA) Method 8011. In addition, we submitted an equipment blank, one field blank, an MS/MSD, and one duplicate sample to Eurofins for analyses of EDB by EPA Method 8011. Analytical results are included in the attached "Groundwater Analytical Results," Table 2. Results for the EDB analysis are summarized below. In addition, we compared EDB results from the January 2025 event to the August 2024 event conducted by HDR. The laboratory analytical report for the January 2025 event and our Data Usability Summary Report (DUSR) is provided in Appendix A.

5.2.1 Data Validation and Processing

Following the receipt of analytical results, we conducted a validation review of the data to assess the viability and usability of the data. The data validation assessment followed EPA guidelines, specifically the National Functional Guidelines for Organic Data Review. The sample data were reported to the laboratory reporting limit (RL) and qualified per the laboratory's standard operating procedures. The results met the data quality objectives and are considered usable. The analytical results are detailed in the Sections below and our DUSR (see Appendix A).



5.2.2 Groundwater

Groundwater samples collected from MW-5SR, -5DR, 6S, -8S and -11S contained EDB concentrations of 3.5, 0.015, 0.056, 0.012, and 27 μ g/L, respectively; these detected concentrations are greater than the Site CUL, but are at least an order of magnitude less than concentrations detected during the August 2024 event. EDB was not detected at concentrations greater than the method reporting limit of 0.010 μ g/L in the remaining monitoring wells. Analytical results are summarized in Table 2 and shown on Figure 4.

5.3 INVESTIGATION-DERIVED WASTE

After the monitoring wells were purged and sampled, Haley & Aldrich stored the collected purge water in a 55-gallon drum on Site. Two full 55-gallon steel drums containing contaminated water from previous monitoring events completed by others were also stored in a building on Site; Haley & Aldrich previously sampled these in August 2024. Haley & Aldrich contracted ACTenviro (ACT) to haul and properly dispose of the two investigation-derived waste drums sampled in August 2024. On March 19, 2025, ACT picked up the drums and delivered the drums to Heritage Crystal Clean in Tacoma, Washington on March 31, 2025. The waste manifest for the two drums is provided in Appendix B.



6. Findings

Based on groundwater elevation data collected from transducers in Site monitoring wells, the wells to the north of the canal observed peak groundwater elevations during August, while monitoring wells south of the canal observed peak elevations during October. This indicates groundwater flow direction and gradient at the Site is likely influenced locally by the East Low Canal north of the property. Based on previous monitoring events and data collected from the transducers, when the Canal is not flowing, the EDB groundwater plume beneath the Site will likely flow southwest toward Industrial Way.

Concentrations of EDB in groundwater samples collected from MW-5SR, -5DR, -6S, -8S, and -11s were greater than the Site CUL during the January 2025 groundwater sampling event. However, between January 2012 and December 2017, EDB concentrations ranged from 2 to 26.8 μ g/L in MW-6S and 9.1 to 234 μ g/L in MW-5S. Following remedial actions completed in 2022, concentrations decreased significantly, ranging from 0.079 to 0.10 μ g/L in MW-6S and below 25 μ g/L in MW-5SR. In January 2025, concentrations further declined to 0.056 μ g/L in MW-6S and 3.5 μ g/L in MW-5SR, indicating ongoing natural attenuation and improved groundwater conditions.

During the January 2025 event, EDB concentrations in monitoring wells MW-11S and MW-6S along the southern Site boundary were greater than the CUL. The only monitoring point further downgradient of the Site is monitoring well MW-9S; however, MW-9S has been a dry well since first constructed and therefore cannot be sampled to assess groundwater conditions. Haley & Aldrich and Simplot submitted a Work Plan to Ecology on March 28, 2025 to guide installation of replacement wells for MW-3 and MW-10, as well as a new well downgradient of the Site.



References

- 1. HDR Engineering, Inc. (HDR), 2018. "Final Remedial Investigation and Feasibility Study Report," September.
- 2. HDR Engineering, Inc. (HDR), 2023. "Groundwater Monitoring Well Construction and Monitoring Plan," March.
- 3. HDR Engineering, Inc. (HDR), 2024. "January 2024 Semi-Annual Groundwater Monitoring Report, CSID No. 1618," March.
- 4. Pacific Groundwater Group (PGG), 2007. "City of Warden Preliminary Investigation of Ethylene Dibromide Contamination," April 20.

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TABLES

DEPTH TO GROUNDWATER, GROUNDWATER ELEVATIONS, AND WATER QUALITY PARAMETERS

SIMPLOT GROWERS SOLUTIONS MONITORING WARDEN, WASHINGTON

FILE NO. 0211591-000

Monitoring Well	Date of Sampling	Top of Casing Elevation (feet amsl)	Depth to Water (feet)	Groundwater Elevation (feet amsl)	Temperature (°C)	рН	Specific Conductivity (mS/cm)	ORP (mV)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
MW-1	1/22/2025	1245.62	25.94	1219.68	13.9	7.69	0.510	37.3	3.53	1.54
MW-2	1/22/2025	1247.09	29.11	1217.98	14.0	8.49	2.119	80.9	28.27	1.19
MW-5SR	1/22/2025	1249.41	30.35	1219.06	13.3	7.08	3.223	129.4	1.97	3.58
MW-5DR	1/22/2025	1249.43	30.51	1218.92	14.5	8.02	0.444	-70.9	2.92	0.09
MW-6S	1/22/2025	1247.86	29.25	1218.61	14.9	6.97	5.182	133.1	2.03	3.62
MW-7S	1/22/2025	1250.86	31.44	1219.42	14.7	7.68	2.837	164.8	5.19	7.94
MW-7D	1/22/2025	1251.01	31.60	1219.41	14.2	8.21	0.602	147.2	29.47	8.63
MW-8S	1/22/2025	1248.84	30.21	1218.63	14.9	7.52	2.046	117.3	1.36	8.28
MW-11S	1/22/2025	1250.06	31.39	1218.67	14.7	6.76	3.521	126.7	0.96	0.90
MW-12S	1/22/2025	1249.44	30.70	1218.74	14.7	7.58	4.944	145.6	3.72	7.02

Notes:

Depth to water is referenced from top of casing.

Top of casing elevation previously measured by HDR Engineering, Inc. in January 2024.

-- = not measured/calculated

amsl = above mean sea level

°C = degrees Celsius

DO = dissolved oxygen

mg/L = milligrams per liter

mS/cm = microsiemens per centimeter

mV = millivolts

MW = monitoring well

NTU = mephelometric turbidity units

ORP = oxidation-reduction potential

TABLE 2 PAGE 1 OF 2

SIMPLOT GROWERS SOLUTIONS MONITORING WARDEN, WASHINGTON

FILE NO. 0211591-000

Sample ID	Sample Date	Analyte	Q
Cample 10	·	EDB (µg/L)	۲
	1/1/2012 4/1/2012	<0.010	
	7/1/2012	<0.0098 <0.0097	
	10/1/2012	<0.010	
	1/1/2013	<0.010	
	7/1/2013	<0.0094	
MW-1	10/13/2013	<0.0098	
	12/1/2017	<0.0098	
	11/1/2023	<0.0025	
	1/1/2024	0.0036	
	8/22/2024	<0.010	U
	1/22/2025	<0.010	U
	1/1/2012	<0.0099	
	4/1/2012	<0.0098	
	7/1/2012	<0.0097	
	10/1/2012	<0.010 <0.010	
	7/1/2013	<0.010	
MW-2	10/13/2013	<0.0098	
	12/1/2017	<0.0098	
	11/1/2023	<0.0025	
	1/1/2024	<0.0025	
	8/22/2024	<0.010	U
	1/23/2025	<0.010	U
	1/1/2012	<0.010	
	4/1/2012	<0.097	
	7/1/2012	<0.0099	
MW-3 ¹	10/1/2012	<0.010	
	1/1/2013	<0.010	
	7/1/2013 10/13/2013	<0.0096 <0.0099	
	12/1/2017	<0.0097	
	1/1/2012	<0.010	
	7/1/2012	<0.0097	
3	10/1/2012	<0.010	
MW-4 ³	1/1/2013	<0.010	
	7/1/2013	<0.0097	
	10/13/2013	<0.0098	
	1/1/2012	234	
	4/1/2012	16.1	
	7/1/2012	9.1	
MW-5S ³	10/1/2012	22.3	
	1/1/2013	14.5	
	7/1/2013 10/13/2013	5.7 63	
	12/1/2017	151	
	11/1/2023	<0.0025	
2	1/1/2024	24	
MW-5SR ³	8/22/2024	10	
	1/22/2025	3.5	
	1/1/2012	0.27	
	4/1/2012	0.01	
	7/1/2012	<0.0097	
MW-5D ³	10/1/2012	<0.010	
	1/1/2013	<0.010	
	7/1/2013	<0.0096	
	10/13/2013	0.01	
	12/1/2017	<0.0098	
	11/1/2023 1/1/2024	<0.0025 0.039	
MW-5DR ³	8/22/2024	<0.010	U
	1/22/2025	0.015	J
	1/1/2012	10.9	
	A /4 /2012	0.7	
MW-6S	4/1/2012	8.7	
05	7/1/2012 10/1/2012	26.8 15.4	
	1/1/2012	15.4 4.2	
	7/1/2013	2.00	

GROUNDWATER ANALYTICAL RESULTS

SIMPLOT GROWERS SOLUTIONS MONITORING

WARDEN, WASHINGTON FILE NO. 0211591-000

		Analyte	
Sample ID	Sample Date	EDB (µg/L)	Q
	10/13/2013	ND	
	12/1/2017	0.35	
	11/1/2023	0.10	
MW-6S (continued)	1/1/2024	0.10	
	8/22/2024	0.079	
	1/22/2025	0.056	
	1/1/2012	<0.0099	
	4/1/2012	0.011	
	7/1/2012	<0.0099	
	10/1/2012	<0.010	
	1/1/2013	<0.010	
	7/1/2013	<0.0097	
MW-7S	10/13/2013	<0.0098	
	12/1/2017	<0.0098	
	11/1/2023	<0.0035	
	1/1/2024	<0.0025	
	8/22/2024	<0.010	U
	1/23/2025	<0.010	U
	1/1/2012	<0.009)
	4/1/2012	0.011	
	7/1/2012	<0.0098	
	10/1/2012	<0.010	
	1/1/2013	<0.010	
	7/1/2013	<0.0095	
MW-7D	10/13/2013	<0.0099	
	12/1/2017	<0.0096	
	11/1/2023	<0.0035	
	1/1/2024	<0.0025	
	8/22/2024	<0.010	U
	1/23/2025	<0.010	U
	1/1/2013	<0.010	0
	7/1/2013	<0.010	
		1	
	10/13/2013	<0.0010	
MW-8S	12/1/2017	<0.0098	
	11/1/2023	<0.0025	
	1/1/2024	<0.0025	
	8/22/2024	<0.010	
	1/22/2025	0.012	
MW-10S ¹	10/13/2013	<0.0097	
	12/1/2017	<0.0098	
	11/1/2023	15	
MW-11S	1/1/2024	48	
223	8/22/2024	0.24	
	1/22/2025	27	
	11/1/2023	0.028	
MW-12S	1/1/2024	0.0051	
223	8/22/2024	<0.010	U
	1/22/2025	<0.010	U
Site Cleanup Level	0.05	μg/L	

Notes:

- ¹ MW-3 and MW-10 were not sampled in November 2023, January, and August 2024, as they could not be located.
- ² MW-9S was dry.
- $^{\rm 3}~$ MW-4, MW-5D, and MW-5S were abandoned. MW-5SR and MW-5DR replace MW-5S and MW-5D.
- ⁴ Samples collected during the August 2024 event were collected by Haley & Aldrich, Inc. and were analyzed by Eurofins Environment Testing Northwest, LLC in Spokane Valley, Washington for Ethylene Dibromide (EDB) by U.S. Environmental Protection Agency (EPA) Method 8011.
- ⁵ Samples collected prior to August 2024 were collected by HDR Engineering, Inc. and were analyzed by Eurofins Environment Testing Northwest, LLC in Spokane Valley, Washington for EDB by EPA Method 8011.

Results in **bold** were detected.

Shaded values indicate the detected concentration is greater than the Site cleanup level.

-- = not applicable

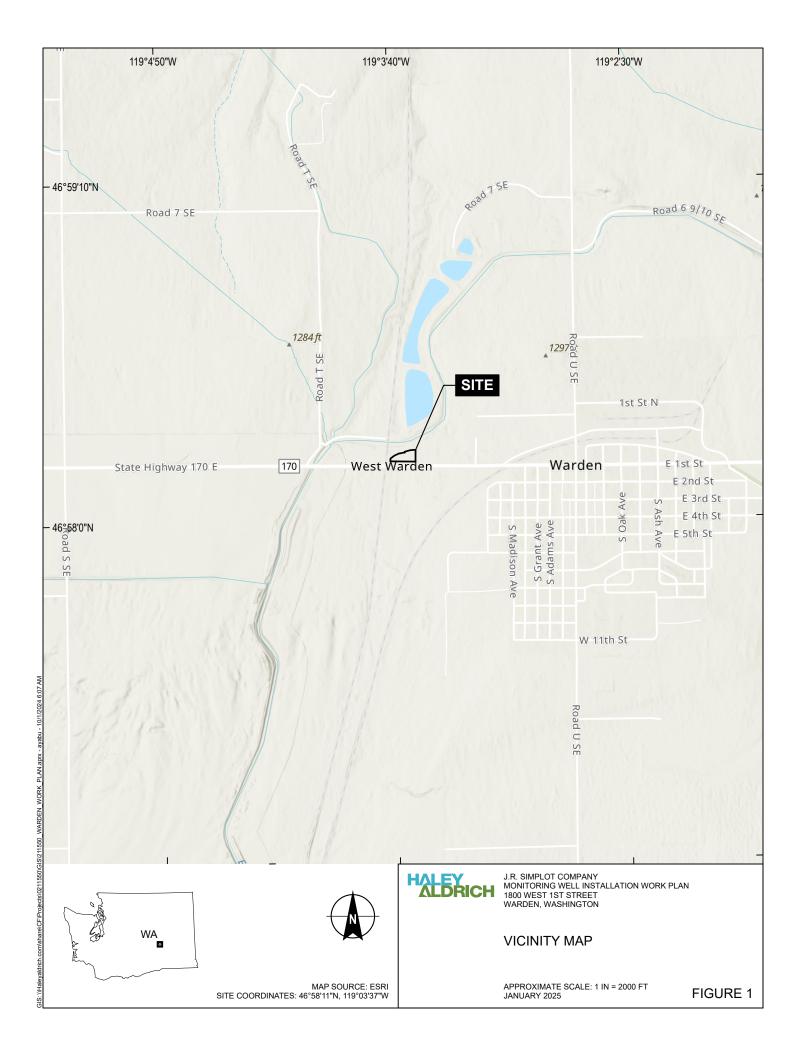
ND = not detected at or above Reporting Limit

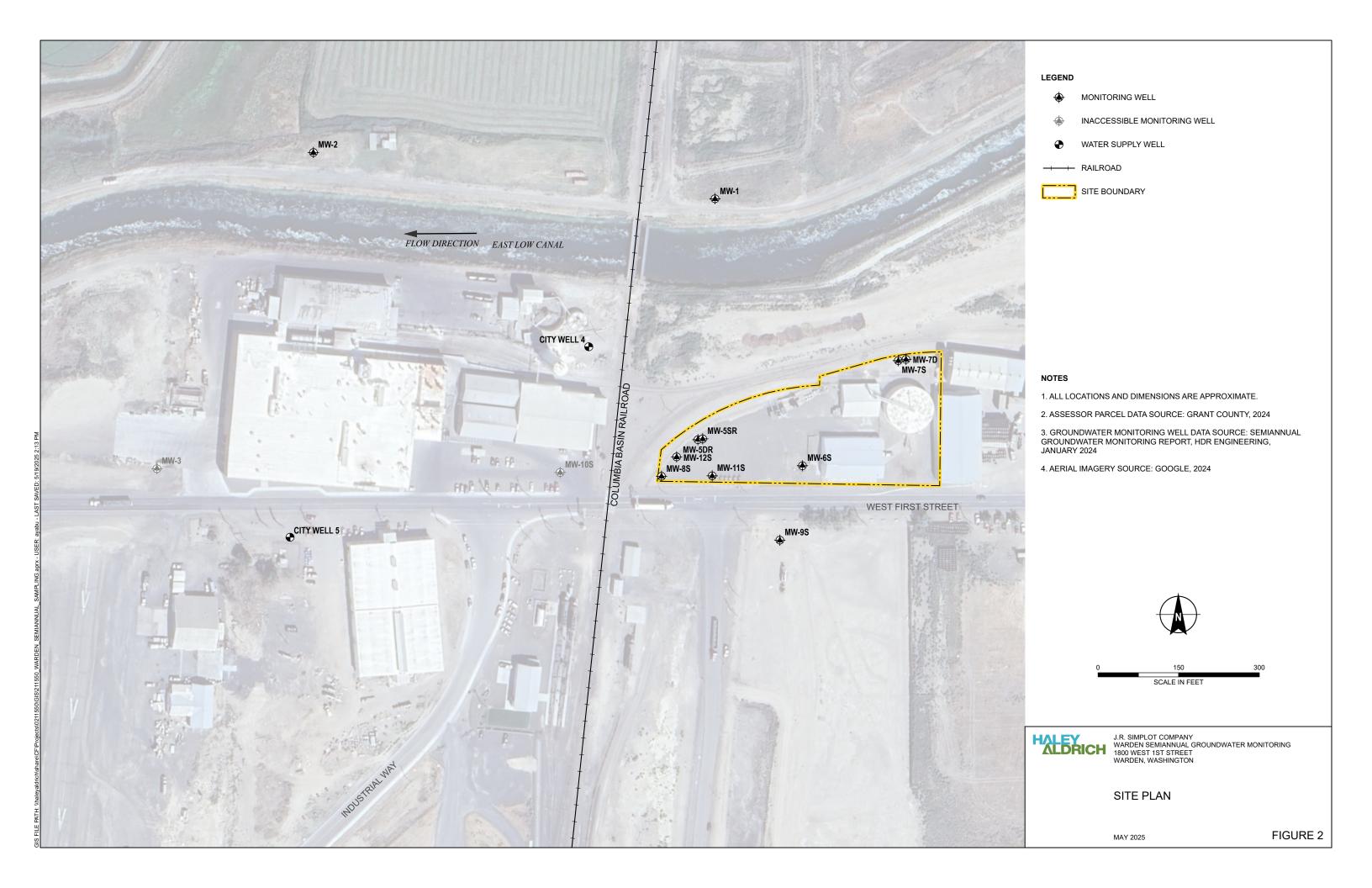
NS = not sampled

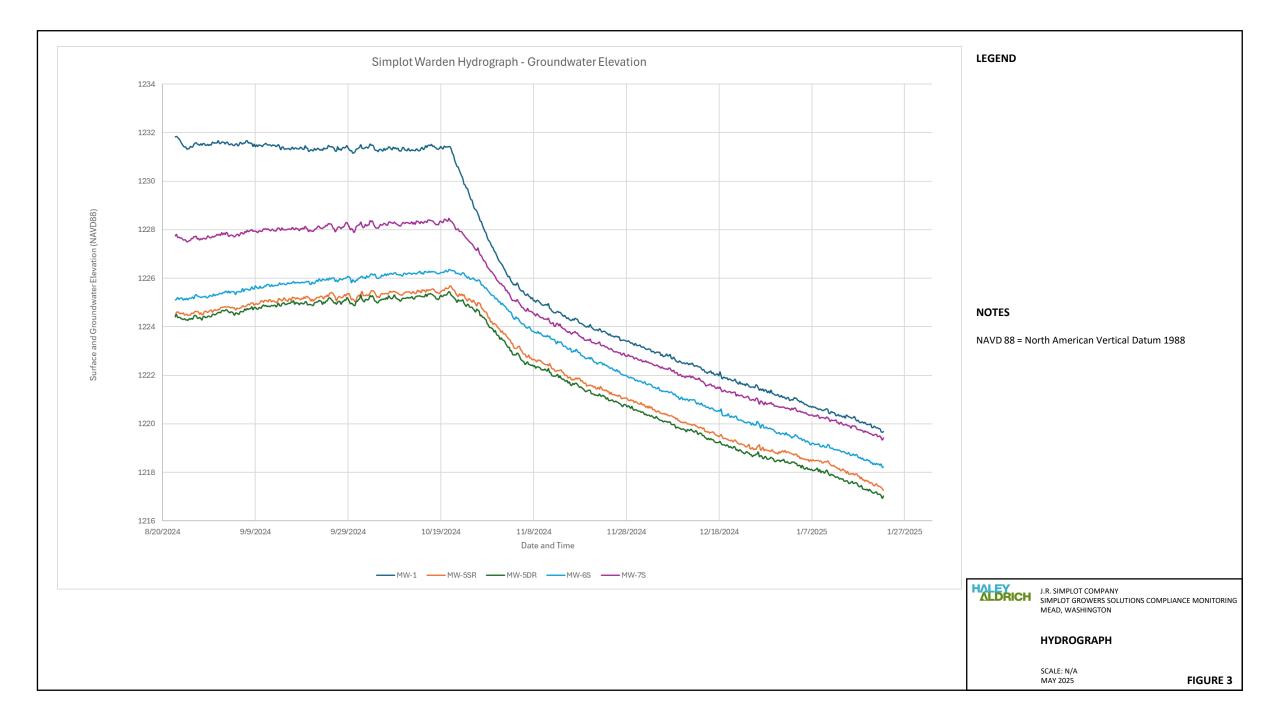
 μ g/L = micrograms per liter

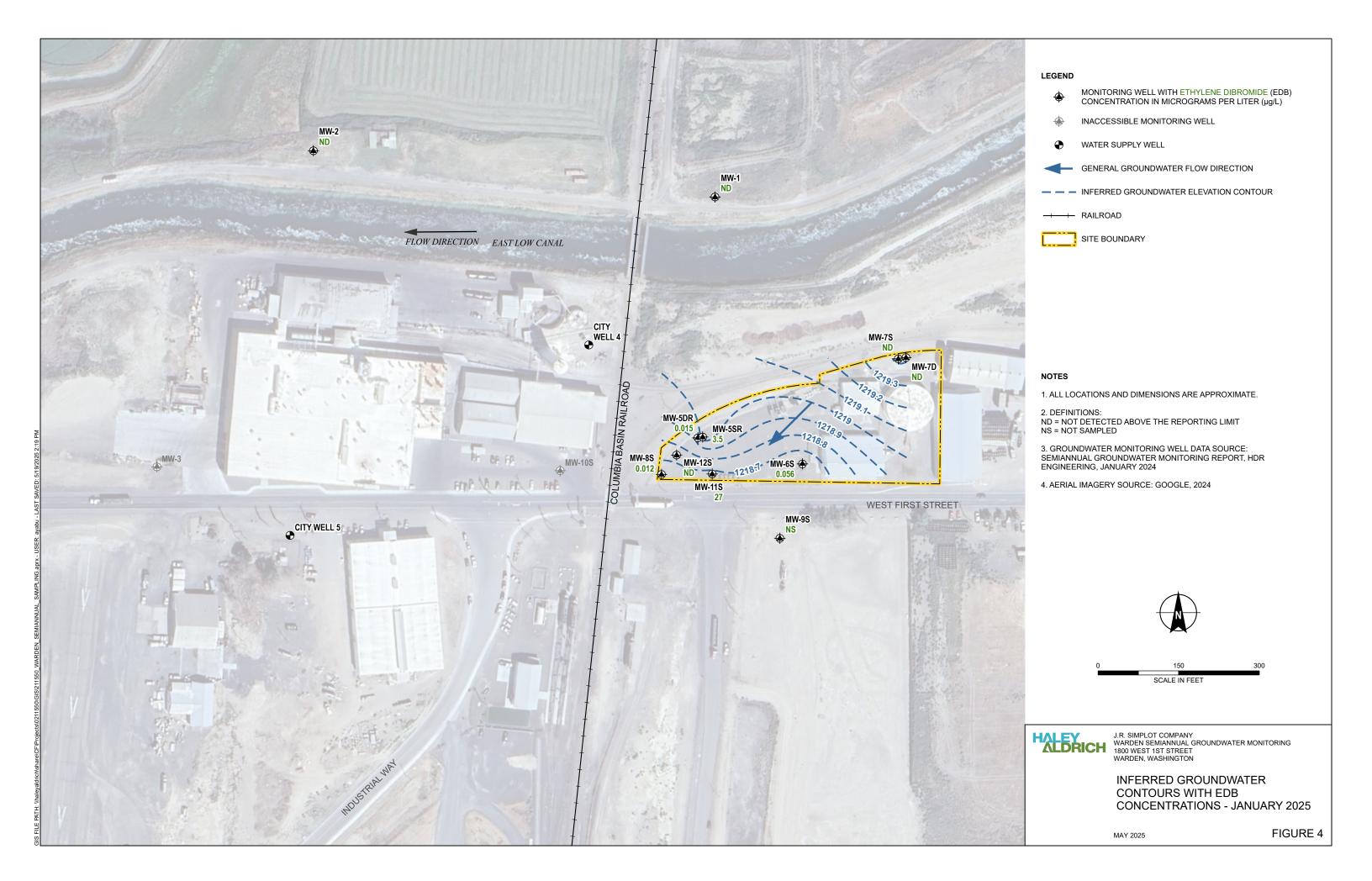
U = analyte not detected at a concentration greater than the method detection limit indicated

FIGURES









		APPENDIX A
Laboratory Reports	and Data Usabili	ty Summary Report

ANALYTICAL REPORT

PREPARED FOR

Attn: Ward McDonald Haley & Aldrich, Inc. 505 W Riverside Ave Suite 450 Spokane, Washington 99201

Generated 1/30/2025 7:30:45 AM

JOB DESCRIPTION

Simplot

JOB NUMBER

590-29120-1

Eurofins Spokane 11922 East 1st Ave Spokane WA 99206



Eurofins Spokane

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

Generated 1/30/2025 7:30:45 AM

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

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

Laboratory Job ID: 590-29120-1

Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Sample Summary	5
Definitions	6
Client Sample Results	7
QC Sample Results	9
Chronicle	10
Certification Summary	13
Method Summary	14
Chain of Custody	15
Receint Checklists	17

7

0

10

11

Case Narrative

Client: Haley & Aldrich, Inc.

Job ID: 590-29120-1 Project: Simplot

Eurofins Spokane Job ID: 590-29120-1

Job Narrative 590-29120-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

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

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

Receipt

The samples were received on 1/23/2025 1:55 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 time was 3.9°C.

Receipt Exceptions

The following sample was not on the COC but the client requested to run it for 8011 on 1/24/2025: Trip Blank (590-29120-14).

GC Semi VOA

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

Eurofins Spokane

1/30/2025

Page 4 of 17

Sample Summary

Client: Haley & Aldrich, Inc.

Project/Site: Simplot

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
590-29120-1	MW-5DR	Water	01/22/25 12:25	01/23/25 13:55
590-29120-2	MW-11S	Water	01/22/25 09:10	01/23/25 13:55
590-29120-3	MW-8S	Water	01/22/25 10:05	01/23/25 13:55
90-29120-4	MW-12S	Water	01/22/25 11:20	01/23/25 13:55
90-29120-5	MW-800S	Water	01/22/25 08:00	01/23/25 13:55
90-29120-6	MW-120S	Water	01/22/25 08:00	01/23/25 13:55
90-29120-7	MW-5SR	Water	01/22/25 13:30	01/23/25 13:55
0-29120-8	MW-500SR	Water	01/22/25 13:25	01/23/25 13:55
0-29120-9	MW-1	Water	01/22/25 15:15	01/23/25 13:55
90-29120-10	MW-2	Water	01/23/25 10:20	01/23/25 13:55
90-29120-11	MW-7D	Water	01/23/25 09:10	01/23/25 13:55
90-29120-12	MW-7S	Water	01/23/25 07:10	01/23/25 13:55
90-29120-13	MW-6S	Water	01/23/25 07:05	01/23/25 13:55
90-29120-14	Trip Blank	Water	01/22/25 08:00	01/23/25 13:55

Job ID: 590-29120-1

Definitions/Glossary

Client: Haley & Aldrich, Inc.

Job ID: 590-29120-1

Project/Site: Simplot

Glossary

LOD

LOQ

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)

MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit

Limit of Detection (DoD/DOE)

Limit of Quantitation (DoD/DOE)

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

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Client Sample ID: MW-5DR	Lab Sample ID: 590-29120-
Date Collected: 01/22/25 12:25	Matrix: Water

Matrix: Water

Date Received: 01/23/25 13:55
Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 0.010 01/27/25 14:22 01/27/25 17:11 1,2-Dibromoethane (EDB) 0.015 ug/L

Lab Sample ID: 590-29120-2 **Client Sample ID: MW-11S** Date Collected: 01/22/25 09:10 **Matrix: Water**

Date Received: 01/23/25 13:55

Method: SW846 8011 - EDB, DBCP	, and 1,2,3-TCP (GC)							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	27	2.0		ug/L		01/27/25 14:22	01/28/25 09:53	200

Client Sample ID: MW-8S Lab Sample ID: 590-29120-3 Date Collected: 01/22/25 10:05 **Matrix: Water**

Date Received: 01/23/25 13:55

Method: SW846 8011 - EDB, DB	CP, and 1,2,3-TCP (GC)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	0.012	0.010	ug/L		01/27/25 14:22	01/27/25 17:44	1

Client Sample ID: MW-12S Lab Sample ID: 590-29120-4 **Matrix: Water**

Date Collected: 01/22/25 11:20 Date Received: 01/23/25 13:55

Method: SW846 8011 - EDB, DBCP	, and 1,2,3-TCP (GC)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND —	0.010	ug/L		01/27/25 14:22	01/27/25 18:00	1

Lab Sample ID: 590-29120-5 Client Sample ID: MW-800S

Date Collected: 01/22/25 08:00 Date Received: 01/23/25 13:55

Method: SW846 8011 - EDB, DBCI	P, and 1,2,3-TCP (GC)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac

1,2-Dibromoethane (EDB) ND 0.010 ug/L 01/27/25 14:22 01/27/25 18:16 Client Sample ID: MW-120S Lab Sample ID: 590-29120-6

Date Collected: 01/22/25 08:00 **Matrix: Water**

Date Received: 01/23/25 13:55

Method: SW846 8011 - EDB, DBCP	, and 1,2,3-TCP (GC)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND -	0.010	ug/L		01/27/25 14:22	01/27/25 19:22	1

Lab Sample ID: 590-29120-7 Client Sample ID: MW-5SR

Date Collected: 01/22/25 13:30 Date Received: 01/23/25 13:55

	P, and 1,2,3-TCP (GC)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	3.5	0.20	ug/L		01/27/25 14:22	01/28/25 10:10	20

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

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

Client Sample ID: MW-500SR

Date Collected: 01/22/25 13:25 Date Received: 01/23/25 13:55

Lab Sample ID: 590-29120-8

Matrix: Water

Method: SW846 8011 - EDB, DBCP, and	1,2,3-T	CP (GC)
Δnalvte	Result	Qualifier

RL **MDL** Unit D Prepared Analyzed Dil Fac 0.010 ug/L 01/27/25 14:22 01/27/25 19:54 1,2-Dibromoethane (EDB) 0.024

Lab Sample ID: 590-29120-9 Client Sample ID: MW-1 Date Collected: 01/22/25 15:15 **Matrix: Water**

Date Received: 01/23/25 13:55

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Result Qualifier RL MDL Dil Fac Unit D Prepared Analyzed 1,2-Dibromoethane (EDB) ND 0.010 01/27/25 14:22 01/27/25 20:11 ug/L

Lab Sample ID: 590-29120-10 Client Sample ID: MW-2

Date Collected: 01/23/25 10:20 Date Received: 01/23/25 13:55

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC) Analyte Result Qualifier

RL MDL Unit D Prepared Analyzed Dil Fac 1,2-Dibromoethane (EDB) ND 0.010 01/27/25 14:22 01/27/25 20:27 ug/L

Client Sample ID: MW-7D Lab Sample ID: 590-29120-11

Date Collected: 01/23/25 09:10

Date Received: 01/23/25 13:55

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 01/27/25 14:22 1,2-Dibromoethane (EDB) ND 0.010 01/27/25 20:43 ug/L

Client Sample ID: MW-7S Lab Sample ID: 590-29120-12

Date Collected: 01/23/25 07:10

Date Received: 01/23/25 13:55

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 1,2-Dibromoethane (EDB) ND 0.010 ug/L 01/27/25 14:22 01/27/25 20:59

Date Collected: 01/23/25 07:05

Date Received: 01/23/25 13:55

Client Sample ID: MW-6S Lab Sample ID: 590-29120-13 **Matrix: Water**

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Result Qualifier RL Unit Prepared Analyzed Dil Fac 0.010 01/27/25 14:22 01/27/25 21:16 1,2-Dibromoethane (EDB) 0.056 ug/L

Client Sample ID: Trip Blank

Lab Sample ID: 590-29120-14 Date Collected: 01/22/25 08:00 **Matrix: Water**

Date Received: 01/23/25 13:55

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 1,2-Dibromoethane (EDB) ND 0.010 ug/L 01/27/25 14:22 01/27/25 21:32

QC Sample Results

Client: Haley & Aldrich, Inc. Job ID: 590-29120-1

Project/Site: Simplot

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 590-52007/1-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 52014								Prep Batcl	h: 52007
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.010		ug/L		01/27/25 14:22	01/27/25 16:06	1

Lab Sample ID: LCS 590-52007/3-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 52014						Prep Batch: 52007
	Spike	LCS LCS				%Rec
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits
1,2-Dibromoethane (EDB)	0.125	0.107	ug/L		85	60 - 140

Lab Sample ID: LCSD 590-52007/4-A Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Matrix: Water

Analysis Batch: 52014							Prep	Batch:	52007
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,2-Dibromoethane (EDB)	 0.125	0.114		ug/L		91	60 - 140	7	20

Lab Sample ID: 590-29120-5 MS Client Sample ID: MW-800S **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 52014

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,2-Dibromoethane (EDB)	ND		0.125	0.116		ug/L		88	60 - 140	

Lab Sample ID: 590-29120-5 MSD Client Sample ID: MW-800S

Matrix: Water

Analysis Batch: 52014

Prep Batch: 52007 Sample Sample Spike MSD MSD %Rec **RPD** Result Qualifier Added Analyte Result Qualifier Unit %Rec Limits RPD Limit 1,2-Dibromoethane (EDB) 0.125 98 ND 0.129 ug/L 60 - 140 20

Prep Type: Total/NA

Prep Batch: 52007

2

Job ID: 590-29120-1

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

Client Sample ID: MW-5DR

Lab Sample ID: 590-29120-1

Matrix: Water

Date Collected: 01/22/25 12:25 Date Received: 01/23/25 13:55

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	52007	01/27/25 14:22	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	52014	01/27/25 17:11	NMI	EET SPK

Lab Sample ID: 590-29120-2

Matrix: Water

Client Sample ID: MW-11S Date Collected: 01/22/25 09:10 Date Received: 01/23/25 13:55

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	52007	01/27/25 14:22	NMI	EET SPK
Total/NA	Analysis	8011		200	1 mL	1 mL	52014	01/28/25 09:53	NMI	EET SPK

Client Sample ID: MW-8S Lab Sample ID: 590-29120-3

Date Collected: 01/22/25 10:05 Matrix: Water

Date Received: 01/23/25 13:55

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	52007	01/27/25 14:22	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	52014	01/27/25 17:44	NMI	EET SPK

Client Sample ID: MW-12S Lab Sample ID: 590-29120-4

Date Collected: 01/22/25 11:20

Matrix: Water

Date Received: 01/23/25 13:55

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	52007	01/27/25 14:22	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	52014	01/27/25 18:00	NMI	EET SPK

Client Sample ID: MW-800S

Date Collected: 01/22/25 08:00

Lab Sample ID: 590-29120-5

Matrix: Water

Date Received: 01/23/25 13:55

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	52007	01/27/25 14:22	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	52014	01/27/25 18:16	NMI	EET SPK

Client Sample ID: MW-120S Lab Sample ID: 590-29120-6

Date Collected: 01/22/25 08:00 Matrix: Water
Date Received: 01/23/25 13:55

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	52007	01/27/25 14:22	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	52014	01/27/25 19:22	NMI	EET SPK

Eurofins Spokane

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

Client Sample ID: MW-5SR

Date Collected: 01/22/25 13:30 Date Received: 01/23/25 13:55 Lab Sample ID: 590-29120-7

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	52007	01/27/25 14:22	NMI	EET SPK
Total/NA	Analysis	8011		20	1 mL	1 mL	52014	01/28/25 10:10	NMI	EET SPK

Client Sample ID: MW-500SR

Date Collected: 01/22/25 13:25 Date Received: 01/23/25 13:55 Lab Sample ID: 590-29120-8

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	52007	01/27/25 14:22	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	52014	01/27/25 19:54	NMI	EET SPK

Client Sample ID: MW-1 Lab Sample ID: 590-29120-9

Date Collected: 01/22/25 15:15

Date Received: 01/23/25 13:55

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	52007	01/27/25 14:22	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	52014	01/27/25 20:11	NMI	EET SPK

Client Sample ID: MW-2 Lab Sample ID: 590-29120-10

Matrix: Water

Date Collected: 01/23/25 10:20 Date Received: 01/23/25 13:55

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	52007	01/27/25 14:22	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	52014	01/27/25 20:27	NMI	EET SPK

Client Sample ID: MW-7D Lab Sample ID: 590-29120-11 **Matrix: Water**

Date Collected: 01/23/25 09:10

Date Received: 01/23/25 13:55

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	52007	01/27/25 14:22	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	52014	01/27/25 20:43	NMI	EET SPK

Client Sample ID: MW-7S Lab Sample ID: 590-29120-12

Date Collected: 01/23/25 07:10

Date Received: 01/23/25 13:55

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	52007	01/27/25 14:22	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	52014	01/27/25 20:59	NMI	EET SPK

Eurofins Spokane

Matrix: Water

Lab Chronicle

Client: Haley & Aldrich, Inc. Job ID: 590-29120-1

Project/Site: Simplot

Client Sample ID: MW-6S Lab Sample ID: 590-29120-13

Date Collected: 01/23/25 07:05

Date Received: 01/23/25 13:55

Matrix: Water

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA 8011 52007 Prep 80 mL 2 mL 01/27/25 14:22 NMI **EET SPK** 8011 01/27/25 21:16 Total/NA Analysis 1 1 mL 1 mL 52014 NMI EET SPK

Client Sample ID: Trip Blank Lab Sample ID: 590-29120-14

Date Collected: 01/22/25 08:00 Matrix: Water

Date Received: 01/23/25 13:55

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8011			80 mL	2 mL	52007	01/27/25 14:22	NMI	EET SPK
Total/NA	Analysis	8011		1	1 mL	1 mL	52014	01/27/25 21:32	NMI	EET SPK

Laboratory References:

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

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Accreditation/Certification Summary

Client: Haley & Aldrich, Inc.

Job ID: 590-29120-1

Project/Site: Simplot

Laboratory: Eurofins Spokane

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C569	01-06-26

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Method Summary

Client: Haley & Aldrich, Inc.

Project/Site: Simplot

Job ID: 590-29120-1

Method	Method Description	Protocol	Laboratory
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	EET SPK
8011	Microextraction	SW846	EET SPK

Protocol References:

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

Laboratory References:

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

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Eurofins Spokane

11922 East 1st Ave Spokane, WA 99206 **Chain of Custody Record**

À	eurofins	

Environment Testing

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Sampler Fmilm T	ZuHeel	leve			n, Ra	nde	e E					Carrler	Tracki	ing No)(s):					1-327	2.1			
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Ver. 10/10/2014/30/2025

Page 15 of 17

Eurofins Spokane

11922 East 1st Ave Spokane, WA 99206 **Chain of Custody Record**

4.5	eurofins
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Environment Testing

Phone: 509-924-9200 Fax: 509-924-9290																						
Client Information	Sampler Emil Phone: (616-	M But	\-edux	, Lab (Arri	ngton	, Rar	ndee I	E					er Trac		o(s):			COC No: 590-12111-	3272.2			
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Company: Haley & Aldrich, Inc.			PWSID:	-	Π					nalysi		ques	sted					Job#:				
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Job Number: 590-29120-1

Client: Haley & Aldrich, Inc.

Login Number: 29120 List Source: Eurofins Spokane

List Number: 1

Creator: Vaughan, Madison R

ordion. Yaughan, maaison it		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	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	



Data Usability Summary Report

Project Name: Simplot Warden Groundwater Sampling

Project Description: Groundwater Samples

Sample Date(s): 22 and 23 January 2025

Analytical Laboratory: Eurofins Spokane – Spokane, WA

Validation Performed by: Kristina Ilina Validation Reviewed by: Gabrielle Davis

Validation Date: 5 February 2025

Haley & Aldrich, Inc. prepared this Data Usability Summary Report (DUSR) to summarize the review and validation of the analytical results for the Sample Delivery Group (SDG) listed. This DUSR is organized into the following sections:

- 1. Sample Delivery Group Number 590-29120-1
- 2. Explanations
- 3. Glossary
- 4. Abbreviations
- 5. Qualifiers

References

This data validation and usability assessment was performed per the guidance and requirements established by the United States Environmental Protection Agency (USEPA) using the following reference materials:

National Functional Guidelines (NFG) for Organic Data Review.

Data reported in this sampling event were reported to the laboratory reporting limit (RL).

Sample data were qualified in accordance with the laboratory's standard operating procedures (SOPs). The results presented in each laboratory report were found to be compliant with the data quality objectives (DQOs) for the project and are therefore usable; any exceptions are noted in the following pages.



1. Sample Delivery Group Number 590-29120-1

1.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of SDG number 590-29120-1, dated 30 January 2025. Samples were collected, preserved, and shipped following standard chain of custody (COC) protocols. Samples were also received appropriately, identified correctly, and analyzed according to the COC. Issues noted with sample management are listed below:

- The following sample was not on the COC, but the client requested to run it for SW8011 on 1/24/2025: Trip Blank (590-29120-14).
- Collection time (7:10 a.m.) for sample MW-7S doesn't match with COC (8:10 a.m.).

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Date	Matrix	Methods	Holding Time
MW-5DR	N	590-29120-1	01/22/2025	WG		
MW-11S	N	590-29120-2	01/22/2025	WG		
MW-8S	N	590-29120-3	01/22/2025	WG		
MW-12S	N	590-29120-4	01/22/2025	WG		
MW-800S	FD	590-29120-5	01/22/2025	WG		
MW-120S	FD	590-29120-6	01/22/2025	WG	Ethylene	14 days preserved,
MW-5SR	N	590-29120-7	01/22/2025	WG	Dibromide by	
MW-500SR	FD	590-29120-8	01/22/2025	WG	Microextraction and Gas by	7 days
MW-1	N	590-29120-9	01/22/2025	WG	SW8011	unpreserved
MW-2	N	590-29120-10	01/23/2025	WG		
MW-7D	N	590-29120-11	01/23/2025	WG		
MW-7S	N	590-29120-12	01/23/2025	WG		
MW-6S	N	590-29120-13	01/23/2025	WG		
TRIP BLANK	ТВ	590-29120-14	01/22/2025	WQ		

1.2 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified per method protocol.

1.3 REPORTING LIMITS AND SAMPLE DILUTIONS

All sample dilutions were reviewed and found to be justified. Only detected analytes were reported from a sample dilution analysis.



1.4 LABORATORY CONTROL SAMPLES

<u>Refer to Section E 1.3</u>. Compounds associated with the laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses associated with client samples exhibited recoveries and relative percent differences (RPDs) within the specified limits.

1.5 MATRIX SPIKE SAMPLES

Refer to Section E 1.4. The sample(s) below were used for matrix spike/matrix spike duplicate (MS/MSD):

Lab Sample Number	Matrix Spike/Matrix Spike Duplicate Sample Client ID	Method(s)
590-29120-5	MW-800S	SW8011

1.6 BLANK SAMPLE ANALYSIS

<u>Refer to Section E 1.5.</u> Method blank samples had no detections, indicating that no contamination from laboratory activities occurred. The analysis of the blank samples for field quality control (QC) was free of target compounds.

1.7 DUPLICATE SAMPLE ANALYSIS

Refer to Section E 1.6. No client samples were used for laboratory duplicate analysis.

The following sample(s) were used for field duplicate analysis. RPDs were all below 35 percent (or the absolute difference rule was satisfied if detects were less than 5 times the RL).

Primary Sample ID	Duplicate Sample ID	Method(s)
MW-12S	MW-120S	
MW-8S	MW-800S	SW8011
MW-5SR	MW-500SR	

Method(s): SW8011											
Analyte	Primary Sample ID	Duplicate Sample ID	% RPD	Qualification							
(μg/L)	MW-5SR	MW-500SR	% KPD	Qualification							
1,2-Dibromoethane (Ethylene Dibromide)	3.5	0.024	NA	J/UJ, Abs. Diff. > RL							

1.8 PRECISION AND ACCURACY

<u>Refer to Section E 1.7.</u> Where required by the method, some measurement of analytical accuracy and precision was reported for each method with the site samples.



1.9 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to comply with the DQOs for the project and the guidelines specified by the analytical method. Based on the review of this report, the data are useable and acceptable, as no data was rejected. The qualifiers applied to this dataset are summarized in the table below.

Sample ID	Analyte	Reported Result	Validated Result	Reason for Qualifier		
MW-5SR	1,2-Dibromoethane (Ethylene	3.5	3.5 J	Field Duplicate calculations		
MW-500SR	Dibromide)	0.024	0.024 J	Field Duplicate Calculations		



2. Explanations

The following explanations include more detailed information regarding each of the sections in the DUSR above. Not all sections in the Explanations are represented:

- E 1.3 Laboratory Control Samples
 - The LCS/LCSD analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences.
- E 1.4 Matrix Spike Samples
 - Matrix spike/matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method and evaluate the effects of the sample matrix on the sample preparation procedures and measurement methodologies.
- E 1.5 Blank Sample Analysis
 - Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination.
 - Field blanks are prepared to identify contamination that may have been introduced during field activity. Equipment blanks are prepared to identify contamination that may have been introduced while decontaminating sampling equipment. Trip blanks are prepared when volatile analysis is requested to identify contamination that may have been introduced during transport.
- E 1.6 Laboratory and Field Duplicate Sample Analysis
 - The laboratory duplicate sample analysis is used by the laboratory at the time of the analysis to demonstrate acceptable method precision. The RPD or absolute difference was evaluated for each duplicate sample pair to monitor the reproducibility of the data.
 - The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. The RPD or absolute difference was evaluated for each duplicate sample pair to monitor the reproducibility of the data.
- E 1.7 Precision and Accuracy
 - Precision measures the reproducibility of repetitive measurements. In a laboratory environment, this will be measured by determining the RPD found between a primary and a duplicate sample. This can be an LCS/LCSD pair, a MS/MSD pair, a laboratory duplicate performed on a site sample, or a field duplicate collected and analyzed concurrently with a site sample.
 - Accuracy is a statistical measurement of the correctness of a measured value and includes components of random error (variability caused by imprecision) and systematic error. In a laboratory environment, this will be measured by determining the percent recovery (%R) of certain spiked compounds. This can be assessed using LCS, blank spike (BS), MS, and/or surrogate recoveries.



3. Glossary

Not all of the following symbols, acronyms, or qualifiers occur in this document.

Sample Types:

EB Equipment Blank Sample
FB Field Blank Sample
FD Field Duplicate Sample
N Primary Sample
TB Trip Blank Sample

Units:

μg/kg micrograms per kilogram
 μg/L micrograms per liter
 μg/m³ micrograms per cubic meter
 mg/kg milligrams per kilogram

ppb v/v parts per billion volume/volume

milligrams per liter

pCi/L picocuries per liter
 pg/g picograms per gram
 pg/L picograms per liter

Matrices:

mg/L

AA Ambient Air
GS Soil Gas
GW/WG Groundwater
QW Water Quality
IA Indoor Air
SE Sediment
SO Soil

SSV Sub-slab Vapor

WQ Water Quality control matrix

WS Surface Water

Table Footnotes:

NA Not applicableND Non-detectNR Not reported

Common Symbols:

- % percent- < less than

- ≤ less than or equal to

– > greater than

– ≥ greater than or equal to

– = equal

C degrees Celsius
± plus or minus
~ approximately
x times (multiplier)



• Fractions:

N Normal (method cannot be filtered)

D Dissolved (filtered)

T Total (unfiltered)



4. Abbreviations

%D	Percent Difference	MDL	Laboratory Method Detection Limit	
%R	Percent Recovery	MS/MSD	Matrix Spike/Matrix Spike Duplicate	
%RSD	Percent Relative Standard Deviation	NA	not applicable	
%v/v	Percent volume by volume	ND	Non-Detect	
2s	2 sigma	NFG	National Functional Guidelines	
4,4-DDT	4 4-dichlorodiphenyltrichloroethane	NH ₃	Ammonia	
Abs Diff	Absolute Difference	NYSDEC	New York State Department of	
amu	atomic mass unit	WISDEC	Environmental Conservation	
BPJ	Best Professional Judgement	PAH	Polycyclic Aromatic Hydrocarbon	
BS	Blank Spike	PCB	Polychlorinated Biphenyl	
ССВ	Continuing Calibration Blank	PDS	Post-Digestion Spike	
CCA	Continuing Calibration Verification	PEM	Performance Evaluation Mixture	
CCVL	Continuing Calibration Verification	PFAS	Per- and Polyfluoroalkyl Substances	
CCVL	Low	PFBA	Perfluorbutanoic Acid	
COC	Chain of Custody	PFD	Perfluorodecalin	
COM	Combined Isotope Calculation	PFOA	Perfluorooctanoic Acid	
Cr (VI)	Hexavalent Chromium	PFOS	Perfluorooctane sulfonate	
CRI	Collision Reaction Interface	PFPeA	Perfluoropentanoic Acid	
DoD	Department of Defense	QAPP	Quality Assurance Project Plan	
DQO	data quality objective	QC	Quality Assurance Project Plan Quality Control	
DUSR	Data Usability Summary Report	QSM	Quality Systems Manual	
EIS		R ²		
	Extraction Internal Standard Estimated Maximum Possible		R-squared value Radium-226	
EMPC		Ra-226		
FDV	Concentration	Ra-228	Radium-228	
FBK	Field Blank Contamination	RESC	Resolution Check Measure	
FDP	Field Duplicate	RL	Laboratory Reporting Limit	
GC	Gas Chromatograph	RPD	Relative Percent Difference	
GC/MS	Gas Chromatography/Mass	RRF	Relative Response Factor	
000	Spectrometry	RT	Retention Time	
GPC	Gel Permeation Chromatography	SAP	Sampling Analysis Plan	
H ₂	Hydrogen gas	SDG	Sample Delivery Group	
HCl	Hydrochloric Acid	SIM	Selected ion monitoring	
ICAL	Initial Calibration	SOP	Standard Operating Procedure	
ICB .	Initial Calibration Blank	SPE	Solid-Phase Extraction	
ICP/MS	Inductively Coupled Plasma/Mass	SVOC	Semi-Volatile Organic Compound	
	Spectrometry	TCLP	Toxicity Characteristic Leaching	
ICV	Initial Calibration Verification		Procedure	
ICVL	Initial Calibration Verification Low	TIC	Tentatively Identified Compound	
IPA	Isopropyl Alcohol	TKN	Total Kjeldahl Nitrogen	
LC	Laboratory Control	TPH	Total Petroleum Hydrocarbon	
LCS/LCSD	Laboratory Control Sample/Laboratory	TPU	Total Propagated Uncertainty	
	Control Sample Duplicate	USEPA	U.S. Environmental Protection Agency	
MBK	Method Blank Contamination	VOC	Volatile Organic Compound	
MDC	Minimum Detectable Concentration	WP	Work Plan	



5. Qualifiers

The qualifiers below are from the USEPA National Functional Guidelines and the data in the DUSR may contain these qualifiers:

Concentration (C) Qualifiers:

- U The compound was analyzed for but not detected. The associated value is either the compound quantitation limit if not detected by the analytical instrument or could be the reported or blank concentration if qualified by blank contamination. This can also be displayed as less than the associated compound quantitation limit (<RL or <MDL), or "ND".
- B The compound was found in the sample and its associated blank. Its presence in the sample may be suspect.

Quantitation (Q) Qualifiers:

- E The compound was quantitated above the calibration range.
- D The concentration is based on a diluted sample analysis.

Validation Qualifiers:

- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- J+ The result is an estimated quantity, but the result may be biased high.
- J- The result is an estimated quantity, but the result may be biased low.
- J/UJ as listed in exception tables J applies to detected data and UJ applies to non-detected data as reported by the laboratory.
- UJ The compound was not detected. The reported sample quantitation limit is approximate.
- NJ The analysis indicated the presence of a compound for which there is presumptive evidence to make a tentative identification; the associated numerical value is an estimated concentration only.
- R The sample results were rejected as unusable; the compound may or may not be present in the sample.
- S Result is suspect. See DUSR for details.



References

1. United States Environmental Protection Agency, 2020. National Functional Guidelines for Organic Superfund Methods Data Review. EPA-540-R-20-005. November.



APPENDIX B Waste Manifest

	use print or type rm designed for use on elite (12	-pitch) typewriter.)									
A	NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number WAVSQG		2. Page 1 of 3.	Emergency Respons 888-7	e Phone 85-7225	4. Waste T	racking Numb D7073	per 42/572933		
	5. Generator's Name and Mailing Address Simplot Grower Solutions 1130 West Highway 30 Pocatello, ID 83204 Generator's Phone: Generator's Name and Mailing Address Generator's Site Address (if different than mailing address) Simplot Grower Solutions 1800 West 1st Street Warden, WA 98857										
	6. Transporter 1 Company Name ADVANCED CHEMICAL TRANSPORT LLC U.S. EPA ID Number CAR000070540										
	7. Transporter 2 Company Nam	ne					U.S. EPA IC	Number			
	8. Designated Facility Name and Site Address Heritage Crystal Clean 1901 East D Street Tacoma, WA 98421 U.S. EPA ID Number NON HAZ										
	Facility's Phone: 9. Waste Shipping Name	and Description			10. Cont		11. Total Quantity	12. Unit Wt./Vol.			
GENERATOR —	1. Non-RCRA/N (GROUNDW)	Ion-DOT Regulated Ma ATER)	nterial Liquid		-Z	Type DM	900	P			
- GENEF	2.										
	3.										
	4.										
		2x55 D4	42								
V	Generator's/Offeror's Printed/Ty	4. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste. Seperator's/Offeror's Printed/Typed Name Signature Month Day Year									
INT'L -	15. International Shipments	15. International Shipments									
		Transporter Signature (for exports only): 16. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name Month Day									
TRANSPORTER	Transporter 2 Printel Typed No	PARGY TYLER 1 GOTTEN 131							13 19 25		
1	17. Discrepancy 17a. Discrepancy Indication Spa	ace Quantity	Туре		Residue		Partial Re	jection	Full Rejection		
CILITY —	17b. Alternate Facility (or Gener	rator)			Manifest Reference	Number:	U.S. EPA ID	Number	X et		
DESIGNATED FACILITY	Facility's Phone: 17c. Signature of Alternate Facil	lity (or Generator)							Month Day Year		
- DESIG											
	18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a										
¥	Printed/Typed Name Dennis T)orsey		Signati	DOR	1			Month Day Year 3 3 25		